HSC ECONOMICS Notes

2023 Statistics

Current statistics	

Monetary policy	• Cut to **1.5%** in 2016, remaining constant for **3 years,** before contracting further during COVID
	  ○ Demonstrates an aggressive expansionary monetary policy stance
	• **COVID-19:** 0.1%
	  ○ **Ineffective** as the RBA struggled to stimulate a growth in consumption, remaining at 0.1% until April 2022
	• **Current:** 4.1%
	• **US:** 9% (current)

Fiscal policy	**2023-24 Budget** • **Surplus of $4 billion** • **Contractionary** • Provided a **$14.6 billion cost-of-living relief package** • **JobSeeker** payments increased by **$40 per fortnight** • Placed emphasis on **improving living costs** as opposed to growth • Increased company tax and personal income tax to finance these subsidies • **$28.3 billion** allocated to the **Quality Schools package**, providing funding to state schools
The Global Economy	**Global economic growth** • Global economic growth has **contracted** within recent years as a result of COVID • Prolonged by **high interest rates, reduced investment, supply chain disruptions and high inflation** • Global economic growth has been **low during COVID-19** **Trade** • Grown by nearly **5% since 1990** (WTO)

	• Trade growth contracted by **5%** in 2020 • Increased by **25%** post-COVID **Financial flows** • Annual growth in the 2010-20 decade was **relatively slow** • **60%** increase in global capital flows in **2021** • **Portfolio investment** has **plummeted** • FDI fell by **42% during COVID, and are continually falling**
Microeconomic policy	**Major investments** • 2018-19 budget increased funding into the **Western Sydney City Deal**, improving transport and community infrastructure • Further commitments to infrastructure have been made in each proceeding budget, helping to **streamline supply chains** **Taxation policies** • Decrease in **company tax by 2.5%** in 2019-20 for business with turnover below $50 million • **Instant asset write-offs** temporarily increased in the 2023-24 budget to improve the **productive capacity of small businesses**, boosting **AS** **Labour Market Policies** • Ongoing commitment to labour market reform in the 2023-24 budget • **Committed $5 billion** to a **National Skills Agreement** making over **300,000 TAFE and VET** places **fee-free** • 2019-20 budget introduced the **Skilling Australians Fund**, funding 80,000 apprenticeships to support shortages in numerous industries

Balance of Payments	**Current Account**
	• **CAD** has historically been between **3-6% of GDP**
	  ○ Expected return to 6% of GDP
	• **CAD as a % of GDP** has gradually decreased since the GFC
	• Recorded first surplus in 2019 resulting from:
	  ○ Low global interest rates
	  ○ Strong commodity prices
	  ○ Improvement in ToT during the COVID-19 pandemic
	• **$14 billion surplus** (2022)
	• Forecast to return to **deficit**

	BOGS • Consistent **surplus since 2016-17** • **$15 billion** surplus in 2023 • **Record surplus of $147 billion** in **2021-22** • Coincides with upward trend in ToT • Imports decreased at a **greater** rate than exports during COVID-19 • Low **AUD has supported a BOGS surplus** through boosting **international competitiveness** **NPY** • **Persistent deficit** due to Australia's net foreign liabilities and high savings rate **Terms of Trade** • **ToT** record high of **140.6** in the first quarter of 2021 as global demand for commodities, particularly as a result of infrastructure spending in China, grew • The onset of stringent **COVID-19** measures led to fall in the ToT as dwindling consumer confidence led to a fall in demand for goods and services. ○ Supply chain issues had also influenced these fluctuations in the ToT as the cost of importing goods had drastically increased. **101.9** in Dec 2019 to **96.6** by Dec 2020. • Currently **104**

Trade protection	• Australia is currently a signatory to **18 FTA's**
	  ○ Most prominent examples include ChAFTA, AUSFTA and CERTA
	• **RCEP** consists of **14 indo-Pacific nations**
	  ○ World's largest FTA, combined population in excess of **2 billion people**
	  ○ Economies represent **$530 billion** of Australian trade
	
	Case study: ChAFTA
	
	• **Tariffs** of **up to 25%** were **completely eliminated**
	• Over **95%** of Australian exports are **tariff-free**
	• Value of two-way trade has increased by over **60%**
	• Value of Australian exports into China has increased by **almost 100%**
	• **$1 billion** worth of annual tariffs have been eliminated.

	Case study: CPTPP ● Eliminates over **95%** of tariffs imposed on goods between member states ● DFAT: member states collectively account for **40%** of global GDP ● Member states account for **over a quarter** of world trade ● Market of **500 million** people ● CPTPP markets are projected to account for over **50%** of global growth
Exchange rate	**Trade Weighted Index** ● TWI: **multilateral** measures of the AUD, compared against a basket of Australia's major trading partners ● General **downward trend**, reaching **55 in 2020** ● **High interest rates** have bolstered Australia's TWI, contributing to an appreciation to **63 points** **AUD/USD** ● All time high of **$1.10 USD in 2011** due to **interest rate differentials** and high demand for Australian commodities ● **Mid-2010s** saw **gradual depreciations** as a result of interest rate differentials ● RBA intervened during COVID-19, purchasing AUD to prevent domestic inflation and rapid depreciation ● Plummeted to **$0.55 during COVID** ● **Rose to $0.77 in Jan 2021**, before falling in 2022 due to high rates in the US
Economic growth	● **Remember that the growth target is 3-4%** **Prior to 2020** ● **Nearly 3 decades** of **consecutive growth** ● GFC: economic growth **fell drastically** but the effects of the GFC were offset by Australia's commodities boom ● **Remained under 2%** until 2013, reaching a high of **3.5%** ● Growth remained **low** until 2020 **COVID-19** ● Economy **contracted by 7%,** leading to Australia's first recession in 3 decades ● Economy began to expand in 2021

	Post COVID-19
	● Late 2021 saw **growth rebound** considerably at **5.2%**
	● Growth eased to **3.7%**, higher than other advanced economies
	● **Current:** 5.2% (up from 4.9% in July)
	  ○ Expected to return to **1.6%**
	● **Peak:** 7.8% (Dec 2022)
	  ○ Highest since 1990s
	
	Causes of low growth
	● China's economic slowdown
	  ○ Economic growth has reached a **30-year low**
	  ○ Contraction in demand for Australian exports
	● Low consumer spending
	  ○ Caused by **low wage growth**
	  ■ Has grown to over **3%** from 2022 to 2023
	  ○ High inflation has shrunk disposable incomes
	  ○ Consumption accounts for **60% of GDP**, meaning its a key driver of growth
	  ○ The growth of inflation has **outpaced** wage growth
	● End of the mining boom
	  ○ Commodity price index contracted following 2013
	  ○ Index is continually on a declining trend

Inflation trends	**Low inflation in 2010s** ● Caused by **stagnant economic growth,** leading to less AD and demand-pull inflation ● Wage growth has been consistently low since the GFC, keeping production costs at a low ● Low inflationary expectations slowed price increases **Recent inflationary trends** ● **3.8%** in June 2021 ● **7.8% high** Q4 2022 ○ Attributed to supply-side disruptions and high savings during COVID now being consumed following expansionary monetary policy ● **5.2%** now (up 4.9% from July)
Unemployment	**Unemployment**

	● From 2015 to 2020 unemployment hovered around **5%** ● **Reached 2 decade high** in July 2020 at **7.5%** ○ Effects of COVID-19 were subdued by **JobKeeper** payments (wages of eligible employees were subsidised) ● Unemployment has **fallen to 3.5%** gradually ○ Attributed to growth in AD **Underemployment** ● Has risen steadily over past several decades due to the **casualisation of the workforce** ○ People are increasingly employed part time or casually instead of full time ○ Young workers are the most prone to underemployment ● **6.1% currently** after peaking at **13.7% during COVID-19**, standing at **8.6%** prior to the pandemic **Labour force underutilisation** ● Peaked at **20.4%** during COVID ● JobKeeper enabled for underutilisation rates to established ● **Fallen to 9.8%** since **Structural unemployment** ● Manufacturing has the highest concentration of structural unemployment ● Australian manufacturing industries are uncompetitive, worsened by technological advancements ● Employment in automobile manufacturing by **60%**
Income inequality	**Income inequality** ● 2023-24 budget provided a **$14.6 billion cost-of-living relief package** ● 2020-21 budget increased transfer payments expenditure to **$227.5 billion**, a **third of all government expenditure** ● Base rate of **JobSeeker payments** have been increased by **$40 per fortnight** ● **$6 billion** additionally allocated to **Medicare** to make healthcare more accessible ● **$28.3 billion** allocated to the **Quality Schools package**, providing funding to state schools ● **Income tax** changes are **less progressive,** worsening income inequality

	Wealth inequality ● **Highest quintile** has a **net worth** that is **94 times** that of the **lowest quintile** ● Superannuation contributions have **increased,** and is expected to continue to rise, providing more savings ● **Housing Australia Future Fund** has been established with a **$10 billion** commitment to building 30,000 affordable social housing
The environment	**Commitments & recent action** ● Commitment in 2021 to make the economy **carbon-neutral by 2050** ○ Remains largely symbolic until concrete plans are developed to meet the target ● 2022-23 budget: **$2.3 billion** allocated to environmental conservation, including **$1 billion** to the **Great Barrier Reef** ● 2023-24 budget: **$4 billion** commitment to the **Renewable Energy Plan** to support energy-saving home upgrades ● 2023-24 budget funded the **Net Zero Authority** which advises the government on how to achieve net-zero emissions by 2050

---

1 | The Global Economy

International economic integration	
Introduction	
Globalisation	The process of increasing integration between economies around the world due to increased trade, capital flows and technological change
GWP	**Gross World Product** ● The value of all goods and services produced **around the world** over a period of time
GDP	The total value of all the goods and services that **an economy** makes during a year
Purchasing power parity	An economic theory that uses a basket of goods to compare the valuer of currencies

	• This accounts for variations in each country's purchasing power • Currencies are converted to be on-par with one another so prices can be compared accurately • Used to compare GDP levels across different economies more accurate
Indicators of globalisation	
Trade in goods and services	• Globalisation had lead to growth in the exchange of products between economies • Economies used to rely on goods produced domestically • Now we import a large proportion of what we consume

Financial flows	• The integration of international financial systems has occurred as a result of **global financial deregulation**.
	• This has enabled greater mobility of capital flows.
	  ○ Such as the flows of foreign direct, portfolio investments and foreign exchange between countries.
	• Speculators are one of the main drivers of global financial flows
	  ○ Optimistic speculations lead to a short term boost in growth
	  ○ **Example:** during the GFC, there was a fall in activity in financial markets due to increasing volatility and cost of credit

Investment and TNCs	• Trade and investment going across international boundaries • Seeks the most competitive and cost effect locations to achieve higher profit margins. • Involves the expansion of businesses globally in hopes of reaching a larger market • **FDI:** the purchase of a **controlling** interest of over 10% ○ FDIs have decreased due to financial deregulation

Technology, transport & communication	• The advancement of technology and communication within the last few decades has led to new businesses and products servicing the global markets.
	• Examples of this include:
	  ○ E-commerce and social media marketing.
	  ○ Enhanced efficiency of maintaining accounts and inventories reducing warehouse costs
	  ○ Increased competition as there is a greater range of goods and services in the global market, lowering prices

<table>
<tr><td></td><td>
Capital assets such as roads, planes and ships are vital for global and domestic economies
</td></tr>
<tr><td>International division of labour & migration</td><td>

This refers to the specialisation of people according to labour tasks in production.
Offshoring: when TNCs establish subsidiaries in foreign countries to utilise labour skills at a lower cost
Semi-skilled labourers migrating from emerging/developing economies to work in primary and manufacturing industries
Outsourcing manufacturing to countries with an abundance of cheap unskilled labour

</td></tr>
<tr><td>International and regional business cycle</td><td>

International business cycle: refers to changes in world output and GDP over time
Regional business cycle: fluctuations in the level of economic activity in a geographical region of the global economy over time (e.g the EU)
Over 60% of changes in output have been due to changes in in interest rates and growth from the G7

<table>
<tr><th colspan="2">Factors of the international business cycle</th></tr>
<tr><td>Strengthening factors</td><td>Weakening factors</td></tr>
<tr><td>Reduced trade barriers
Deregulation
Forex trading
Improvements in transport and communications</td><td>Restrictions on trade
Volatile forex markets
Higher taxation</td></tr>
</table>
<table>
<tr><th>Case study: GFC 2008</th></tr>
<tr><td>Caused by a dramatic fall in housing prices
The global economy experienced a recession
Sharpest economic slowdown since the Great Depression</td></tr>
</table>
</td></tr>
</table>

Trade, financial flows & foreign investment

The basis of free trade	
Free trade	Occurs when there is an absence of artificial barriers to trade imposed by governments upon the flow of goods and services across international borders. ● Each country has resources it is naturally abundant in, indicated through **absolute and comparative advantages** ○ Hence the need for countries to rely on imports as some countries specialise in some products
Absolute advantage	When a country can produce more output with the same resources as another country ● For example, country A can produce 3 coats with a given amount of wool, country B can produce 5 coats with the same amount of wool. Hence country B has the absolute advantage.
Comparative advantage	Is when a country has a lower opportunity cost when a producing a good, meaning they make the most efficient use of resources in production ● Based on **David Ricardo's theory** of comparative advantage ● Economies with comparative advantages are more efficient, boosting exports and economic growth
Advantages & disadvantages of free trade policies	Advantages
	● Consumers have a **greater variety** of goods/services ○ Increases living standards ● Allows countries to **specialise,** achieving **economies of scale** in production ensures resources are allocated efficiently and output is maximised ● Improves **international competitiveness** as firms are able to adopt foreign production methods ● **Increases GDP** as output increases across a domestic economy.
	Disadvantages
	● Increase in unemployment and closure of inefficient domestic firms ● Difficult to establish new businesses ● Increase in unemployment ● Dumping of surplus production ● Negative externalities (environmental degradation and human rights issues) ● Increase dependence on other nations

	• Possible current account deficit (CAD) issues if there is a large BOGS deficit
Role of international organisations	
World Trade Organisation	• The largest multilateral trade organisation • Played an instrumental role in promoting trade policies • Monitors developments in world trade to provide basic principles with the aim of **eliminating trade barriers** • Also acts as a mediator in resolving trade disputes

International Monetary Fund	• Oversees the stability of the global financial system
	• Primary objectives are to
	  ○ Promote monetary cooperation and exchange rate stability
	  ○ Facilitate expansion of international trade
	  ○ Give resources and funds to members experiencing BOPs difficulties
	• Provided over **$100 billion** in financial assistance to low-income countries

World Bank	• Promotes economic development in developing countries through influencing micro and micro economic policy
	• This is achieved by providing:
	  ○ Development assistance
	  ○ Support for long-term investment projects
	  ○ Dispute settlements in investment projects
	• The **conditionality principle** requires governments to implement structural reforms before being eligible for assistance

United Nations	• Primary aims involve peacekeeping, conflict prevention, humanitarian assistance, and human rights on a global scale • UN has implemented an array of Sustainable Development Goals (SDG's) that aim to bolster the UN's efforts to eliminate disparities and poverty between countries

OECD	• Engages in research, consultation and coordination of economic issues
	• Primary objectives are to:
	  ○ Promote sustainable economic growth and development and maintain financial stability
	  ○ Contribute to global economic development through consultation

Influence of government economic forums	

G20	• Established after the GFC to coordinate a response to avert a depression
	• Members account for the vast majority of the global economy, trade and population
	• Primary objectives are to:
	  ○ Coordinate fiscal stimulus around the world
	  ○ Improve supervision of the global financial system
	  ○ Discuss key issues in the global economy

G7	• Unofficial forum for coordinating global macroeconomic policy ○ This is due to its influence over the fiscal and monetary policies of the world's largest economies • Significance has declined in recent years
Trading blocs, monetary unions & FTA's	
Advantages and disadvantages of FTA's	Advantages
	• Allows countries to sell **more exports** and to engage in trade **at a lower cost** • Stimulates economic growth
	Disadvantages
	• **Trade diversion** occurs with trade with non-members declining • Trade flows become divided between regional lines
EU	• Multilateral trading bloc • Economic integration through the use of a common currency

APEC	**Asia Pacific Economic Cooperation**
	• Multilateral free trade agreement and regional economic forum created to promote free trade
	• Objectives are to
	  ○ Implement common trade policies with member nations
	  ○ Develop mechanisms for closer trade and investment links in Asia Pacific
	• Accounts for 60% of global GDP

AANZFTA	• Formed between Australia, New Zealand and ASEAN nations

	• Committed to eliminating 96% of all tariffs on all exports
Bilateral agreements	Advantages
	• Reduced trade barriers more quickly • More flexibility
	Disadvantages
	• Trade diversions • Undermine

Protection

- Refers to the use of **artificial barriers** to restrict the free flow of goods and services in international trade to give **domestic producers an artificial advantage**

Reasons for protection

Infant industries	• An infant industry is one that is new and in its early stages of development and, thus, not yet capable of competing against established industry competitors • Allows infant industries sufficient time to improve efficiency in order to achieve economies of scale and compete internationally • Protection should only be temporary to avoid industries becoming complacent whilst not striving for efficiency
Domestic employment	• If overseas countries offer cheaper production, domestic jobs are at risk of being outsourced • Tariffs and other barriers can prevent job losses to avert contractions and recessions • May distort the allocation of resources towards inefficient industries ○ If protection does not exist resources will be allocated to more efficient industries in the long run • **Example:** Donald Trump's protectionist policies against China
Dumping	• Refers to a country exporting a product at a price that is lower in the foreign importing market than the price in the exporter's domestic market. This involves substantial exporting volumes of a product, it often endangers financial viability of the products' manufacturer or produce in the importing nation.

<table>
<tr><td></td><td>

- Local producers could be forced out of businesses
- Reduce productive capacity of the economy
- Increase unemployment
- Lower prices are usually short-term - once local competition is eliminated foreign producers can rise the price of goods and services

</td></tr>
<tr><td>Defence</td><td>

- Sometimes there are non-economic reasons for protecting industries
- These include national defence, medical supplies, basic supplies related to other industries
- May lead to higher prices due to a lack of competition

</td></tr>
<tr><td colspan="2">Methods of protection</td></tr>
<tr><td>Tariffs</td><td>Taxes on imported goods imposed for the purpose of protection

Calculating tariffs

• Supply = Domestic production
• Demand = Goods supplied with free trade
• World price = price without trade barriers
• Domestic price = price with trade barriers
• Government revenue (T) = tariff x quantity of imports
• Foreign suppliers revenue = price without tariff x quantity of imports

Advantages

• Stimulates domestic production and employment, increasing domestic incomes
• The government gains revenue from tariffs
• Reliance on imports falls, improvising ToT, the BoP and the CAD

Disadvantages

• Leads to imported inflation, lowering living standards
• Retaliatory tariffs may be imposed by other countries, dampening export revenues</td></tr>
<tr><td>Quotas</td><td>Quotas are a quantitative restriction on certain categories on imported goods
• Advantages & disadvantages are similar to tariffs</td></tr>
<tr><td>Subsidies</td><td>A form of financial assistance paid to domestic producers such as farmers to</td></tr>
</table>

	allow them to **increase supply** and compete internationally
	Advantages
	• All the advantages of a tariff, with the exception of revenue • Offers a **price advantage for local consumers** • Easier to remove than a tariff as they are undesirable due to the burden on the budget
	Disadvantages
	• Distorts resource allocation and may support inefficient industries • Increases the tax burden • Has a direct cost on government budgets
Effects of protectionist policies	
Effects on domestic economy	• **Distorts resource allocation and income distribution:** local industries gain the short term, however in the long-term the economy experiences a shift from efficient to less efficient industries • **Inflation:** may increase as the tariffs on imported goods increases costs, in turn increasing the cost of production. • **Slower economic growth:** as resources are used less efficiently • **Exports may be lower:** protected industries will be hesitant to market their goods/services internationally in order to seek higher returns locally
Effects on global economy	• **Reduced access to markets:** developing economies are often excluded from access to the market of advanced economies as trade policies/agreements are more favourable for advanced economies • **International trade barriers:** tends to harm developing economies who depend on agricultural exports and manufactured goods, increasing income inequality • **Global political tensions:** retaliatory effects of trade barriers undermines economic relationships • **Reduced trade and economic growth**: this is due to the protection of inefficient industries, lower trade volumes, higher prices, and lower living standards

Globalisation and economic development

Differences between economic growth and development	
Economic growth	• Increases in real GDP over time • Increases productive capacity of the economy • Leads to rising output, incomes, employment and living standards • Economic growth leads to an outward shift of an economy's production possibility curve or frontier, enabling it to achieve rising national output, material welfare and living standards over time.

Economic development	• Process of structural change needed for growth to occur
	• Development of an economy's social and economic infrastructure
	• Can be measured by HDI which accounts for:
	  ○ Life expectancy
	  ○ Education levels
	  ○ GNI per capita

Distribution of wealth & income	
Distribution of income	• Refers to the comparison of annual incomes, which are direct returns from the factors of production of citizens
Distribution of wealth	• Refers to the comparison of asset ownership between citizens
Disparities	• Over 50% of people in extreme poverty live in Sub-Saharan Africa • 1 billion have moved out of extreme poverty since 1990 • The richest 1% owned 44% of the world's wealth • The divide between the billionaires and the bottom half of humanity continues to grow
Income & quality of life factors	
Gross National Income (GNI)	• Measures the sum of value added by all resident producers in the economy plus primary income from foreign countries on PPP • UN reports have stated that inequalities income influences inequalities in other dimensions of wellbeing, emphasising the importance of considering income
Developing, emerging	**Advanced** • High income levels

and advanced economies	• Slower economic growth • Market based economies dominated by tertiary sector **Emerging** • Income levels vary but fast growth in income levels • Strongest growth rates with favourable prospects • Industrialised economies dominated by the secondary sector **Developing** • Low-income levels, around half of population in absolute poverty • Moderate growth rates with high population growth • Heavily reliant on the primary sector and foreign aid
Reasons for differences between nations	

Global factors	**Agriculture protectionism**
	• Protectionism in the agricultural sector has resulted in income inequality globally
	  ○ Remember: developing economies depend on agricultural exports for income
	Global financial architecture
	• Advanced economies often engage in short-term financial investments in emerging economies
	• Low-income economies fall into debt traps
	  ○ Reduces income available for economic growth
	Global technology flows
	• Technology flows between advanced and emerging economies widen disparities as advanced economies have greater access to capital in order to boost productivity

Domestic factors	**Economic resources**
	• Lack of natural resources
	• Labour supply and quality
	  ○ Poor education levels
	  ○ Low health standards
	  ○ High population growth
	• Lack of infrastructure and capital
	• Low per capita income (**vicious cycle of poverty**)
	Institutional factors
	• Political instability and corruption impedes investor confidence
	• Low taxation (budget cannot afford welfare)
	• High levels of foreign debt

Effects of globalisation	
Effects on emerging economies	• Globalisation has mostly benefited emerging economies as resource relocation and enhance trade flows have enabled for rapid economic development and growth
Economic growth & convergence	• The convergence of economies has occurred as a result of increased integration between market economies • Increased opportunity for firms to achieve economies of scale and to **specialise** • Increased **technological innovation** due to increased competitiveness internationally • **Financial contagion** where financial crises have a knock-on effect on the global economy quickly
Economic development	• Increased **income inequality** as global mobility of labour results in ***brain drain*** • Increased **negative externalities** such as environmental degradation and exploitation of the labour forces of developing countries
Trade, investment & transnational corporations	• Rapid increases in trade, investment, and transnational corporations • Created a global web of production facilities and supply chain connecting economies • TNCs are often criticised for exploiting lower labour costs and natural resources. ○ E.g Apple labour violations in China

Case study: China

Economic reform policies

- China's economy was liberalised under Deng Xiaoping
- Focus was on reforming the economy to become more market driven and globalised
- China underwent industrialisation to boost living standards

1 | Decollectivisation (Agricultural reforms)

Policy	• Government determined production & price • Workers met quota & received a fixed reward

	○ Extra goods produced wasn't rewarded, hence there were no incentives to boost output ● The economy required vast majority of the population to be employed in the primary sector, with few employed in secondary industries ● **Decollectivisation** enabled farmers to sell the surplus they had produced, boosting productivity
Impact	● Fostered productivity and entrepreneurship ● Agricultural output enabled for the population's food needs to be met with fewer employees ● Laid the foundations for China's rapid industrialisation ● Labourers produce **4x more** on average than they previously did ● **Nearly 40% decrease in people working in agriculture** ● **700 million** out of poverty across 4 decades ● One of few countries to transition from **low to high HDI**
2 | Open Door Policy & SEZs	
Policy	● Government allowed foreign investment into China through the establishment of SEZs ○ SEZs were subject to fewer regulations with special tax breaks
Impact	● China's new manufacturing industry subsequently boomed ○ Abundance of capital & labour within SEZs ● Economies of scale were achieved with significant enhancements in efficiency ● Exports boomed from SEZs, becoming internationally competitive ● Accounts for **over 20% of China's GDP** ● Income of participating farmers **increased by 30%** ● **2019:** largest emitter of greenhouse gases
3 | Decreased protection	
Policy	● Tariff cuts with a centralised taxation system ○ 32% in 1996 to 9% in the present ● Joining WTO in 2001 ○ Unanimously granted membership in the WTO ○ Follows **numerous concessions** made by China over 15 years of negotiations ● Reallocation of resources to manufacturing in SEZs
Impact	● **400 million out of poverty** after joining the WTO ● Exports grew by **5x since 2001** ● 32% in 1996 to 9% in the present in tariffs

	○ A decrease in domestic supply boosts productive & allocative efficiency • In **3 decades** exports went from 10% of GNP to 37% • Immediate **30% increase in FDI** • **Largest exporter globally by 2009**

2 | Australia in The Global Economy

Australia's trade and financial flows	
Value, Composition and Trade of Australia's financial flows	
Trends in Australia's trade patterns	• Australia's largest exports were iron ores & concentrates in 2019-20 (over 50% of all exports) • **Exports reached $475 billion in 2019-20,** an increase of nearly 0.9% • Comparative advantage in commodities, agricultural products and services
Debt and equity	• Financial system underwent reforms in the 1980s with a **floating exchange rate** ○ Enabled for greater accessibility of Australian firms into foreign markets and foreign investment into Australia • FDI into Australia has **doubled in the last decade** • The AUD is the 5th most trade currency in 2020

Trade at a Glance report 2021 (DFAT)		
Top 10 export destinations	Top 10 import origins	Top 5 two-way trade partners

1. China (35.3% of AU exports) 2. Japan 3. South Korea 4. United States 5. United Kingdom 6. India 7. Singapore 8. New Zealand 9. Taiwan 10. Malaysia	1. China 2. United States 3. Japan 4. Germany 5. Thailand 6. United Kingdom 7. Singapore 8. New Zealand 9. South Korea 10. Malaysia	1. China 2. United States 3. Japan 4. South Korea 5. United Kingdom

Trends in Australia's trade and financial flows	
Composition, direction & future trade	
Composition	Importance of the agricultural sector has declined over time due to: ● Technological advancements ● Shifts towards consumerism ● Protectionism ● Fluctuating world prices Mining exports account for a larger proportion of exports ● This is as a result of increased demand from developing economies in Asia, namely China. Australia's reliance on imported intermediate goods has declined ● As there has been a shift away from large-scale manufacturing in Australia. ● Australia no longer exports as many manufactured goods. ● This shift is as a result of the comparative advantage of outsourcing manufacturing to other countries, namely China and Mexico due to the inflation of the Australian dollar. ● Australia has begun to focus more on ETMs (e.g niche goods such as medical equipment). Exports & imports of services has grown over time ● The high value of the Australian dollar reduced the international competitiveness of Australia's services industry (this diminished in

	2013 as the exchange rate fell as a result of cuts made by the RBA to the cash rate). ● Exports have increased 10% of the GDP (1975) to 20% of the GDP (2010)
Direction	● Australia now **trades less with western economies** such as the UK, the United States, and the rest of the EU (all 3 less than 10%), and **more with Asian countries** such as India, China (at least 25% of our export market), Japan and Indonesia. ● Trade with EU countries and the US has decreased due to artificial trade barriers that have disincentivised agricultural exports, which has led to increased demand from Asian countries, thereby increasing exports credits. ● Australia's **regional links** with numerous Asian economies has enabled Australia to **import cheaper manufactured goods** and increase our export income (**improving the BOGS**). ● Australia's **potential over-reliance** on Asian countries will make Australia prone to issues pertaining to **Australia's narrow export base** (dominated by commodities).
Future trade	● Expected to continue to be dominated by commodities (over 50% from 2019-20) following the mining investment boom in 2013. ● The rise of Asia's middle class will place upward pressure on demand for agricultural goods due to shifts in diets, in addition to services such as education and tourism. ● Continued concerns regarding environmental degradation, water shortages, and high protection have cast some doubt on these outlooks.
Terms of Trade	
ToT trends	● ToT began to improve in the late 2010s ○ This can be attributed to the rise of Asia's middle class during the period which bolstered demand for exports such as tourism and education. ● The onset of stringent **COVID-19** measures led to fall in the ToT as dwindling consumer confidence led to a fall in demand for goods and services. ○ Supply chain issues had also influenced these fluctuations in the ToT as the cost of importing goods had drastically increased. **101.9** in Dec 2019 to **96.6** by Dec 2020. ● A global economic rebound as health measures began to ease, the ToT had surged to **128** by Sep 2021, reaching a record high of **140.6** in

	the first quarter of 2021 as global demand for commodities, particularly as a result of infrastructure spending in China, had placed upward pressure on the export price index.

Balance of Payments

Introduction	• The BoP is a **record of Australia's transactions** with the rest of the world over a set period of time
	• Inflows are referred to as **'credit'** whereas outflows are labelled as **'debit'**
	• Balanced between the:
	  ○ Current account (CA)
	  ■ Australia's engagement with global trade
	  ○ Capital/financial accounts (KAFA)
	  ■ Australia's financial investments
	• This is a key indicator of Australia's relationship with the global economy
	• CA + KAFA = 0 must always be true

Components of the Balance of Payments

Current account (CA)	**Capital/financial accounts (KAFA)**
• All non-reversible transactions	• All reversible transactions
Balance on goods/services (**BOGS**)	Capital account (**CA**)
All export and import transactions *BOGS = (Money earnt from exports) - (money spent on imports)* Net goods & services: the difference between the amount of goods/services Australia imported and the amount exported. Goods include electronics, whereas services include tourism. This can either be in balance, surplus or	• Capital transfers to other countries • E.g debt forgiveness (when a government agrees to forget part or all of a loan) • Exchange of non-produced and non-financial assets (non-goods and services that aren't liquidable but still hold value) • E.g Franchisee rights and intellectual property

<table>
<tr><td colspan="2">deficit, with Australia having a net goods surplus of $70.5 billion from 2019-20.</td></tr>
<tr><td>Net primary income account (NPY)</td><td>Financial account (FA)</td></tr>
<tr><td>• Records all earnings on foreign investment (returns on investments)
• E.g Dividends, profits, interest, rent
• Income earnings on overseas investments are NPY credits
• Outgoing earnings from foreign investors in Australia are NPY debits</td><td rowspan="3">• Transactions related to investment
• Borrowing and lending of money
• Purchasing assets such as shares
• Examples include:
○ Direct investment
○ Portfolio investment
○ Financial derivatives
○ Reserve assets
• E.g if an overseas investor invests in Australian shares, this flows as financial credit to the BoP.</td></tr>
<tr><td>Net secondary income account (NSY)</td></tr>
<tr><td>• Records all non-market transfers
• Financial support or products provided without anything specific in return
• Examples include:
○ Insurance claims
○ Workers remittances
○ Senior pension</td></tr>
</table>

<table>
<tr><th colspan="2">Factors influencing the BOGS</th></tr>
<tr><td colspan="2">Cyclical factors
Fluctuates over time</td></tr>
<tr><td>Domestic business cycle</td><td>• Higher economic growth leads to higher import spendings as households have more disposable income
• Hence, high economic growth will deteriorate the BOGS</td></tr>
<tr><td>International business cycle</td><td>• Overseas economic growth increases export revenues, improving the BOGS.
• The opposite effect occurs if overseas economic growth falters.</td></tr>
<tr><td>Exchange rates</td><td>• An appreciation makes it more costly for foreigners to purchase AUD and Australian goods/services.
○ This leads to a fall in BOGS credits as Australia would become less competitive in the global market.
○ Simultaneously, imports will become more affordable, leading</td></tr>
</table>

	to an increase in **debit.** ● If exchange rates were to depreciate, this will lead to a BOGS increase as Australian goods will become more competitive, ○ This occurs as demand for Australian goods would grow
Terms of Trade (ToT)	● An index that measures the price movements of an economy's exports and imports over a set period of time. ● It indicates the amount of imports a country can purchase based on the revenue received from exports. ● ToT does NOT account for **volume** of trade. ● If ToT **increases**, this means that **export prices are rising** at a higher rate than import prices. ○ Export revenues > imports spending, **improving** the BOGS ● If ToT **decreases,** this means that **import prices are rising** faster than export prices. ○ Imports spending > export revenues, **deteriorating** the BOGS **Terms of Trade formula** $\frac{\text{Export Price Index}}{\text{Import Price Index}} \times 100$
Structural factors *Imbedded into the economy*	
Narrow export base	● Australia is **highly competitive in the resource and minerals sector,** but is on the other hand **less competitive in other sectors.** ● Australia can easily achieve high profit margins on minerals such as gold due to increasing demand from emerging markets such as China ● Australia, however, is **incapable of producing various goods it depends on imports for** ○ Examples include cars, technology ● We import more expensive goods and we export cheap goods ○ This leads to a BOGS deficit

Factors influencing NPY

Cyclical factors
Fluctuates over time

Exchange rates	• When the AUD **appreciates, it gains value**
	  ○ People can buy **more** foreign currency
	• The main way in which exchange rates influences the NPY account is through the valuation effect
	• **The valuation effect:** when changes in $A influence the value of debt denominated in foreign currencies
	• An **appreciation** decreases the value of debt, improving the NPY balance
	  ○ AUD has gained value and can buy more foreign currency

Interest rates	• The amount due on loans are determined by interest rates, which fluctuate ○ Repayments will increase if interest rates overseas rise • Increases in foreign interest rates will worsen the NPY

Domestic economic growth	• High growth leads to optimistic expectations from investors, increasing payments to foreign investors investing in Australia
	  ○ **More NPY debits**, as foreign earnings flow out of Australia
	• High growth will boost business profits, with higher dividends paid to shareholders
	  ○ More NPY debits, as dividends will also flow to foreign investors who've invested into Australian companies

Structural factors *Imbedded into the economy (**more important in NPY**)*	
Savings investments gap	• Australia has a low level of domestic savings but needs a high level of investment ○ Needed in order to support industries, firms and growth • In order to fund high levels of investment, Australia will borrow from overseas, increasing NPY debits

Current Account Deficits	
Introduction	• A CAD occurs when the **amount spent on imports exceeds revenue earnt on imports**. • The CAD is too high when it is **above 6% GDP in the short term** and **4% GDP in the long term** • CAD is an **indicator of Australia's financial stability** and its ability to pay its debts

Negatives	
Foreign liabilities	• A large CAD means foreign liabilities are increasing • Australia would need to borrow from overseas to finance these if there is a large CAD • An increase in foreign liabilities will potentially entrench the economy in greater levels of debt as Australia would need to repay interest • Interest and debt paid is recorded on the NPY
Investor confidence	• Negative impact on investor confidence as our CAD would continue to deteriorate • Investors may raise interest rates or withdraw their investments • The depletion of foreign investment in Australia may plunge the economy into a crisis
Economic growth	• Seen as a **constraint on economic growth** • Slowing economic growth will reduce import spending ○ The CAD shrinks as a result • Governments may opt to compromise unemployment to reduce the CAD
Positives	
Finances domestic investment	• The CAD finances domestic investment, as a high CAD means that there is investment coming into the economy
Limited impact on growth	• Countries with low savings (such as Australia) depend on funds from overseas to expand businesses and the construction of new industries. ○ This was vital to the mining boom.

Foreign investment & the BoP

The components of the Financial Account (FA)

Component	**Description**	**Example**
Foreign Direct Investment	• Foreign financial transactions used to fund new investments in Australia or overseas. • FDI includes the purchasing of a **controlling** share (more than 10% of a company's shares).	• A Japanese country investing in the construction of a Sydney motorway

	• Long term **commitments** rather than short term investments to generate profits. • The investor is **actively involved** in the operations of the company. • **Surplus** of $27.6 billion (2019-20)	• BHP investing in Indonesia to finance the construction of a copper mine
Portfolio Investment	• The purchasing of land, shares and other marketable securities (those that can be easily sold) in existing companies. • Most foreign debt is recorded here, and is often the **largest** item on the KAFA account. • Portfolio investments are made to purely generate financial returns through dividends, interest and rent. • These investments are largely **short term.** • **Deficit** of $29.7 billion (2019-20) ○ Indicates there were more outgoing than inbound investments.	• Securities • Stocks • Bonds • Property • Purchasing of land • Commodities • Stocks (<10% of a company's share)
Financial Derivatives	• Complex financial assets whose values are dependent on the performance of such assets. • **Surplus** of $4.8 billion (2019-20).	• Stocks • Commodities • Interest rates
Reserve Assets	• Foreign financial assets that can be **leveraged** and **controlled** by central authorities and banks. • **Surplus** of $18.5 billion (2019-20)	• Gold held by the RBA • Foreign exchange held by the RBA
Other Investment	• A residual category that includes transactions that aren't classified as the aforementioned components of the financial account. • **Deficit** of $55.8 billion (2019-20)	• Trade credits • Loans • Financial leases • Currency • Deposits • *Others*
Trends in foreign investment		

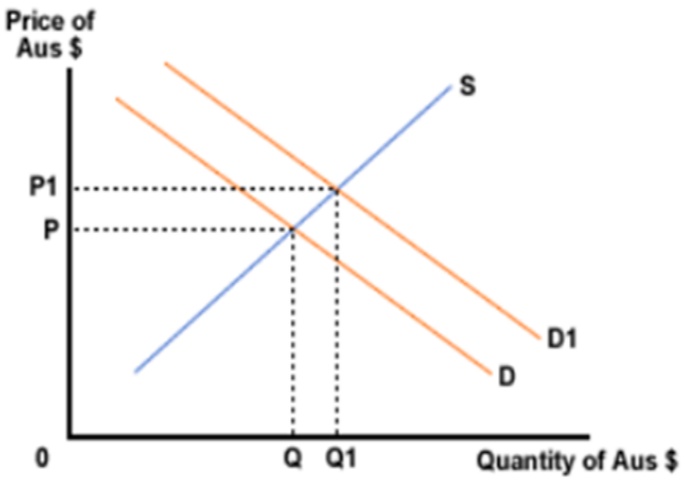
General trends	• Prior to financial deregulation, **FDI flows were higher than portfolio investment flows.**
	  ○ FDI was favoured by governments as it helped in advancing technologies and generating jobs
	  ○ Portfolio investments weren't as accessible
	• Foreign investment grew rapidly due to **deregulation**
	  ○ Globalisation enabled for easier access to foreign markets
	• **Portfolio investments are accelerating at a faster rate than FDI.**
	  ○ As FDI is a long term investment, it requires active involvement and is less favourable to investors solely seeking financial returns.
	• **Portfolio investments have increased by 13 times since the 1990s** as restrictions on capital inflows were eased.
	• New technologies have led to increased financial literacy which have also led to an increase in portfolio investment

Exchange rates

Introduction	• The price of Australia's currency against another currency.
	  ○ The price at which traders can swap Australia's currency with another
	• These rates are important as exporters prefer to be paid in their own local currencies
	• This mechanism allows firms to convert their domestic currencies into foreign ones in order to make payments
	  ○ E.g a South Korean company must sell their South Korean Won for Australian Dollars when purchasing Australian Goods
	• Exchange rates have a significant impact on international competitiveness
	• These exchanges occur in the Foreign Exchange Market (Forex market)
	• Exchange rates are determined by the forces of supply and demand (e.g ToT, liabilities)

Statistics	• AUD is the 5th most traded globally, behind the USD, GBP, JPY and EUR • 6.8% of all exchanges in the Forex market include AUD • **89% of AUD exchanged** in the Forex market **are exchanged to USD**

Trade Weighted Index	• Another form of exchange rates, asides from bilateral forex rates • TWI provides a better overall picture of the value of the AUD, as it is weighted against the trade Australia does with other partners (**multiple economies)**. It is a broader measure of AUD strength's (purchasing power) • Indicates the strength of a given currency in relation to other currencies • Definition: the price of the AUD against a group (or 'basket') of foreign currencies based on their share of trade with Australia • If the TWI is higher, the given currency is stronger against their trading partners. If the TWI declines, the AUD is weaker against trading partners.
Determination of exchange rates	
Floating exchange rate (clean)	• Market forces establish the equilibrium price of the AUD in terms of another country's currency • The equilibrium fluctuates in correlation with supply and demand (potentially by the minute) • Demand is represented by inflows into the Balance of Payments (those who wish to buy AUD, firms purchasing Australian exports) • Supply is represented by outflows from the Balance of Payments (all the people who wish to sell AUD, Australian firms purchasing foreign imports) • Prone to market failures and flaws • Australia adopted the Floating Exchange Rate model, after switching from a managed flexible peg
Fixed exchange rate (dirty)	• Market forces don't factor into the exchange rate • Determined by the central bank/government • The central bank maintains set rates by purchasing/selling AUD to keep exchange rates at its desired level (buying/selling forex) • In order to maintain this, central banks would need to attain a large reserve of forex to buy/sell AUD • Pegged exchange rates are fixed to the value of other currencies. • Risk of running out of forex, potentially causing the value of the AUD to collapse
Managed exchange rates	• Under a managed exchange rate, the currency is mostly floating, though the Central Bank may intervene to alter exchange rates should there be undesirable exchange rates.

Factors affecting demand	• **The volume of financial flows into Australia** and the amount of currency that would subsequently need to be converted into AUD. • **Interest rate differentials** have a critical influence on demand. Higher interest rates will attract more foreign savings. • **Speculatory motives for future fluctuations** in the value of the AUD. If the AUD is predicted to appreciate, demand will increase for speculators, which amplifies the level of appreciation for the AUD. • **Demand for Australian exports**, as foreign firms will need to purchase AUD in order to purchase Australian goods and services. • **Fluctuations in the ToT and commodity prices** - increases in either will place upward pressure on the value of the AUD.
Appreciation & depreciation	
Appreciation	• This occurs when the **equilibrium increases** as a result of demand increases or supply decreases. • If demand increases, the demand line would shift to the right, increasing the equilibrium. • If supply decreases, the supply line would shift to the left, which also increases equilibrium. 
Depreciation	• This occurs when the equilibrium decreases as a result of demand decreases or supply increases. • If demand decreases, the demand line would shift to the left, decreasing the equilibrium. • If supply increases, the supply line would shift to the right, decreasing the equilibrium.

Factors affecting supply & demand for AUD	
Trade flows	
Trade flows	• All trade between foreign economies requires foreign exchanges, hence the volume of trade flows determines the supply and demand for AUD. • A higher demand for exports will **increase** demand for AUD. • An increase in imports will lead to increased **supplies** of the AUD.
Terms of Trade	• TOT: the price of exports against the price of imports, **does not involve volume.** • A high ToT corresponds to higher demand for AUD and subsequently, lower supply, and vice versa. • A positive ToT leads to positive speculation in regards to the strength and performance of the dollar, thereby encouraging investment in AUD
Inflation	• As the CPI increases, purchasing power weakens and the exchange rate decreases. • Economies with **higher inflation rates** are **less internationally competitive** as inputs are too expensive, as countries with high CPI's will increase their dependence on imports, thus increasing the supply of the AUD
Financial flows	
Financial flows	• When foreigners wish to invest in Australia, they must exchange their domestic currencies for AUD. • Hence, higher investment inflows into Australia increase demand for the AUD, whereas higher investment outflows increase supply of the AUD • 95% of FOREX transactions are financial rather than trade based.
Interest rate differentials	• Refers to the difference in interest rates between different economies • Higher interest rates attract foreign investments as they provide higher returns **Case study:** GFC

	The US and EU lowered interest rates to around 0% in an attempt to stimulate economic growth and limit the impacts of the recession. Australia's fiscal stimulus meant that Australia's interest rate was roughly 3%, which caused many investors from adversely affected economies such as the US and EU to invest in Australia
Credit ratings	• Evaluates the abilities for borrowers to repay their debts • Provides reassurance on the risk of foreign investments • Australia has a AAA credit rating, which reels in more foreign investments
Investment opportunities	• Countries with a sector or industry growing rapidly will attract more foreign investments • A rapidly growing economy would have larger returns on investments **Case study:** Mining Boom Lucrative investment opportunities drove up demand for the AUD, this has since slowed and demand has weakened.
Speculative currency trading	• If investors speculate an appreciation, demand for the AUD will increase which appreciates the AUD, but this doesn't increase investment • This can be driven by the levels of ToT, CAD or the level of debt • If investors are concerned, investors will sell AUD, increasing supply and depreciating the currency
Influence of the RBA on exchange rates	

Direct intervention	• ***Dirtying the float***
	• The RBA can either boost the value of the AUD, or reduce it
	• The ability for the RBA to **correct** depreciations/appreciations depends on the RBA's **volume** of forex in their reserves
	  ○ To buy AUD, the RBA must be able to sell foreign currencies
	• The RBA can **boost** the value of the AUD by **purchasing** AUD and **selling** forex (the RBA has reserves of forex for these purposes).
	  ○ This would increase the demand whilst draining the supply for AUD, thereby appreciating the value of the AUD.
	• The RBA can **reduce** the value of the AUD by doing the opposite

Indirect intervention	• The RBA can indirectly intervene in the forex market **by changing the cash rate** by either loosening or tightening monetary policy • If interest rates increase, this incentivises investors to purchase AUD as there are prospects of higher returns, which increases demand in the AUD and appreciate its value • If interest rates decrease, this will have the opposite effect which disincentives savings and investments, depreciating the value of the AUD as foreign investors sell AUD, increasing supply. • The RBA **rarely** changes monetary policy
Effects of appreciations	
Positives	**Living standards** • Imports become cheaper, which increases the purchasing power of households. • Finite resources (e.g household/disposable income) can satisfy more wants, thus leading to an increase in living standards.

	Inflationary Pressures
	• Net exports fall (exports become more expensive while imports become more affordable), slowing aggregate demand for domestic goods.
	  ○ This leads to a fall in demand-pull inflation.
	• Imports become cheaper for local firms, decreasing production costs and enabling for more price cuts
	  ○ Causes cost-push inflation to subsequently fall.

	NPY Balance • The value of overseas debt decreases in terms of AUD (a stronger AUD means that foreign borrowings and interest can be paid with fewer AUD). ○ This reduces the value of net foreign liabilities.
	Structural change and efficiency • As international competitiveness reduces, industries will also become less competitive which drives innovation, or may otherwise lead to a contraction and shut down of affected industries. ○ Factors of production will then be reallocated to more competitive industries, increasing long term efficiency. Thus, boosting aggregate supply with increased growth and lower prices.

Negatives	**International Competitiveness** ● Australian goods become more costly on foreign markets, deteriorating international competitiveness. ● Australian export revenue and net exports will **decrease** along with aggregate demand. ● This consequently leads to **lower** economic **growth**, **living standards**, and a **higher unemployment rate.**
	BOGS - Trade balance ● As exports increase in price and imports become cheaper, the TOT will fall, lowering BOGS credits and increasing BOGS debits, worsening the CAD. ○ With the valuation effect, the value of overseas debt decreases in terms of AUD aids in reducing the CAD.
	Foreign Investment ● More expensive to invest as the AUD becomes more costly ● Foreign investment goes elsewhere, Australia loses on international competition which erodes the BOGS ● Australia is highly dependent on investment due to the savings-investment gap ● Dampens economic growth and investment in new technologies and innovation ● Foreign funds become more expensive as foreign lenders increase interest rates on loans to Australia ● Cost of AUD decreases, potentially decreasing foreign investment
	Trade and growth ● If trade performance is poor, an appreciation in the exchange rate would be undesirable as Australian goods and services would become less internationally competitive.

Free trade & protection

Introduction	● Prior to the 1970's, Australia had numerous artificial barriers in place and had adopted protectionist policies in an effort to support Australia's small labour force and high wages.

	• In the 1970's Australia had **shifted away from protectionist policies** and enacted policies to **liberalise** trade. • The average tariff had initially in the 1980s **dropped from 36% to 20%,** now standing at less than **1% today** ○ This is half that of other developed economies in the EU, making Australia one of the **most liberal countries** globally in terms of trade • **Subsidies** were also significantly reduced, with **2% of farmer's income** consisting of subsidies, dramatically lower than other advanced economies such as the **EU where it stands at 20%, and 40% in Japan.**
Free trade agreements	
Introduction	• Australia is a current signatory to **16 FTA's**, with the first being with New Zealand in 1983. • FTA's include multilateral and bilateral agreements. • The removal of artificial trade barriers and strengthening relations with other economies presents significant opportunities to bolster economic growth, development and to spur prosperity.
Bilateral FTA's	• The most notable bilateral FTA is *ChAFTA*, in which 95% of Australian exports can enter China tariff-free. • **ChAFTA** has enhanced the competitiveness of Australian firms as firms are able to sell their goods and services to foreign markets. This is Australia's most vital FTA as a third of all Australian exports flow towards China. **Case study:** ChAFTA • **Tariffs** of **up to 25%** were **completely eliminated** • Over **95%** of Australian exports are **tariff-free** • Value of two-way trade has increased by over **60%** • Value of Australian exports into China has increased by **almost 100%** • **$1 billion** worth of annual tariffs have been eliminated.
Multilateral FTA's	• **AANZFTA** removed all tariffs for Australian exports towards New Zealand and ASEAN member states. This enabled Australian firms to export goods to a market of over **650 million** consumers.

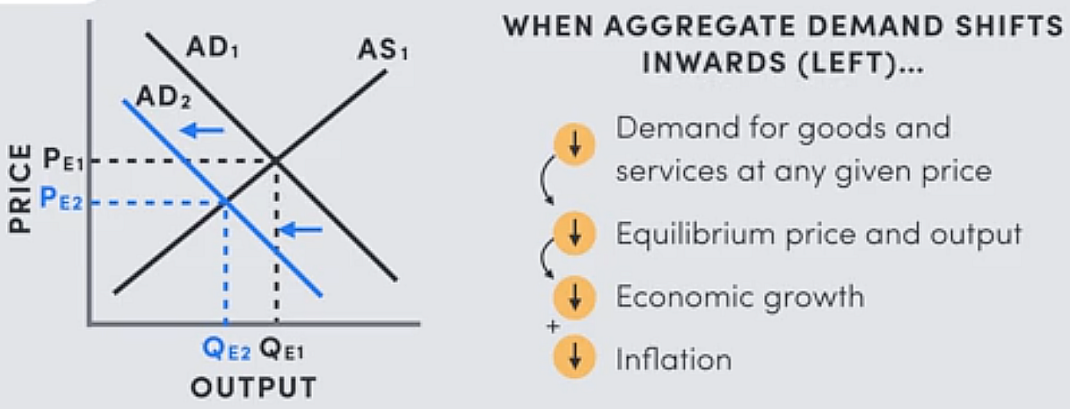
	• **RCEP** is currently the world's largest FTA, consisting of Australia, New Zealand, all ASEAN states, China, South Korea and Japan. RCEP has a combined GDP of $26.3 trillion USD and a population of 2.3 billion. **Case study:** CPTPP • Eliminates over **95%** of tariffs imposed on goods between member states • DFAT: member states collectively account for **40%** of global GDP • Member states account for **over a quarter** of world trade • Market of **500 million** people • CPTPP markets are projected to account for over **50%** of global growth
Impacts of free trade	
Domestic firms	Positives
	• Protection makes intermediate goods cheaper, lowering production costs • Efficient firms and industries innovate and become more internationally competitive regaining market share
	Negatives
	• Domestic firms account for a lower proportion of the market as cheaper imports are available, losing out on competition • Firms that are unable to compete with other economies go out of business (*e.g low-skilled labour intensive industries that is less cost effective than overseas labour)*
Individuals	Positives
	• Cheap access to imports increases individual utility and living standards • Increased job opportunities as competitive industries grow in the long term
	Negatives

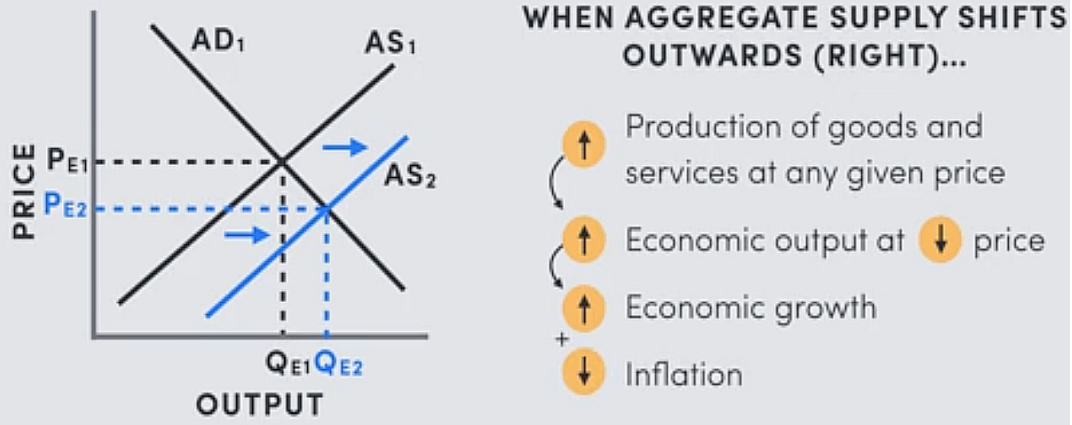
	• Increases structural unemployment as inefficient firms go out of business • Long term unemployment may increase as those who are affected by structural unemployment struggle to find new positions
Governments	Positives
	• Increased growth from decreased protection will increase government revenue as growth dividends improve (increased economic growth increases income and profits, which leads to a growth in tax revenue)
	Negatives
	• Strain to the budget (government revenue decreases due to an absence of tariffs) • Increased expenditure towards unemployment benefits & retraining • Liberalisation is often met with political backlash (takes several years for policies to take effect)

3 | Economic Issues

Economic growth	
Introduction	• Defined as an **increase in the output** of goods and services that an economy produces over a given period of time • It is measured by the annual rate of change in **Real GDP** ○ The % change increase in the value of goods and services produced in an economy over a period of time and • **Income and living standards** are **raised** with economic growth • The percentage change in the production of goods and services is the rate of economic growth. **Economic growth formula** $\textbf{Growth (\%)} = \frac{\text{Real GDP (current year) - Real GDP (previous year)}}{\text{real GDP (previous year)}} \times 100$

Real GDP	• Accounts for inflation, unlike nominal GDP • Nominal GDP needs to be found first before calculating real GDP • Nominal GDP is adjusted for inflation with Real GDP **Real GDP formula** $\text{Real GDP} = \frac{\text{Nominal GDP}}{\text{CPI}} \times 100$
Aggregate supply & demand	
Aggregate demand (**AD**)	• Total demand for all finished goods and services in an economy at a certain price level (total amount of spending in an economy) • Comprised of expenditure in household consumption, investment (business), government spending and net exports • General price levels are used as AD applies to all goods and services in an economy • Reflects the law of demand • The position of the AD curve influences the level of economic output and growth ○ Price is on the **y-axis**, and output is on the **x-axis** **Aggregate demand formula** $AD = C+I+G+(X-M)$ **C** (Consumption) **I** (Investment) **G** (Government Expenditure) **X** (Exports) **M** (Imports)
Aggregate supply (**AS**)	• Total amount of goods and services an economy can produce in a specific period at a certain price (total productive capacity of an economy)

	• When prices fall, output falls, resulting in a move to the left of the curve (A$ contracts) • When prices increase, output increases with a movement towards the right on the curve (A$ expands) • As output expands, less inputs are available (inputs become more scarce). If prices rise it's harder and more expensive to expand. **Aggregate supply formula** AS = C + S + T **C** (Consumption) **S** (Savings) **T** (Taxation)
The AD-AS diagram	• This interaction determines the level of economic activity and growth • **Shows how shifts** in AD and AS **impact the general price level** and **total output** of an economy • The level of output on the AD-AS diagram determines the value of GDP, whereas the price determines the inflation rate • Macroeconomic occurs when *AD = AS* ○ Means that total demanded = total supplied 

	
Implications of growth	
Overall	• It generates **jobs**, and enables individuals to maximise their utility, thereby **raising living standards** • It is considered to be the **single most important measure** to determine economic performance
Governments	• It informs the government and policy makers • The RBA uses this information to **forecast** inflation trends and to **determine appropriate changes in the cash rate** • The productivity commission uses this information to see how structural policies impact on economic growth in the long term.
Outlooks	If economic outlooks are **pessimistic**: • Households will **spend less** and **increase savings** • Firms would be **less likely to invest** in capital goods • Falling production • Rising unemployment This leads to a fall in aggregate demand
Multiplier Effect (K)	• Used to measure the **overall impact in an increase in a component** in the economy (such as government spending in the economy or investment) ○ For example, if the government were to inject more into the economy, how would the initial amount affect the output of the economy as it flows through the circular flow of income • As such, if one variable is affected, all other variables will be affected as well. • Used to see how macroeconomic policies will affect an economy's output (GDP)

	Formula for the Multiplier (K) K = 1 / MPS *or* K = 1 / (1-MPC) --- If MPC is 0.80, then: K = 1 / MPS would be: K = 1 / 0.20 K = 1 / (1-MPC) would be: K = 1 / 0.80 **Formula for MPC** Change in Consumption [C] / Change in Income [Y] --- ● The proportion of extra income that is consumed ● Remember: MPS + MPC = 1

Sources of growth

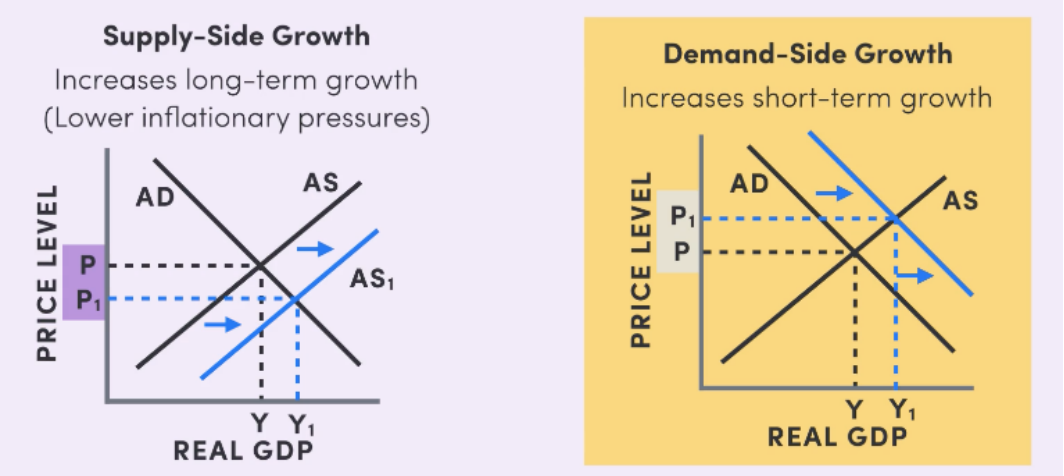
Demand-side growth

- Any economic growth occurring due to an increase in aggregate demand **(AD)**
- Accounts for consumption, investment, government spending and net exports
- Only improves economic growth in the **short-term**, unlike supply-side growth

Consumption	● Household spending on goods and services Disposable income ● Higher income tax will **decrease** the amount of disposable income available ● A decrease in disposable income will also decrease the rate of consumption, lowering economic growth Consumer expectations ● If poor economic conditions are anticipated, households will opt to save to preserve their funds for the foreseeable downturn ● Pessimistic forecasts will lead to a **contraction** in spending, lowering **aggregate demand** Interest rates ● Higher interest rates will **increase** the cost of borrowing and **increase** returns on savings ● Households will prefer to **save** to reap higher returns on interest, whilst borrowers will **decrease** savings to finance their loans

	• Consumption declines as a result of higher interest rates
Investment	• Spending by firms on capital goods such as equipment and machinery Business profits • With higher profit margins, businesses will be able to purchase a larger range of tools and machinery (capital) • This increases investment and **drives up** aggregate demand and growth Business expectations • Unfavourable economic conditions will increase the volatility of investments, leading a **contraction** in investments • Aggregate demand and growth subsequently falls Interest rates • With **lower** interest rates, it is cheaper to borrow loans and increases investment and aggregate demand
Government spending	• Government spending with regards to public consumption, investments and transfer payments • With economic downturns, governments **reduce taxes** to stimulate greater levels of spending • Downturns also **increase** unemployment, reducing revenue from income tax (PAYG) • More people will rely on transfer payments, decreasing tax revenue and increasing spending as leakages decrease, whilst investment increases • This downturn results in **higher** economic growth
Net exports	Overseas economic conditions • Demand for Australian exports increases as a result of favourable economic conditions from international markets • This leads to higher net exports and higher economic growth Domestic economic conditions • With a stronger Australian economy, demand for overseas imports rises, leading to a trade deficit Exchange rate • Influences the price of imports and exports • With a stronger AUD, the cost of Australian exports increases, making Australia **less** internationally competitive • Import spending also rises with a stronger AUD, reducing net exports and economic growth
Supply-side growth	

- Economic growth caused by increases in aggregate supply (AS)
- Refers to the **productive capacity** of the economy
    - In other words, the quantity of output producers can make at any price point
- When **AS increases**, production volumes at any price level increases (**producers can produce more at a lower price**)
- Growth in AS drives **long-term growth**
- A shift to the right as a result of supply-side growth **decreases** inflationary pressures as the price level also decreases (as shown below)



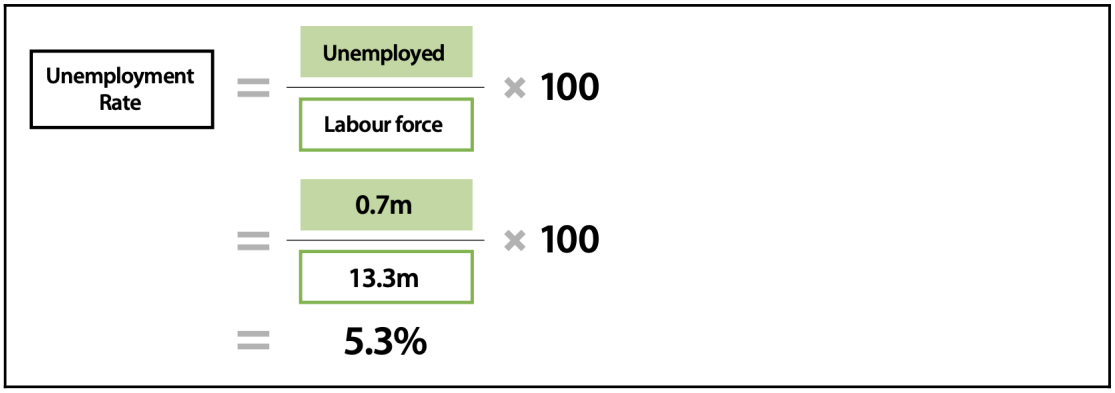
Quantity of new resources	• New resources are naturally located so factors of production **increase naturally** over time (often a slow process) • **Example**: population growth resulting from **migration** (increase in skilled labour) increases the labour supply • Also influenced by the discovery of more natural resources such as oil or coal
Technological advancements	• Enables firms to produce more **efficiently** (new machinery and production techniques) • This boost in labour and capital productivity can increase the quantity of outputs per inputs • Example: **robots** can replace human labour is **more cost effective** and can produce at a faster rate • This is often prompted by firms who invest in research and development • Governments can **spur** further technological advancements through **grants and tax incentives**
Microeconomic reform	• Improves efficiency and productivity across the economy • **Example**: **closure of inefficient firms** and expansion of efficient ones (economic restructuring) • Factors of production will also shift to efficient sectors

	• As a result, the economy **utilises resources more efficiently** • **Example**: to make labour more **efficient**, the government can **increase investment in education and training** • As such, more efficient means of production boosts the quantity of outputs per input
Effects of growth	
Positives	**Increase in living standards** • An increase in real GDP or GDP per capita will increase household income, enabling households to **satisfy their material wants.** • *This doesn't apply if population growth increases at a greater rate than real GDP*
	Lower unemployment • Labour demand is derived from demand for the final output in the economy. • High rates of economic growth **stimulate** demand for goods and services. ○ Production must hence be **boosted** by **employing** more workers to satisfy demand.
	Improvement in Government Budget • When unemployment falls, fewer people require unemployment benefits. This reduces government spending on welfare. • The government also receives more income tax as more people are paying taxes. • People are also pushed into higher tax brackets, increasing government revenue. • Company tax revenue increases.
	Increased innovation • Higher growth leads to broader competition for firms, hence, in order to compete, firms will improve production processes. • This decreases costs and increases the quality of the goods produced in order to compete with other firms. • Investment in innovative technology and capital rises to achieve this, **improving production and efficiency.**
Negatives	**Income inequality** • This occurs when the benefits of growth are unequally distributed across households.

	○ Ideally, the benefits are shared through public goods/services and higher wages, though this rarely occurs. ● This disproportionately benefits people with higher incomes.
	Inflation ● Excessively fast demand-side growth can increase inflation, outpacing supply. ● An **increase in aggregate demand** results in an **increase in the price level** (inflation). ○ This can be **mitigated** if the increase in aggregate demand is **met with similar increases in aggregate supply** (firms are able to supply at the level of demand).
	Environmental degradation ● There is an economic **conflict** between growth and sustainability. ○ This occurs as a result of heightened demand for resources when aggregate demand rises. ● The government aims for ecologically sustainable development, which enables for economic growth whilst minimising the environmental costs.
	External stability ● Australia's **reliance on imports** increases with higher economic growth due to a rise in disposable income. ● This **deteriorates** the BOGS and the current account as a result of the increase in debits. ● The decrease in the BOGS **threatens** external stability, hence the government aims to slow growth to prevent an increase in a CAD.

Unemployment	
Measures of unemployment	
Working age population	**Everyone** aged 15 years and over
Labour force	Total population **aged 15 or over** that are **either employed or unemployed** (working or seeking for work)

	To be active in the labour force: • Actively searching for work • Employed for at least an hour per week (or self-employed) • Stood down without pay for less than 4 weeks • Students paid while working and studying • Striking workers To be inactive: • Children under 15 years • Full time students aged 15 or over • People with full time domestic duties • Retirees • People not looking for work
Labour force participation rate	% of working age population **in the labour force** **Participation rate formula** $\text{Participation Rate} = \frac{\text{Labour force}}{\text{Working-age population}} \times 100$ $= \frac{13.3\text{m}}{20.0\text{m}} \times 100$ $= 66.5\%$ • Proportion of people participating in the workforce (e.g % of the working age population (15 years or over) who are employed or unemployed) • When the participation rate **rises** this means that more individuals are **actively searching for work** • The **unemployment rate rises** in the **short term** if the participation rate **rises**
Unemployment rate	% of people in the labour force that **are employed** **Unemployment rate formula**

	 • **Unemployed** people are those who actively seek paid employment but are unable to find work (% of people in the labour force who are unemployed) To be counted as unemployed, an individual must be **actively seeking** work through forms such as: • Checking job advertisements • Responding and applying to jobs • Attending interviews
Issues with measurement	
Labour force underutilisation	• The unemployment rate **often** underestimates the underutilisation of labour resources **Underutilisation rate formula** Unemployment rate + underemployment rate
Under-employment	• People who are employed but not working as many hours as they would like to ○ A cashier works 3 shifts a week, but desires to work 6 • If several shifts are distributed among several employees as opposed to one, this makes the **unemployment rate deceivingly low** and doesn't reflect how employees aren't receiving enough hours
Hidden unemployment	• People who are employed but not working as many hours as they would like to • This isn't accounted for in statistics and thus the unemployment rate is lower than it should be

Types & causes of unemployment	
Cyclical unemployment	Caused by a contractions in economic activity --- • When aggregate demand **decreases**, cyclical unemployment **rises** • Labour demand is a derived demand, **determined by the demand for goods and services** • During downturns, demand for goods and services decline leading to workers being laid off, thus leading to cyclical unemployment
Structural unemployment	Caused when the skills of jobseekers don't match the characteristics demanded by firms --- • Mainly caused by structural change (e.g technological progress, changing consumer demand) which affects the pattern and location of production within the economy • Structural change affects industries in varying ways, with some experiencing contractions whilst others shutting down • **Example**: Australia's manufacturing industry contracted due to technological advancements, many workers lost their jobs and found it difficult to acquire skills for other industries <u>Poor training and education</u> • If training and education is lacking or inaccessible, this leads to limited skills and qualifications to find jobs in the economy <u>Geographical immobility</u> • Workers with the right skills are unable to move to to where jobs are available • This is as a result of financial and familial constraints
Frictional unemployment	Caused by the **search time** for workers to find new jobs and firms to find new employees --- • When people are in between jobs (quitting jobs and searching for another), this leads to frictional unemployment • Time and effort is invested to find a new job • Frictional unemployment also occurs when school leavers are transitioning towards work • Inevitable yet temporary
Seasonal	Resulting from the seasonal nature of some work and production

unemployment	• Outside certain periods, specific industries and firms don't require as many workers • Unavoidable but generally predictable • Examples: christmas retail, fruit pickers
Hidden unemployment	Individuals who seek work but aren't actively searching • **Excluded from unemployment statistics** as they aren't officially considered to be part of the labour force as they aren't searching for work • Examples: discouraged job seekers after lengthy or unsuccessful search, and parents who would work if suitable jobs and childcare options were available
Long-term unemployment	Out of work for 12 months or longer • Occurs as a result of structurally unemployed individuals who are unable to retrain • Strong growth can reduce unemployment by opening vacancies, but not necessarily for those unemployed long term • **This can become permanent unemployment as a result** Finding a job after being unemployed for 12 months is more challenging as: • **New arrivals** are preferred • Training and skills become **outdated** • Lose networks, connections, skills and **employability** • Unfavourable **stigmas**
Hardcore unemployment	Out of work for so long that employees are rarely employed due to personal circumstances Often caused by: • Mental disabilities • Physical disabilities • Drug abuse • Anti-social behaviour • Never had a job
Wage unemployment	Caused by wage levels and expectations of this rising • Rising wages or expectations will led to increased costs in labour,

	causing demand to fall due to increased costs for employers causing further unemployment • Labour is often replaced with capital (machinery) if the minimum wage is set above equilibrium wage
Under-employment	People who are not working as many hours are they desire (technically not classified as unemployed) Categorised as: • Part-time workers who want more hours • Usual full-time workers who are currently working part time • Generally higher in groups with large proportions of part-time workers (e.g females, young workers) • **Significant increases in underemployment have been caused by casualisation**
Groups impacted by unemployment	
Young people	A lack of skills demanded by employers has led to unemployment among those aged 15-19 to be **3x** higher than the national average
Mature age workers	Older individuals are seen as less desirable by employers as they are more likely to retire soon, in addition to a lack of awareness on technology usage
Low educated individuals	Due to a general lack of qualifications, individuals with low levels of educational attainment may struggle to attain jobs
Industries undergoing structural change	Industries such as manufacturing and textiles that are becoming less dependent on human labour face structural unemployment as the skills in these industries are often not transferable to others.
First nations individuals	Often resulting from racial discrimination or disparities in healthcare and education access.
Migrants	Migrants often face adversity as a result of language and cultural barriers that bar many from obtaining a job. The rate of unemployment declines as migrants live in Australia for longer.
Regions	Socioeconomic disadvantage and lower levels of educational attainment have contributed to higher unemployment rates. Regional areas additionally have fewer opportunities.

Trends

Trends: **CD_2021 Y12 Chapter 8.pdf**

- High rate of economic growth in the decade up to the COVID-19 pandemic has bolstered employment rates
- Higher economic growth rates have increased job opportunities further placing downward pressure on the unemployment rate
- Growing casualisation of the industry has resulted in rising underemployment

NAIRU

Natural rate of unemployment	Level of unemployment in the economy where **no cyclical** unemployment exists ● Also known as **full employment** ● The government aims to achieve full employment ○ In other words, the full utilisation of labour resources --- ● Rather, it is comprised of employment that is **unavoidable** ○ Frictional ○ Seasonal ○ Structural ○ Hardcore
The NAIRU	Lowest level of **unemployment** that can be sustained without an increase in inflation, interchangeable with the natural rate of unemployment ● Does not account for **cyclical unemployment** ● **Estimated to be at 4.5-5%** **At or below the natural rate** *Increases inflation* ● **Any increase in economic growth will lead to an increase in inflation** ● This is due to a lack of suitable individuals to fill vacant positions (due to structural factors) ● Firms have to increase labour demand to boost production, increasing inflation ● Firms compete for employees with suitable skills, often employed in other industries thus forming a competitive labour markets causing an increase in wages (this needs to be financed by

<table>
<tr><td></td><td>
<table>
<tr><td>increasing prices)
• Collectively, this results in inflation</td></tr>
<tr><td>Above the natural rate</td></tr>
<tr><td>Leads to lower unemployment
• There's cyclical unemployment in the economy
• Indicates there is spare capacity in the labour market
• Government can boost economic activity to boost to promote job creation and decrease unemployment</td></tr>
</table>
</td></tr>
<tr><td>Policy implications</td><td>• Any macroeconomic policy to reduce unemployment by boosting growth won't work as this only leads to inflation
○ Expansionary policy is unsuitable
• To reduce unemployment, the government must instead address non-cyclical factors
○ Structural, seasonal, frictional and hardcore unemployment</td></tr>
<tr><td colspan="2">Economic costs</td></tr>
<tr><td>Lost output & income</td><td>• Opportunity cost of lost productivity
• Productive potential is not being used to its full capacity
• Operating below Production Possibility Frontier
• Decreased production and GDP</td></tr>
<tr><td>Economic growth falls</td><td>• Decreased GDP causes a contraction in economic growth
• Decrease in consumer income and spending
• Consumer demand falls
• Profit decreases
• Investment decreases, diminishing long term economic growth</td></tr>
<tr><td>Declining skills</td><td>• When out of work for a long time, people being less employable
• Skills become more outdated
• Those suffering from long term unemployment are unable to compete with newer entrants to the labour market
• Increases long term structural unemployment (hysteresis)</td></tr>
<tr><td>Lower wage growth</td><td>• High unemployment means there's excess labour supply - leading to a wage decrease
• Rather, wages experience slow growth due to:
• 'Downward stickiness' wages often don't get reduced</td></tr>
</table>

	• Wages are usually **fixed** under formal agreements (e.g Awards) • Slow wage growth places downward pressure on consumer spending and growth
Decreased living standards	• Often having lower incomes, resorting to welfare payments • Less able to afford basic needs and wants • Erodes standard of living
Increased tax burden	• High unemployment causes an increased reliance on welfare payments • **Tax burden on workers to fund the payments** • **Erosion of the tax base** ○ Number of people tax decreases whilst demand for benefits increases
Worsened budgetary position	• High unemployment decreases taxation revenue • Increases spending on transfer payments and welfare payments • Government also incurs additional spending on retraining and job placement assistance
Social costs	
Worsens income equality	• Unemployment is often more **concentrated** among **lower-income** earners (e.g youth and unskilled) • This is because lower-income groups are usually less competitive and more **replaceable** • Income is **redistributed** from low-skilled, young workers to higher skilled, experienced workers
Social issues	• People experiencing unemployment are more likely to encounter social problems (usually long-term) such as crime, debt, poverty, homelessness, family breakdown, loss of dignity, and poor health • Contributes to the poverty trap • Reduces education opportunities

---

Inflation

Introduction	• **Definition:** sustained increase in the general price level over a period of time, generally a year (price increases without the product changing) • **Price stability:** the goal of keeping inflation at a low, stable level • Refers to the prices of numerous products across the economy, hence the general price level is used

Government inflation goals	• The RBA has an inflation target of **2-3%** over the business cycle on **average**
	• This target has been implemented to minimise the possibility of hyperinflation
	  ○ Hyperinflation is defined as over **50%** per **month**
	  ○ Purchasing power depletes
	  ○ Money becomes worthless
	  ○ Cost of living soars
	• **A low positive inflation** rate (2-3%) is preferred as to **avoid deflation**
	  ○ During deflation, price levels **fall**, placing upward pressure on savings
	  ○ Aggregate demand subsequently falls
	  ○ Economic activity slows, potentially leading to a **recession**

Measurements of inflation	
Headline inflation	• Most common, as it is a good indication of movements • Found using the **Consumer Price Index (CPI)** • Price changes of basket of goods and services, weighted by importance to the average household • **Quarterly** changes are recorded by the media, hence the name • Categories included in the basket include food, clothing, transport and health **Headline inflation rate formula** $\text{Inflation rate} = \frac{\text{Current CPI - Previous CPI}}{\text{Previous CPI}} \times 100\%$ ↳ % Change in CPI **Shortfalls** • Doesn't measure all goods and services (e.g property, mortgages) • Doesn't reflect the current performance of the economy

<table>
<tr><td>Underlying rate</td><td>

Also referred to as the core rate
Most accurate and preferred

<table>
<tr><th>Underlying inflation rate formula</th></tr>
<tr><td>Headline rate - Volatile factors</td></tr>
</table>

Unusual movements can distort our understanding of inflation
Excludes temporary shocks to inflation rates
Example: higher food prices in times of drought makes the inflation rate seem deceptively high

</td></tr>
<tr><td colspan="2">Types of inflation</td></tr>
<tr><td colspan="2">Demand-pull inflation</td></tr>
<tr><td colspan="2">

When increases in aggregate demand exceed increases in aggregate supply (can’t keep up with demand)
If demand outpaces the rate of supply, this leads to a shortage of good and heightened consumer competition, placing upward pressure on prices
Generally occurs during a boom period (aggregate demand is strong but the economy nears productive capacity)
Caused by any increase in aggregate demand (consumption, investment, government spending, net exports, consumer confidence)

</td></tr>
<tr><td>Inflationary expectations</td><td>

A demand-side source
If consumers expect higher inflation, planned purchases are brought forward, increasing spending increases short term, driving up demand-pull inflation
In other words, consumers cause inflation by avoiding it

</td></tr>
<tr><td colspan="2">Cost-push inflation</td></tr>
<tr><td colspan="2">

Production costs rise, forcing firms to increase their prices to preserve profit margins
When production cost increases, firms are strained and can produce fewer goods at a certain price level
Factors include wages (minimum wage), cost of intermediate goods

</td></tr>
<tr><td>Imported inflation</td><td>

Originates from the overseas sector
If the AUD depreciates, cost of imports of intermediate goods increases, driving cost-push inflation

</td></tr>
</table>

Wage-price spiral	• Inflation within the economy heightens the cost of living, hence causing workers to seek higher wages, inadvertently pushing cost-push inflation
Effects of inflation (economy)	
Limitations	
Constraint on economic growth	**Economic decisions** • Distorts consumer spending and saving decisions • Economic growth falls in the long term • Short term spending increases as a result of **inflationary expectations**, increasing short term growth • Strains long term growth **Contractionary policy** • Contractionary monetary or fiscal policy is implemented to alleviate inflation • Demand and economic growth subsequently decreases due to contractionary policies
International competitive-ness	• High inflation rates wanes Australia's international competitiveness, as consumers will choose to purchase goods from more competitive economies with lower prices • With high inflation, the cost of Australian of products increase which deteriorates the BOGS and the current account due to decreases in exports
Currency depreciation	• Inflation **depreciates** the value of money ○ The same amount of AUD is worth less and can buy less foreign currency • Undermines investor confidence and demand for AUD, leading to a depreciation
Benefits	
Avoiding deflation	• Avoids deflation due to low economic growth and high unemployment • Consumers delay spending to wait for prices to drop further, dampening aggregate demand • For this reason, the RBA strives for a **low positive** inflation level of 2-3%
Unemploym-	• Indirect effect of increasing employment

ent	• High inflation means that aggregate demand is strong, placing upwards pressure on demand in the labour market
Effects of inflation (stakeholders)	
Income earners	• Loss of **purchasing power** ○ The same amount of money buys fewer goods and services over time • Unless incomes rise at the same rate as inflation, households cannot buy as much
Income distribution	• **Worsens** to differing degrees depending on skill level and income types • Workers seek higher incomes as prices rise, and the ability to achieve higher incomes depends on **bargaining power** ○ More skilled individuals have greater bargaining power • Incomes that are pegged (or **indexed**) won't be adversely impacted by rises in inflation

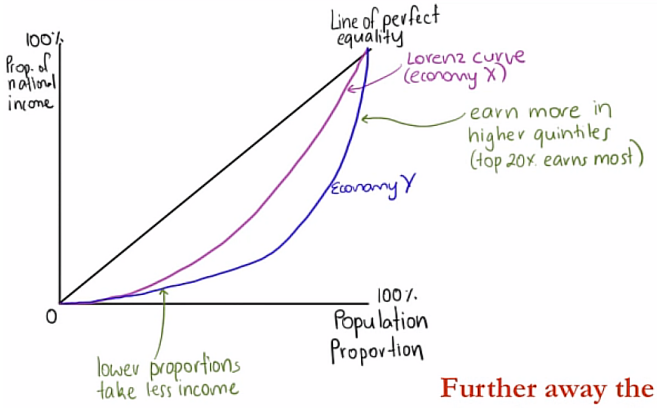
Borrowers, lenders & savers	• Lenders are **negatively** affected
	  ○ Lenders **receive** an interest that is worth less with inflation
	• Borrowers **benefit**
	  ○ Borrowers are technically repaying less interest

Owners of real assets	• Real assets - physical assets that have worth • Inflation causes the monetary value of assets to rise, making their owners **wealthier**

Firms	• The effect of inflation of firms varies by the **type** of firm and **market**
	  ○ Monopolies benefit, hence they earn more profits
	  ○ Import competing firms suffer due to waning international competitiveness

Government	• Inflation increases taxation revenue
	• Nominal wages grow, pushing more individuals into higher tax brackets
	  ○ This is despite real value of wages remaining unchanged
	• Government expenditure increases
	  ○ Cost of providing public goods is higher

Distribution of income	
Income	• The amount of money or other benefits that flows to individuals and households from the sale of factors of production **over a period of time** • Earned income: earnt from labour • Unearned income: transfer payments, dividends, interest, rent
Sources of income	• **Wages:** accounts for **57%** of all income • **Earnings from capital:** contributes to around **9%** of income. Includes dividends from shares and interest. • **Profits**: profits generated from operating businesses. Accounts for **9%** of income. • **Rent:** accounts for **8%** of income • **Transfer payments:** contributes to **8%** of income
Wealth	• The **stock of assets individuals own** at a **particular point in time** • Wealth can be acquired using income to purchase **real estate, shares** and **government bonds.** • Wealth can also be inherited. • The dominant source of wealth is **property** (**42%** of all wealth)
Measurement	
Quintile measurement	• What % of income each proportion of the population has • Generally, each quintile progressively earns a greater proportion of income
Lorenz curve	• Visual representation of the distribution of income & wealth **The Lorenz curve**



	1st economy X	2nd economy Y
1st quintile	5%	2.5%
2nd q.	15%	7.5%
3rd q.	20%	15%
4th q.	25%	20%
5th q	35%	55%

Further away the Lorenz curve is from the line of perfect equality = more unevenly distributed

Gini coefficient

- A higher number indicates more **inequality**
- Ranges from **0** to **1**
- A gini coefficient of 1 means that a singular person holds **all** national income
- A gini coefficient of 0 means that every person earns **the same** amount of income
- Calculated from the Lorenz curve
- The further from the line of perfect equality, the **higher** the gini coefficient

Gini coefficient formula
A / A + B

Trends in distribution of income

Differences in incomes between groups

- The wealthiest quintile owned **over 60%** of wealth in Australia
- Highest income earners are between **35 and 54**
  - Those between **15 and 19** take the lowest earnings
- Wealth generally increases with age in Australia
- Non-English migrants face lower incomes
- People with higher educational attainment have higher incomes
- Women earn **~$250** less on average than men
  - Due to lingering stigmas and women generally being in lower paying occupations

<table>
<tr><td>Reasons for differences in incomes</td><td>

Pay is determined by how employers value their employees in terms of skill levels and productiveness

In other words, jobs that demand more skills have higher incomes

Some industries grow faster than others due to their competitiveness

Higher wages in firms that are growing faster

</td></tr>
<tr><td colspan="2">Government policies</td></tr>
<tr><td>Introduction</td><td>

Remember: inequality isn’t necessarily viewed negatively as governments often choose to promote inequality
The overarching aim is to boost social mobility and increase standards of living

<table>
<tr><th colspan="2">Variations between countries</th></tr>
<tr><td>Countries accepting inequality</td><td>Minimising inequality</td></tr>
<tr><td>

United States
Australia

</td><td>

Denmark
Finland
Netherlands
Norway
Sweden

</td></tr>
</table>
</td></tr>
<tr><td>Policies to reduce inequality</td><td>
Welfare/transfer payments system

Progressive taxation system: higher income earners are taxed more
Money is redistributed from high income earners to lower income
Welfare is distributed based on the needs on individuals
Examples include

Unemployment benefits
Disability benefits
Youth benefits
Dole

Australia’s gini coefficient would be worse without a progressive taxation system

<table>
<tr><th colspan="2">Indirect policies influencing inequality</th></tr>
<tr><td>Reducing unemployment</td><td>Reduces inequality by employing people without incomes</td></tr>
</table>
</td></tr>
</table>

Mandatory superannuation	Reduces inequality between older and younger individual by providing older individuals with savings
Monetary policy	Changes the cost & reward for borrowing or saving, with high income earners saving a larger proportion of their income. As such, higher interest rates benefit high income earners.
Microeconomic policy	Redistributes income to more efficient and competitive industries at the expense of others

Economic costs & benefits of inequality

Positives	**Encourages training to improve skills** ● Entrepeneurialship was incentivised as people sought to attain higher wages ○ Entrepreneurial acts as a main driver behind growth ● Incentive to upskill boosts economic productivity ● Improves **AS**, driving growth in the long term
	Increases national saving as wealthier individuals tend to save ● Lowers reliance on overseas borrowing to finance domestic investment ○ Benefits external stability
	Improved budgetary position ● Less spending on welfare and transfer payments with an uneven distribution
Negatives	**Reduction in overall utility** ● Utility refers to overall ability to satisfy wants ● Low income individuals gain more utility for each dollar earned than wealthier individuals ● Income isn't going to places where they aren't the most appreciated
	Reduce economic growth in the short term ● Wealthier individuals tend to save their incomes whilst people on lower incomes tend to spend their incomes

	○ Hence, with an uneven distribution, less is spent overall in the economy ● Inequality reduces short term economic growth as it increases the proportion of income saved ○ Weakens the multiplier
	Poverty ● Lower income individuals will be pushed into relative poverty ● Forms class divisions and potentially social unrest ● Worsens social outcomes (increased vulnerability to crime, drug abuse and mental illness)

External stability

Definition

Refers to the government's aims to maintain sustainability on external accounts so Australia can service its foreign liabilities

- Maintaining sustainability on external accounts refers to ensuring that foreign liabilities and imports are at a repayable level

Implications of External Instability

Debt trap	● Debt may **require more borrowing** to repay it ● If net foreign liabilities grow at a higher rate than the GDP, our debt obligations will outweigh our capacity to repay them ○ More capital will need to be borrowed to repay existing debts ○ This incurs more financial liabilities, and continues a **cycle** of borrowing funds to service debt, hence creating a **debt trap**
Lower credit rating	● May potentially lower Australia's **AAA** credit rating ● A lower credit rating makes it more difficult for Australians to borrow **foreign loans** ○ This is due to the fact that foreign investors will lose confidence in our ability to repay debt ● Borrowing hence becomes less accessible ● Creates more issues for **domestic economic growth** which is heavily reliant on borrowing

	○ This is due to our savings and investment gap
Capital flight	● **Reduced investment** entering Australia ● If CAD and debt are high and our currency is volatile: ○ Investors lose confidence and withdraw capital ● If investors withdraw at a high rate, this will **destabilise** the AUD and cause a rapid **depreciation**
Australia's external stability concerns	
Historical CAD	● Financial deregulation in the 1980's saw Australia's CAD rise dramatically ○ Average of **nearly 5% of GDP** in 2000's from **4.1%** in the 1980 after **deregulation** ○ The CAD narrowed in the 2010s to **3.4**% in the 2010's, alleviating some concerns ○ Moved into a **surplus** in 2019 ○ Currently **2%**
Growth in debt	● **Accelerated** from **6%** in the 1980s to **35%** by 1990, before standing at **60%** of GDP ● Debt has **increased faster than economic growth,** raising concerns about our ability to service our obligations
Trade balance	● BOGS are generally in a **deficit,** sometimes fluctuating to a surplus. This is due to: ○ Australia's volatile terms of trade (ToT) ■ Export revenue fluctuates with volatile commodity prices ○ Lack of international competitiveness ■ Australia heavily relies on imports for industries such as manufacturing ■ This increases our reliance on imports for expensive goods, deteriorating the CAD
Currency volatility	● When commodity prices rise, the AUD appreciates ○ This is as a result of increased demand for AUD from overseas buyers ● Current appreciations **undermine international competitiveness** ○ Australian goods become more expensive for foreign buyers with an appreciation of the AUD ● During the **Mining Boom,** the AUD appreciated to the point that it led to a decline in the manufacturing sector

Measurements of external stability

- CAD as a % of GDP
- Net Foreign Liabilities as a % of GDP
- Exchange rate

The CAD as a % of GDP

- Tracks changes in the size of the CAD relative to the rate of economic growth
- Our external stability worsens if the CAD increases as a % of GDP
    - Indicates that our financial liabilities are rising faster than our capacity to repay
    - Average of **nearly 5%** in 2000's from **4.1%** in the 1980 after **deregulation**
    - The CAD narrowed in the 2010s to **3.4**% in the 2010's, alleviating some concerns
    - Moved into a **surplus** in 2019

Causes of the CAD	

Trade balance	• Generally in **deficit** despite of fluctuations
	  ○ As a result of a volatile terms of trade
	  ■ Export revenue from commodities rises and falls
	• Lack of international competitive in manufacturing increases our reliance on expensive imports for goods
	• Hence, import debits remain high, whilst export credits fluctuate

Saving and investment gap	• Persistent **deficit** on the NPY account ○ Historically low savings rates means that Australia relies on overseas borrowing, meaning there is a consistent stream of outgoing servicing costs

Net Foreign Liabilities as a % of GDP

- External stability worsens if net foreign liabilities increases as a % of GDP
- **Trends:**
    - 20% in the 1980s
    - 60% in the 2010s
    - 50% currently

Components of net foreign liabilities	
Foreign debt	• Debt to GDP ratio has been **growing since financial deregulation** • When debt increases faster than GDP, interest payments take up more national income ○ Threatens ability to repay • Unlike equities, interest on debt is paid regardless of economic performance

Foreign equity	• Servicing costs on foreign equity depend on the performance of the asset
	  ○ Dividends payable to overseas investors fluctuate with the level of profit made by a firm
	  ○ If a firm doesn't make a large profit by the end of the year, they don't have to pay back a large amount of dividends

Net Foreign Liabilities formulas
Net foreign liabilities (NFL) *NFL = Net Foreign Debt (NFD) + Net Foreign Equity (NFE)* NFD = *Inbound investments - outbound investments* *NFE = Outbound investments - inbound investments*

The Exchange Rate

- Tracks movement in international confidence in our economy
    - If international confidence **falls**, the AUD will also fall
        - The opposite is true
- The exchange rate is an important factor determining key economic indicators including:
    - Trade
    - Value of debt
    - Foreign investment
- A **stable dollar** supports a stable economy

Factors threatening exchange rate stability	

Terms of Trade	• Reliance on volatile **commodity exports** has led to our **terms of trade** becoming volatile
	  ○ This in turn, causes volatility in the exchange rate
	  ○ TOT directly influences **export revenue** and **demand for $A**

Global instability	• Global economic stability and growth influence **foreign investment**
	  ○ For instance, if overseas markets **contract,** investment inflows **fall** and demand for the AUD **decreases**, driving a depreciation
	  ○ Globalisation has increased the vulnerability of our exchange rate to overseas growth rates

Other indicators	• **Unsustainable CAD** and **high** net foreign liabilities lead to a sudden **loss** of investor confidence and leads to **capital flight** ○ Causes a rapid depreciation

Environmental sustainability

- Economic and environmental management often conflicts
- Economic growth, growing populations and rising affluence are major contributors to environmental degradation
- OECD: If Australia adopts sustainable practices it will increase growth by 1%

Introduction to sustainability

Ecologically sustainable development	• Involves conserving and enhancing of resources in order to maintain ecological processes and quality of life • Any development must be balanced against its impact on the environment • Short-term exploitations of natural resources can cause permanent damage to the environment ○ This reduces productivity in the long run • This is demonstrated through the PPF curve, which will shift inwards as a result of resource depletion

Costs and benefits	• The **price mechanism** is the interaction between demand and supply
	  ○ Refers to the relationship between both in establishing a price equilibrium
	• **Market failure** describes how the price mechanism fails to consider externalities (social costs)
	  ○ Externalities refer to the unintended impacts of economic activities

Public and private goods	**Private goods**
	• Owned and used by individual consumers
	  ○ They are purchased for one's own consumption
	
	Public goods
	• Non-diminishable and non-excludable (non-rivalry)
	  ○ **Non-excludability:** it is impossible to exclude anyone from consuming the good
	  ○ **Non-dominishability:** one person's consumption does not diminish or lower another person's ability to consume the good
	• **Free riders** are individuals who use a good without contributing to the cost of supplying it
	  ○ Free riders may use a park outside their own area as parks are open to the public; they don't contribute to its costs
	  ○ The possibility of free rides excludes the private sector from producing certain items
	  ○ Public goods which are exposed to free rides are provided by the government

More detail in topic 4 notes	

4 | Economic Policies

Economic Objectives	
Objective	**Explanation**

Sustainable growth averaging ***3-4%*** *p.a.*	Greatest increase in living standards without being unsustainable (e.g without causing inflation) **Excess** growth results in: ● This can lead to **demand-pull inflation** ● Increases pressure on **natural resources** and **ecosystems** ● It can **undermine external stability** (increase in import flows, worsening the BOGS)
Price stability of ***2-3%*** *on average*	Inflation below 2% would require very low AD and lead to lower growth in living standards and higher unemployment ● Inflation **below 2%** will lead to **deflation**, lowering real wages and causing a decline in economic growth ● Inflation **above 3%** will decrease real wages as well, in addition to dampening economic growth
Full employment ***4-6%*** *unemployment*	**Full employment:** occurs when there is no **cyclical unemployment** in the economy, meaning that the economy is fully utilising its labour resources NAIRU - lowest rate of unemployment that can be achieved without causing excessive inflation (lowest sustainable rate of unemployment)
External stability	An economy's ability to **service it's international liabilities** This can be measured in a few ways including: ● Looking at the **Current Account Balance** ● Monitoring the **exchange rate** ○ Ideally, the exchange rate should remain stable and avoid volatile changes which would **undermine investor confidence** ● Levels of **foreign debt**
Sustainable development	Refers to the level of economic activity that **preserves natural resources** so **future generations** are able to utilise them ● Economic policies aim to improve the efficiency of our utilisation of resources by using them at a slow pace **Environmental challenges** posed for the government include ● Global warming ● Deforestation ● Loss of biodiversity ● Air pollution
Improved living	Improved living standards aim to maximise the **wellbeing** of households,

standards	This includes considering **quantitative** measures such as • Household income • Life expectancy • Education & literacy levels The **Human Development Index (HDI)** assesses the level of human development within the economy by combining data reflecting: • Life expectancy • Educational attainment • Per capita income
Equitable distribution of income	The government aims to fairly distribute income and wealth across the population by minimising the gap between wealthier and poorer individuals. • The government doesn't strive to eliminate inequality, rather only **reducing it**, as perfect equality disincentivises innovation and entrepreneurial ventures • This is achieved through **transfer payments** to assist individuals who are impaired or are unemployed
Other goals	• Minimising wealth inequality where reasonably possible • Ecologically sustainable development • Maintaining external stability

Policies used	
Short-term policies Targets the demand side	**Long-term policies** Targets the supply side
• Get level of AD to a point where full employment & price stability can be achieved	• Work on making the economy more efficient or productive by lowering the cost of production • Not focused on the business cycle • Countering conflicts between unemployment and inflation (resulting the effects of higher AD)
Macroeconomic policy *Fiscal policy*	**Increasing supply** *Microeconomic policy*
• Matter of accelerating or	• Achieved by either acquiring more

<table>
<tr>
<td>
decelerating economic growth
● Targeting levels of AD
During a boom
● Higher growth
● Lower unemployment
● Demand-pull inflation
Hence…
● Low inflation comes with higher unemployment as economic growth falls
● Neither a boom or contraction is preferred overall

Countercyclical policies
● Policies that counter fluctuations in the business cycle
● E.g during periods of economic downturn, the government will aim to stimulate economic growth
</td>
<td>
resources of boosting efficiency
● A higher level of output and AD can be achieved without increasing inflationary pressures
● An increase in AS alleviates inflationary pressures (the main constraint on achieving higher AD is inflation, so increasing AS is critical)
● Higher AD resulting from higher AS reduces cyclical unemployment

<u>Structural unemployment</u>
● Increasing AS may increase short-term structural unemployment
● Reductions in protection increase short-term structural unemployment as resources are allocated to more efficient sectors of the economy
</td>
</tr>
<tr>
<td>Maximising living standards</td>
<td>Reducing the NAIRU</td>
</tr>
<tr>
<td>
● Protecting people’s employment and incomes
● The government strives to achieve the optimal ranges of inflation, unemployment and growth (striking the best possible balance)

<u>Example</u>
If the economy were to experience 1-2% inflation, 7% unemployment and 1.5% growth, the government would adopt an expansionary stance in order to lower unemployment and increase inflation.
</td>
<td>
NAIRU: lowest possible rate of unemployment (4-6%) that can be achieved without causing excessive inflation (structural & frictional unemployment)
● A lower NAIRU enables for lower rates of unemployment to be achieved without decreasing price stability (inflation)
● Boosts living standards by lowering unemployment

<u>How to reduce the NAIRU (structural & frictional unemployment)</u>
● Achieved by fully utilising all available labour resources
● Retraining individuals with skills that are in demand to make them more employable
● Relocating individuals to areas with
</td>
</tr>
</table>

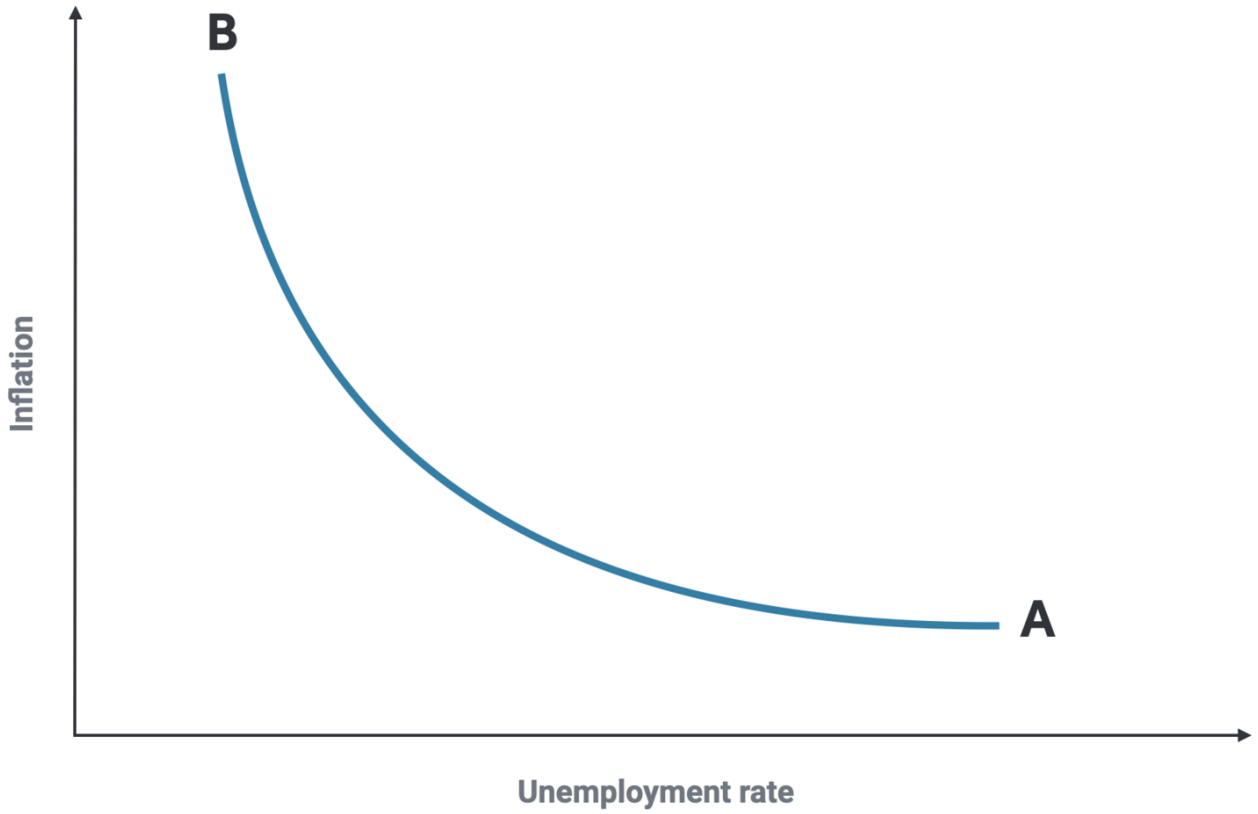
	skills shortages

Barriers in achieving these goals
1. Many factors influence the economy's performance outside policy-maker's control ● Consumer sentiment ● World events ● *It's hard for Australia to counter global business cycle fluctuations* **2. Policies have inherent weaknesses** ● Lags in implementation ● Unintentional consequences (e.g inflation) **3. Conflicts between goals** ● Achieving high living standards whilst maintaining sustainable growth ● Inflation & unemployment ○ Decreasing unemployment by increasing growth leads to inflation ● Inflation & growth ○ Higher levels of AD increases inflationary pressures ● External stability & growth ● Environmental sustainability & growth ● Factors of production requires natural inputs

Conflicts	
Conflict	Equitable Distribution of Income + Higher Rate of Economic Growth
- If distribution of income were to be equitable, there is less incentive for innovation and an increase in skills in order to achieve higher paying jobs, the same can be achieved with equitable distribution of income with less input	
Conflict	Economic Growth + Inflation
● An increase in economic growth will place **upwards pressure on prices** ● Higher inflation strains economic growth ● **Inflation** will also rise if the government implements **expansionary macroeconomic policy** ● The government must prioritise one objective over the other due to the conflict between the objectives of price stability and growth	

Conflict	Unemployment + inflation

Phillips Curve



At point A, unemployment is relatively high while inflation is low, but at **point B,** it's the opposite, with inflation being high whilst unemployment is low.

<u>Reducing unemployment</u>
At point A, the government would implement expansionary fiscal policy to boost AD and reduce unemployment, but this would result in **inflation.** This results in the figures at **point B**, where whilst the government has successfully reduced unemployment, inflation has risen beyond the target range.

<u>Lowering inflation</u>
This results in a movement from point B to point A due to lower levels of **demand and consumption** which would reduce inflationary pressures whilst decreasing demand for labour.

By targeting one variable, the government will inevitably impact the other.

Conflict	Growth + External Stability

- Increases in **economic growth** will cause the **current account** to deteriorate.
- This is as a result of **increased import spending**

- Rising incomes resulting from higher economic growth will lead to increased purchasing powers for households, hence demand for goods and services from overseas increases. **This increases BOGS debits.**
- **Balance of Payments constraint:** arises when the **current account balance** becomes so low that the government must reduce economic activity to **discourage import spending.** The need for contractionary economic policy can lead to a plethora of ramifications.

Conflict	Growth + Environmental Sustainability

- Increases in **economic growth** will strain environmental resources, as production and consumption grows and firms will require more natural resources.
- When **environmental sustainability is prioritised,** growth decreases
- Land and water ecosystems will suffer as they are stripped of crucial resources , potentially resulting in a loss of biodiversity
- Increased industrial activity from heightened growth will cause more greenhouse gases to be emitted, contributing to climate change.

<u>Policies for environmental sustainability</u>

- **Carbon Tax:** imposes additional costs on firms and consumers, decreasing economic growth and worsening living standards
- **Protections:** limit the production inputs available to firms

The government aims to strike a balance between the two objectives.

Fiscal Policy

Introduction to fiscal policy	
Definition	
The **macroeconomic** policy used by the government to **influence the economy** ● Government **spending and taxation** used to influence **aggregate demand** ● Fiscal policy is **countercyclical**	
Primary objectives of fiscal policy	
Redistribute	Aims to make income distribution more equitable

income	• Income taxation • Transfer payments

Reallocates resources	Addresses market failure by redirecting resources
	• Resources are directed towards the production of public and merit goods rather than demerit goods
	  ○ Roads
	  ○ Hospitals

Reducing fluctuations	Mediating the effects of fluctuations in the business cycle • Altering spending and taxation • When AD slows, the government increases spending and decreases taxation to stimulate growth (increasing injections and reducing leakages) • **Example:** if government spending will boost AD, a decrease in spending will have the opposite effect • The government will **adjust spending** and/or **taxation** to achieve a sustainable growth rate

Budget outcomes and stances	
The Budget	
• A record of all **planned spending and revenue** for the forthcoming financial year • *How much money the government intends on earning* • The primary instrument for fiscal policy • Changes year to year - important to monitor and forecast long and short term effects of changes in the economy	

Sources of income (T)	• Direct tax
	  - Income tax
	  - Corporate tax
	• Indirect tax
	  - GST
	  - Excise duties (e.g cigarettes, alcohol)
	• Selling public assets
	• Operation of enterprises
	  - Australia Post

Expenditure (G)	• Welfare system - Transfer payments

	• Transport • Health • Education • Defence
Measuring the budget balance *Ways of **measuring** the budget*	
Headline	Revenue - Spending • Often misleading
Underlying (preferred)	Revenue - Spending • **Not including** sale or purchases of government assets
Budget outcomes *Relative spending and revenue in **one** year*	
Surplus	Government revenue (T) **exceeds** government expenditure (G) *T > G*
Deficit	Government revenue (T) **is less than** government expenditure (G) *T < G*
Balance	Government revenue (T) **is equal to** government expenditure (G) *T = G*
Budgetary stance ***Impact of changes** in fiscal policy on economic growth (the fiscal policy position of the government)* • *Compares budget outcomes in **two different years***	

	Expansionary	**Contractionary**
If deficit...	increases	decreases
If surplus...	decreases	increases

Expansionary	Government intends on increasing spending or reducing taxation • Budget outcome gets more **negative** • **Stimulates** economic growth • Either **increases the deficit** or **decreases the surplus,** relative to

	the previous year
Contractionary	Government will decrease spending and increase taxation ● Budget outcome gets more **positive** ● **Dampens** economic growth ● Either **decreases the deficit** or **increases the surplus,** relative to the previous year
Neutral	Government aims to maintain a constant budget outcome ● **Won't impact** economic growth
Example: in year 1 the budget deficit is at **$10 billion,** whilst in year 2 the deficit is at **$7 billion,** this shows that the budget deficit has **shrunk,** meaning that the budget is **contractionary**, as leakages are increasing relative to injections.	

Discretionary & non-discretionary policy

Discretionary fiscal policy

Structural fiscal policy

Planned spending and revenue measures decided on by the government and recorded in the **budget.**

- If slow economic growth is projected, the government will implement **expansionary policy (**increased government spending and cutting tax receipts)
- Changes are outlined in the Federal Budget

Cyclical fiscal policy

Changes in **expenditure** and **revenue** that arise resulting from changes in the business cycle due to **automatic stabilisers**

Automatic stabilisers	Features of **fiscal policy** that act to **offset changes** in economic activity. It aims to dampen excessive growth or boost stagnant growth. This consists of: ● **Taxation system** - Fluctuations in economic growth will affect the level of tax receipts (revenue earned from each tax bracket) ● **Transfer system** - Fluctuations in economic growth impact the level of transfer payments

	Decreasing economic growth ● Lower economic growth causes household incomes to fall, hence **progressive income tax revenue** falls as individuals are pushed into lower tax brackets ● Lower consumer spending will lower GST revenue and decrease company profits, leading to lower corporate tax ● **Government revenue falls** as welfare payments would need to be increased, increasing **government expenditure** Lower tax + high expenditure = **stimulate** economic growth **Increasing economic growth** ● Higher growth results in higher household incomes and progressive income tax revenue is increased as individuals are boosted into higher tax brackets, **increasing government revenue** ● Higher household incomes reduces welfare payments, leading to a fall in **government expenditure** Higher tax + lower government expenditure = **dampens** high economic growth

Managing deficits & surpluses

Managing a surplus

The government expects to **earn more than it spends,** leaving **excess** money which is used to:

Pay off debt	**Domestic** ● Stimulates consumption and investment ● More money will be available in domestic banks **Overseas** ● Australia's financial liabilities will fall ● Eases the CAD ● Boosts external stability
Deposit with RBA	The government will earn interest from the RBA by depositing it

Special wealth fund	**Example**: Future Fund (2008) ● The government deposits money to pay the superannuation of retired public servants **Example:** The Building Australia Fund (2009) ● Finance investment in transport, communications and utility infrastructure
Managing a deficit	
The government expects to **spend more than it earns,** meaning extra funds are required.	
Borrowing from RBA (*Monetary financing)*	The RBA **prints extra money** to fund the deficit ● This **increases money supply** which results in **inflation** ● Conflicts with the RBA's key economic goals, hence monetary financing is rarely used (has not been used for decades)
Borrowing domestically *(Debt financing)*	Government **sells bonds** and **pays interest** ● For example, the government will sell bonds to the domestic private sector, and borrow from these lenders. ● Governments will then receive loans. --- **Crowding out effect** ● The government borrowing money decreases the amount of money available to be borrowed by the private sector as the government competes with the private sector for those resources ● This increased demand for borrowing leads to higher interest rates, causing a fall in private sector activity. ● Note: unlikely to occur during a downturn
Borrow overseas	● This **eases pressure** on the domestic financial markets (reversing the crowding out effect) ● **Undermines external stability** since interest repayments are recorded as net primary income (NPY) debits, **worsening CAD**
Selling assets	● **Example:** the Howard Government sold Sydney Airport and Telstra were sold to finance deficits ● Allows for a relatively **quick** acquisition of funds ● However, selling assets represents a **loss of public ownership** ● **Privatisation of assets** is unpopular

Benefits of fiscal policy

Specific targeting

- Targets certain areas of the economy
- All states, industries and sectors are in different circumstances, hence applying universal policies aren't suitable. (blanket policies do more harm than good)
- **Example:** if the health sector has an abundance of resources whilst the education sector has limited resources, the government would reallocate funds towards education sector and reduce funding towards the health sector
- Fiscal policy is a versatile and precise instrument able to target specific sectors

Aggregate supply boosts

- Policies can have long-term benefits for Aggregate Supply
- With decreased taxes, firms would have more money to invest in capital and improve the productive capacity of firms
- Reduced taxes increases aggregate supply in the long term as a result of higher investments
- An increase in aggregate supply causes a **fall in inflation** and output will increases
- **Example:** investment in roads will lead to long term impacts on aggregate supply as the flow of goods is improved and business costs will fall

Limitations of fiscal policy

Time lags	**Types of lags** Recognition • Time taken to recognise there are macroeconomic problems Decision making • Time taken to investigate the issue and formulate an appropriate policy Implementation • Time taken to design and write up policies in the Federal Budget • Relatively long as budget is only formulated once a year Expenditure/impact • Time taken for changes to be seen in Aggregate Demand • Relatively quick and short-term **Results** • Policies may be inappropriate or counterintuitive when their effects

	emerge • **Example:** slow initial growth may prompt the government to implement expansionary policy however by the time the policy is implemented, economic growth had already picked up and this pushes economic growth to excessive levels
Political considerations	**Within government** • Where implemented through legislation, new laws require a majority of votes • Numerous governments have been able to achieve a majority **Public popularity** • Reluctance to introduce policies that are beneficial in the long term with negative short term effects • These policies can undermine the political power • Eliminating trade protections will result in short-term job losses, whilst boosting long-term growth
Global considerations	**Expectations of global financial market and investors** • Government spending, company tax and income tax rates should remain low • Hinders the government from achieving their goals **Integration of international business cycle** • When global growth is low (decrease in global investment and trade levels), fiscal policies will have limited impact on growth
Economic conflicts	Conflicts that exist naturally between incompatible economic objectives • No matter what plan, fiscal policy **cannot achieve all goals** • The government has to compromise and prioritise certain objectives
External stability	• A sustained deficit **worsens the CAD and foreign debt** • As governments resort to borrowing to fund deficits, this increases our foreign liabilities and drives more domestic investors to borrow from overseas, worsening **NPY credits**

Monetary Policy

Introduction to monetary policy

Definition

The management of **cash rates** by the RBA (*on behalf of the government*) in order to influence economic activity

Key distinction: interest rates *vs* cash rates

The RBA does not have **direct** control over **interest rates**, these are set by banks who pass on the RBA's **cash rate**

- The RBA periodically meets to **determine the cash rate**
- When determining interest rates, the RBA will consider:
  - Inflation
  - Economic growth
  - Employment levels
  - Wages growth
  - Exchange rates
- Banks adopt the movements of the cash rate set by the RBA
  - If the RBA were to raise the cash rate, banks will follow this movement and raise their individual interest rates
- Raising the cash rate **dampens** economic growth and is an example of **contractionary** monetary policy
- On the other hand, lowering the cash rate is an example of **expansionary** monetary policy as it **stimulates** economic growth

Objectives of the RBA	

Price stability	Maintenance of a healthy **inflation rate** (2-3%)
	• Inflation doesn't necessarily have to remain within 2-3%, but it should **average** in this range over the course of the business cycle
	• The inflation target is important as:
	  ○ **The RBA can track it's success:** it compares current inflation rates to a clear numerical range
	  ○ **It's a goal for the RBA:** when deciding changes to the cash rate
	  ○ **'Anchors' expectations:** consumers expect inflation to remain within the target range and make spending and saving decisions accordingly

Full employment	Avoiding cyclical unemployment, and ensuring the economy operates at the **NAIRU**
Economic	Encouraging a sustained level of **economic growth** (4-5%)

welfare	

Implementing monetary policy

Cash rate

The RBA implements monetary policy through **influencing the cash rate**

- The interest rate within the short term money market
    - The market for overnight loans between financial institutions
- Set by supply and demand within the short term money market
- The RBA intervenes to increase or decrease the cash rate through **domestic market operations**

Domestic market operations

The RBA buys or sells **commonwealth government securities** to banks and other financial institutions in order to influence the money supply in the short term money market.

Within the short term money market, financial institutions hold **settlement accounts** with the RBA, allowing them to **settle debts.**

- When a Commonwealth Bank customer buys from a Westpac Business, the Commonwealth Bank owes Westpac money, in which money will flow from the Commonwealth Bank's exchange settlement account to Westpac's exchange settlement account.
- These settlements **cancel each other out** at the end of every day, meaning the **supply of money doesn't change** day-to-day
- When the RBA **buys or sells** Commonwealth Government Securities to financial institutions, this creates a shortage or surplus in the available funds, placing upward or downward pressure on the cash rate

Expansionary	Contractionary
The RBA **buys** commonwealth government securities • **The RBA pays the banks** for these securities, therefore increasing the money available in ES accounts • When the supply of money in the	The RBA **sells** securities to banks • Banks **purchase** these, meaning there will be **less supply** in the short term money market, leading an **increase in the cash rate**

short term money market increases, the **cash rate falls**	

How the cash rate translates to interest rates

- RBA **buys/sells** securities which influences the supply of money and influences the **cash rate**
  - The cash rate refers to the interest rate within the short term money market only
- Banks tend to **follow movements** in the cash rate when setting their own rates
- An **increase** in the cash rate will mean that banks have to pay more in the short term money market
  - In order to maintain **profit margins**, the interest rate offered to household and firms are also increased accordingly
- When the cash rate **falls**, it becomes cheaper for banks to borrow
  - To maintain competition, interest rates offered to households and firms are lowered

Impacts of monetary policy

Changes in the cash rate

- A rise in the cash rate will have a **contractionary** effect, whilst a fall in the cash rate will have an **expansionary** effect
- **The Transmission Mechanism:** changes in interest rates that impact economic activity (AD)
  - **Internal mechanism:** affects consumption and investment
  - **External mechanism:** affects exports and imports

Rate of borrowing

- Changes to the cash rate, and interest rates, impact the rate of borrowing

Interest rate	**Cost of borrowing:** borrowers' repayments for borrowed funds	**Return on savings:** money deposited in financial institutions receive interest
Increases	Borrowers pay more interest • Discourages borrowing • Consumption falls • Disposable income falls • Investment falls	Savers receive more interest • Encourages saving

	<table><tr><td>Decreases</td><td>Borrowers pay less interest - Encourages borrowing - Consumption grows - Disposable income rises - Investment rises </td><td>Savers receive less interest - Discourages saving </td></tr></table>

The exchange rate	• The cash rate impacts the **value of the currency**
	  ○ The level of the cash rate influences the return that investors earn
	• Investors will invest wherever the potential return is highest
	  ○ Higher interest rates attracts more investment
	• Australia's interest rates relative to overseas rates will impact the level of incoming investment flows
	  ○ Incoming investment will increase with a **high** interest rate, **increasing demand for AUD** and appreciate the AUD
	  ○ An appreciation will worsen the trade balance as import spending would subsequently grow as a result of heightened demand
	  ○ The AUD will depreciate if overseas rates are higher, leading to the opposite effects and improving the trade balance

Effects on AD	• An **increase** in the cash rate will dampen consumption and investment • An **increase** in the cash rate will deteriorate Australia's trade balance ○ This will lower net exports, a component of AD, thereby lowering overall AD • Fluctuations in the cash rate have **no** impact on government expenditure, as this is an example of **fiscal** policy

Benefits of monetary policy	

Short implementation lag	• Monetary decisions are made **monthly** (with the exception of January)
	  ○ Economic fluctuations can be addressed quickly
	  ■ If economic growth is low, the RBA can implements policy to counter the effects of this
	  ○ Discretionary **fiscal** decisions are only made yearly in the Federal Budget

Free from political	• Whilst the RBA acts on behalf of the government, it operates as a **separate entity**

constraints	○ In terms of fiscal policy, the government is often constrained by political motives and public expectations ● Conversely, the RBA only factors in for it's **economic objectives** as opposed to public opinion
Limitations of monetary policy	
Blunt instrument	● Changes affect **all sectors** of the economy, regardless of whether or not their decisions are the most appropriate across the board ○ This is in comparison to fiscal policy, which can be targeted towards certain sectors, making it more **adaptable** ○ For instance, if NSW were to experience low economic growth, whilst the rest of Australia is experiencing high growth, contractionary policy would be detrimental towards NSW's growth
Long impact lag	● Changes to the cash rate can take upwards to 18 months to take effect within the economy ○ This owes to the fact that households and businesses will take time to adjust their spending and saving patterns ● The RBA must **predict** future economic conditions when determining monetary policy ○ Potential for policy made now to be inappropriate in the future
Conflicting fiscal policy stance	● When monetary policy is contractionary whilst fiscal policy is expansionary, or vice versa ● After the GFC, the cash rate was reduced progressively (**expansionary)**, whilst the government implemented **contractionary** budgets to return to a balance following severe deficits

Microeconomic policy

Productivity

<table>
<tr><td>Definition</td><td>Measures how efficiently an economy converts inputs into outputs per unit time

<table><tr><th>Inputs</th><th>Outputs</th></tr><tr><td>Materials that go into production, also known as the factors of production
• Land
• Labour
• Capital
• Enterprise</td><td>Final good or services produced</td></tr></table></td></tr>
<tr><td colspan="2">Measurements of productivity</td></tr>
<tr><td>Labour productivity</td><td>Ratio of the output to the input of labour
• Only accounts for the number of hours worked

Formula for labour productivity
$$\text{Labour productivity} = \frac{\text{GDP}}{\text{Labour hrs worked}}$$</td></tr>
<tr><td>Multifactor productivity</td><td>Measured on the basis of inputs of labour and capital
• Accounts for hours worked and technology used in production
• A broader measure of productivity

Formula for multifactor productivity
$$\text{Multifactor productivity} = \frac{\text{GDP}}{\left(\begin{array}{c}\text{Labour hrs worked} \\ + \\ \text{Capital inputs}\end{array}\right)}$$</td></tr>
<tr><td colspan="2">Types of efficiency</td></tr>
<tr><td colspan="2">In striving to become more productive, an economy will attempt to maximise all types of efficiency</td></tr>
</table>

<table>
<tr><td>Technical efficiency</td><td>The maximisation of outputs per input

● Also known as productive efficiency

<table><tr><th colspan="2">Ways to improve technical efficiency</th></tr><tr><td>Technological innovation</td><td>Specialisation</td></tr><tr><td>When a firm expands their access to new machinery of equipment</td><td>Using inputs in a specific production process over a period of time
● E.g a mechanic focuses on one area of a car, the production process becomes more efficient</td></tr></table>
● These reduce the overall cost of production, allowing for more outputs with the same amount of inputs</td></tr>
<tr><td>Allocative efficiency</td><td>How well inputs are used to produce the right combination of outputs based on consumer preferences

● A firm should produce what is demanded
● If a firm produces what is demanded, it is allocatively efficient</td></tr>
<tr><td>Dynamic efficiency</td><td>How effectively a firm respond to changing market conditions

● The quicker the change, the more dynamically efficient
○ For instance, how quickly a firm adapts to new technology</td></tr>
<tr><td colspan="2">Effects on economic issues</td></tr>
<tr><td>Growth</td><td>● High productivity corresponds to higher growth
● A productive economy maximises outputs with inputs used leading to higher output over time
○ With higher production, GDP rises
● Boost in aggregate supply
● This can be illustrated through a rightwards shift of supply in the AD/AS graph</td></tr>
<tr><td>Inflation</td><td>● Higher productivity also leads to lower inflation
● Economies of scale resulting from productivity eases cost-push pressures
● This can also be illustrated through a rightwards shift of supply in the AD/AS graph</td></tr>
</table>

Structural change	
Introduction	• Refers to **shifts** in the **composition and location of production** and **employment** in an economy over time • Results in resources being reallocated from struggling industries to those that are growing faster ○ Highly profitable industries grow quicker, needing more resources • Often leads to old industries being replaced by emerging industries • Driven by market forces, where business adapt to changes (outlined below)
Causes of structural change	

Technological progress	• Occurs if technological advancement causes an industry to be more efficient relative to another
	  ○ More efficient technology causes a shift in resources to more productive industries
	• This can be seen through the industrial revolution, where economies shifted from agriculture to manufacturing
	  ○ **Manufacturing** become a more efficient industry due to technologies enabling for mass production

Available inputs	• Alters the patterns of production that might be possible or most efficient
	  ○ Changes in the quality and quantity of inputs influence structural change
	• A slow down in the mining industry and growth of the services sector can be attributed to a fall in commodity prices at the end of the mining boom
	  ○ This was as a result of mining becoming less attractive
	• Labour overall is becoming increasingly skilled and educated, resulting in a rebalancing in the economy

Global forces	• Global forces affect domestic markets and drives structural change • Types of global forces that affect structural change include **foreign competition and growth** **Case study:** the decline of manufacturing in Australia

	The decline of Australia's manufacturing sector and growth in mining is a direct result of global forces. ● Emerging economies became more competitive in the manufacturing sector due to cheap inputs and labour ● Australian manufacturers found it increasingly difficult to compete ● Countries such as China and India gained a competitive edge, attaining a greater market share in the global manufacturing market ● Australia had shifted it's resources in the lead to the mining boom from manufacturing to mining in order to capitalise on growing commodities exports
Effects of structural change	
Structural unemployment	● When the skills possessed by workers don't match the skills demanded by employers ○ A mismatch between jobs available and skills of the unemployed ● Inefficient and shrinking sectors may close down, leaving workers unemployed with **less transferable skills** ● Can be **resolved** with **retraining** for a more efficient industry ○ Requires a lot of time and money, and is hence difficult ● Structural unemployment can potentially cause long-term unemployment
Economic growth	● Efficiency and productivity overall in the economy boosts overall, boosting economic growth in the long term ● This is due to a **boost in aggregate supply** ○ If firms become more productive, they can produce **more goods** at any price point
International competition	● The economy focuses on sectors that are internationally competitive ● With a boost in efficiency and productivity, firms can **lower prices** and boost their goods' **quality** ● This occurred during the decline of the manufacturing sector and the shift to the mining sector ○ Australia is highly competitive in the mining sector due to its comparative advantage, whilst it wasn't competitive in the manufacturing sector

	• **Structural change** allows capital and other resources to be invested into **internationally competitive** sectors as inefficient industries close

Introduction to microeconomic policy

Definition

Policies that aim to increase aggregate supply by improving the efficiency and productivity of **specific producers and industries.**

Two main categories of markets	
Product markets	Factor markets
Final goods and services are bought and sold. • Interactions between firms and buyers	Factors of **production** are bought and sold • E.g Labour markets

Rationale

- Aims to **boost aggregate supply** over the long run by improving efficiency and productivity
  - As such, it is referred to as a supply-side policy

Implementation

- Implemented by boosting **efficiency** and **productivity** within industries
- More efficient industries can produce more outputs, leading to an improvement in aggregate supply
- Aims to minimise government **intervention**
  - E.g tariffs causes distortions to the natural operations of markets, causing inefficiencies

Product markets	Factor markets
The government might seek to increase **competition** or to allow overseas trade, or provide grants and tax breaks • Forces firms to innovate	Policies strive to boost the efficiency of the **use** of the factors of production • Have the same quantity of inputs produce a larger quantity of outputs over time

	Over the long term, Australian microeconomic policy has consisted of: ● Competition policy ● Financial market reform ● Removal of trade protection ● Privatisation ● Investment in infrastructure ● Changes to taxation
Effects of microeconomic policy	
Structural change	● Shifts in economic activities to improve efficiency ○ Efficient industries grow while less efficient industries shrink ○ Policies remove government intervention such as trade protection and monopolies. Without intervention, efficient industries expand while inefficient industries contract ■ Government intervention leads to a boost in inefficient businesses ● Positive in the long term, though structural **unemployment** will emerge in the short term
Sustainable economic growth	● Successful microeconomic reform boosts **aggregate supply** ○ Remember: higher AS lowers inflation whilst increasing outputs (GDP) and economic growth ● Microeconomic reform improves long-term growth since it increases productive potential
Inflation	● Eases inflationary pressures as firms can produce **at a lower cost** ● An increase in aggregate supply results in a fall in the price level ○ This allows for faster demand-side **growth** without increasing inflationary pressures
International competition	● A boost in efficiency enhances Australia's international competitiveness ○ Australian goods become relatively cheaper and hence more attractive ● Improvement in international competition will increase export revenue and demand-side economic growth

Examples of policies

Pre-2000s	

Financial market deregulation	• Prior to the 1980s the government had **extensive** control over the financial sector
	  ○ Goals were to maintain stable exchange rates with fixed rates and to limit banks risk taking
	• **Regulation** progressive **eliminated** in the 1980s
	  ○ Banks set their own interest rates
	  ○ Increased competition aiding dynamic efficiency
	  ○ Removed barriers for foreign banks
	  ○ Licensing of 16 foreign banks
	• AUD floated in 1983
	  ○ Exchange rates were instead determined by supply and demand
	  ○ Improved monetary policy, international competitiveness and access to foreign capital
	• Efficiency increased as a result of **competitive pressures** with greater diversity

Trade liberalisation	• High protections on imports were imposed prior to 1980s
	  ○ E.g tariffs on textiles and cars
	  ○ This was inefficient with low productivity growth
	  ○ Australia's economy was performing at 1.3% below the OECD average
	• At the end of the 20th century **protection was reduced**
	  ○ A 25% tariff cut across-the-board
	  ○ Tariffs dropped from 36% (1969) to 1.3% (2017)
	• Lead to structural change due to **competitive pressures** in import-competing industries
	  ○ Domestic textiles and motor industries closed
	• Resources allocated to more efficient industries such as the services sector
	  ○ E.g Australia's financial and mining sectors
	  ○ This boosted Australia's overall efficiency

Privatisation	• The **privatisation** of government business enterprises
	  ○ E.g **Qantas and Telstra in the 1990s**
	• Improved efficiency as owners keep profits hence increasing incentives to maximise profits
	  ○ Firm's didn't receive government assistance, hence the need to be efficient in order to survive
	• Maximising profits encourage firms to:
	  ○ Enhance technical/productive efficiency

<table>
<tr><td></td><td>

Achieve economies of scale by increasing outputs while lowering production costs
Improve resource allocation

</td></tr>
<tr><td>National Competition Policy (NCP)</td><td>

Devised to increase competition in natural monopolies

Refers to markets with only one provider due to barriers
Barriers include factor endowment or geographical factors
Industries include gas and water services, which are seen as undesirable monopolies

Without competition, there is no incentive to boost efficiency or productivity leading to lower outputs and higher costs as firms can charge at any price without affecting demand elasticity
Under the NCP:

Reforms implemented to open up monopoly industries
Established the ACCC

Increased productivity and innovation, aiding supply-side growth in the 1990-2000s
These reforms helped to foster stronger productivity growth

Multi-factor productivity growth doubled from the 1970s to 1990s

</td></tr>
<tr><td colspan="2">Post-2000s</td></tr>
<tr><td>Education and training</td><td>

Boosting workers’ skills increases productivity and efficiency of the labour force
This is achieved by improving access and quality of education and training programs
Vital in boosting the quality of the labour force
Government spending on education has steadily increased since 2011

Demonstrates a growing emphasis by the government on broadened educational outcomes

<table>
<tr><th>Gonski reports</th></tr>
<tr><td>

Two inquiries into Australia’s education system
Recommendations include:

More funding allocated to primary and secondary schools
More equitable allocation of funds between private and public schools

Sought to improve accessibility to education and to enhance the quality of education

</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><td></td><td>

This will boost the labour force in the long term by equipping individuals with more skills: decreasing structural unemployment
Criticised as ineffective with implementation yet to come into fruition

</td></tr>
<tr><td>Infrastructure</td><td>

The efficient functioning of an economy depends on a robust infrastructure system
Streamlines the movement of goods and labour

Boosts the efficiency of workers
Boosts the productivity of firms
Improves aggregate supply in the long term

Infrastructure spending includes $100 billion over 10 years from 2019-20 on transport. This spending strives to improve:

Connections between regions
Alleviating congestion
Facilitating the transport of freight

<table>
<tr><th>Western Sydney Infrastructure Plan</th></tr>
<tr><td>

$3.5 billion to improve transport quality by boosting movement of labour and goods
Investments include:

Roads and motorways
Western Sydney Airport

</td></tr>
</table>
</td></tr>
<tr><td>Taxation reform</td><td>

Policymakers have sought to cut company tax rates

Reduces production costs allowing for lower costs, boosting the international competitiveness of Australian firms

Lower personal income taxes incentivises workers to be more productive by working harder and for longer hours to earn higher wages

Helps to increase labour productivity
If workers are taxed less, they’ll be more inclined to work

<table>
<tr><th colspan="2">Timeline of reforms</th></tr>
<tr><td>2000</td><td>Company tax rate fell from 34% to 30% for most businesses</td></tr>
<tr><td>2012-13</td><td>Tax-free threshold increased from $6000 to $18,200</td></tr>
</table>
</td></tr>
</table>

	<table><tr><td>2017-18</td><td>Tax cuts **announced** for certain businesses</td></tr><tr><td>2021-22</td><td>Tax rate **fall** to 25% for eligible businesses</td></tr></table>
Research and development (R & D)	• Refers to the study and creation of enhanced production processes • Enables firms to produce more efficiently, boosting technical and dynamic efficiency • Firms often don't have adequate funds for their own R & D, hence government grants are vital to boosting efficiency and productivity • Funding has **fallen** since 2013 and is low relative to other economies ○ Strategies to boost R & D primarily revolve around tax measures
Evaluation of recent reforms	

Evaluation	• Overall, policies have be **insufficient** because:
	  ○ Productivity growth **fell** towards the end of the 2000s
	  ■ Includes multifactor and labour productivity
	  ○ Economic growth has been **below average** over the past decade
	  ■ Highlights the need for stronger supply-side growth
	• To support future aggregate supply, the government should bolster microeconomic reform

Labour markets

Features of labour markets	

Definition	The market through which supply of labour by workers interacts with the demand for labour by employers to allocate labour & determine wages
	• Primary features include
	  ○ Contains the regulations of how the labour markets operate
	  ○ Systems in place that influence wage determination
	  ○ Laws in place to protect workers

Main parties involved	

Employers	• Individuals responsible for managing workers
Employees	• The workers *(duh)*
Government	• Aims to optimise economic outcomes of the labour market by enhancing efficiency and lowering the costs of production whilst upholding the rights of the labour force • Implements legislation controlling the operations of the labour market • Laws determine the power held by employers & employees • Influences government bodies

Government bodies	• The primary government bodies in the labour market include:
	  ○ Fair Work Commission
	  ○ Fair Work Ombudsman
	• Ensures laws are implemented by employers/firms
	• Oversees dispute resolutions

Trade unions	• Aims to maximise worker welfare • Comprised of groups of workers from particular industries • Lobbies the government to improve labour conditions and rights
Government regulations	

Fair Work Act 2009 (Cth)	• Introduced an array of regulations that employers were required to adhere by, such as:
	  ○ Maximum work hours
	  ○ Paid leave
	  ○ Public holidays

Award wages & conditions	• National laws which set out the minimum standards for wages & working conditions for workers in **particular** industries • Importance of awards has **declined** as conditions have becoming increasingly determined by employers/employees ○ Number of awards has since been reduced
Unfair dismissal protections	• Reinstated in 2009 under domestic legislation • Enables workers who believe they were dismissed on unjust grounds to dispute the matter with the Fair Work Commission
Current system of determination	
Enterprise bargaining	• Also known as *collective agreement* • Groups of employees negotiate with employers to determine their wages & working conditions

<table>
<tr><td></td><td>

New agreements must be deemed to be suitable by Fair Work Australia

Ensures enterprise agreements cannot result in workers accepting conditions that are worse than their awards
E.g if the award is $22 per hour, the enterprise pay cannot be below this award

Most of these regulations do not apply to high income earners in high skilled professions

These individuals negotiate their own contracts with employers

</td></tr>
<tr><td>Dispute resolution</td><td>Overseen by Fair Work Commission with a total of 3 stages
<table>
<tr><th colspan="2">Stages of dispute resolution</th></tr>
<tr><td>Collective bargaining</td><td>Employee and employer negotiate in order to resolve the dispute without a third party</td></tr>
<tr><td>Conciliation</td><td>A third party oversees negotiations and assists both parties in reaching a resolution</td></tr>
<tr><td>Arbitration</td><td>The third party will make a legally binding decision in order to end the dispute</td></tr>
</table>
</td></tr>
<tr><td colspan="2">Systems to protect vulnerable workers</td></tr>
<tr><td>Minimum wage</td><td>

Award that applies for all industries and determines the minimum hourly wage

Changes to account for inflation

Ensures real wages stay the same

The current minimum wage is $23.23 per hour

This is lower for young people

Minimum wages are often opposed as it creates a surplus of labour supply compared to demand (unemployment)

Firms want to hire workers at lower rates, hence high minimum wages decrease employer’s demand for labour due it being more costly

Skill levels under a minimum wage are also lower as minimum wages discourages workers from enhancing their skills

Governments seeking to reduce inequality often accept the risks associated with minimum wages

</td></tr>
<tr><td>Adult</td><td>

The government allocates billions in to education & training programs

</td></tr>
</table>

education & employment programs	in order to improve efficiency and productivity ○ In NSW it is compulsory for students to attend school until Year 10 ○ Improving school infrastructure ○ Programs to educate structurally unemployed adults ■ Lowers structural unemployment, the NAIRU and overall unemployment

Labour market institutions	
Each of these institutions have differing yet pivotal roles in ensuring the **fairness** and **efficiency** of the Australian labour market	
Federal Parliament	● Responsible for drafting, debating and passing industrial relations legislation ● Creates the regulations that govern the labour market ● **Fair Work Act 2009 (Cth):** a primary piece of labour market legislation ○ Established the National Employment Standards ○ Set out the rights of workers and firms ○ Basis of numerous institutions ■ Fair Work Commission ■ Fair Work Ombudsman ● Without legislation, the operation of labour markets would be determined by the discretion of employers ○ Hence, workers would lose their protections
Fair Work Commission	● Australia's industrial tribunal ○ Tribunals are bodies that settle disputes ● It's primary roles include: ○ Managing all **disputes** in the labour market ○ Helping firms in **negotiating** enterprise agreements ○ Handling **complaints** of bullying or unfair dismissal ○ Providing **mediation/conciliation** for disputes ○ Creating and changing **awards** ■ The FWC can set the minimum pay and conditions for different industries across Australia ● Recent action (2021-2022) include: ○ Increasing the penalty rates in the Hair and Beauty award ○ Updating awards to reflect entitlements for domestic and family violence leave

	○ Adding loaded rates to the hospitality award
Fair Work Ombudsman	● The main institution for providing information on Australia's industrial relations laws and enforcing compliance ○ Essentially acts as the labour market watchdog ● It's primary **roles** include: ○ Monitoring **compliance** with workplace laws ○ Applying **penalties** for breaches ○ Educating workers and firms on their **rights and responsibilities** in the workplace ● Examples of action include: ○ The Ombudsman levied nearly **$80,000** in fines on a Thai restaurant in Perth for failing to back-pay employees

Decentralisation	
History of decentralisation	
Prior to 1980s and 1990s	● The economy didn't have a productive labour force and resources weren't efficiently used or allocated ○ Unemployment and inflation were consistently high at **6-10%** ○ High cost of production meant that wages had to rise quickly in line with inflation to maintain living standards ● Wages in the economy were determined by the government ○ Workers in each industry had a certain set wage ○ **Inefficient allocation of resources** ● Unions lobbied the government for pay rises ○ If successful, this would result in a pay rise for all workers in the economy ● These wages were designed to reflect the value of production from each industry to maximise fairness in determining wages ○ However, more productive workers were paid at the same wage as everyone else ○ No incentive to be more proactive ● Wages increased at the same pace in all industries rather than those that were well-performing
Addressing the problem	● **1991 Accord Statement** ○ **Collective bargaining** enabled groups of workers to negotiate wages with employers rather than being set by the government

	○ Moved wage determination away from governments to firms ● **1996 Workplace Relations Act** ○ Enabled for **individual bargaining** to create Australian Workplace Agreements ○ Individual workers negotiated wages with employers ○ Wages were linked to the productivity of workers with varying rates between different sectors in the economy
Effects of decentralisation	
Benefits to the economy	**Overall** ● Decreased cost of production, with more outputs per input ○ Higher **AS** and **lower inflationary pressures** ● **More efficient overall** ● Contributed to an additional 2-3% growth per year **Increased productive efficiency** ● *Greater outputs per input* ● Economic incentive to earn higher wages under a decentralised system ● Encouraged workers to attain higher levels of education and training to improve productivity and earn higher wages ● Greater volume of goods and services without higher wages **Increased allocative efficiency** ● *Allocative efficiency refers to the ability of a firm to meet the needs and wants of society* ● Wages could rise faster in rapidly growing internationally competitive industry ○ Growing at a faster rate than less competitive industries ● Workers encouraged to acquire skills in sectors with comparative advantage in order to earn higher wages ● More resources were allocated to competitive & efficient industries, maximising output **Lower inflationary pressures** ● Supply-side growth & decreased production costs lowered inflationary pressures ● RBA less inclined to increase cash rates ● Growth becomes more sustainable in the short term ● International competitiveness grows ○ Improves the current account as exports increase and

	imports decrease **Increased employment** ● Makes labour more efficient relative to capital, reducing the amount of capital that is substituted for labour
Disadvantages	**Increased inequality** ● Widens inequality between skilled and unskilled workers ○ Skilled workers are more able to negotiate higher wages due to their productivity ● **0.29** (1990) **to 0.33** (now) Gini Coefficient rise ● This is commonly viewed as a minor side effect relative to the benefits of productivity growth (rewards hard workers) ● A system of safety nets & awards are also in place to maintain standards for all workers, including those less skilled **Wages aren't within the government's control (flawed)** ● The government is unable to control inflation through wage determination ● Leads to a possible wage price spiral under a decentralised system ● Perceived inflation risks increase worker's demand for higher wages, increasing the cost of production and the amount of money circulating, **worsening inflation** ● Keeping control within the government's hands is argued to be the cause of inflation due to inefficiency ○ Chance of a wage price spiral is lower since the 1990's ○ Monetary & fiscal policy is argued to be sufficient

Environmental management

Economics of sustainability
The free market equilibrium is the most economically efficient but often results in unfavourable environmental outcomes
Market failure

<table>
<tr><td>Introduction</td><td>Refers to how the free market only factors in private costs and benefits of economic activity but fails to consider social costs and benefits

<table><tr><td>Example: price of coal-fired electricity</td></tr><tr><td>● Only accounts for the cost of producing it
● Does not account for the social cost of the harmful effects of electricity production and use</td></tr></table></td></tr>
<tr><td>Property rights</td><td>● Market failure often results from a lack of property rights
● Property rights refer to one’s right to own a resource and determine how it is used
● Hence, these resources can be freely used by everyone, resulting in overuse and depletion
○ E.g Free access to forests has resulted in deforestation
● Many resources don’t have strict property rights
○ Atmosphere
○ Oceans

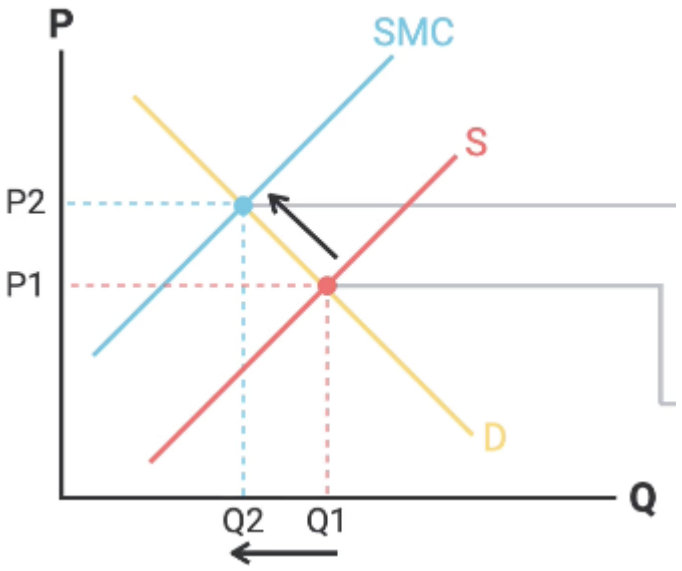
<table><tr><td>Tragedy of the Commons</td></tr><tr><td>Free & unrestricted access to common resources often leads to their overuse and a reduction in their quality and value</td></tr></table></td></tr>
<tr><td>Production of goods</td><td>Underproduction of goods
● Public goods are underproduced in the free market
○ Public goods are non-excludable and non-rival
■ People use them without paying (free riders)
○ Creates a free rider problem and firms may stop producing them
● Creates a loss as they are valuable for the environment and community
○ E.g loss of national parks

Overproduction of goods
● Firms produce too much of a harmful good or service
○ E.g Single-use plastics
● The environmental costs of their production weren’t factored into the</td></tr>
</table>

<table>
<tr><td></td><td>price mechanism</td></tr>
<tr><td colspan="2">Externalities</td></tr>
<tr><td>Introduction</td><td>An unintended consequence of an economic activity that are not factored into the price mechanism
Can be positive or negative
They arise as the free market fails to consider social costs and benefits of economic activities
By accounting for social costs and benefits, the socially optimal level of production can be found that eliminates externalities</td></tr>
<tr><td></td><td>Negative externalities</td></tr>
<tr><td></td><td>An unintended harm that arises from economic activity
Examples include:
Water pollution from the release of toxic waste into waterways by factories
Air pollution from using petrol in cars
<table><tr><th colspan="2">Price mechanism</th></tr><tr><td>Considers:
Price paid by consumers to access electricity
Cost incurred by producers in supplying it</td><td>Doesn’t consider:
Cost of harms to society
Cost to the environment from producing and using electricity (e.g depletion of non-renewable resources and increased emissions)</td></tr></table></td></tr>
<tr><td></td><td>Positive externalities</td></tr>
<tr><td></td><td>An unintended benefit that arises from an economic activity and is not accounted for by the price mechanism
Examples include:
Reduced pollution from increased public transport use
Improved biodiversity from planting more trees in cities
<table><tr><th colspan="2">Price mechanism</th></tr><tr><td>Considers:
The cost for a farmer to</td><td>Doesn’t consider:
The extra benefit to the</td></tr></table></td></tr>
</table>

	produce honey • Price that consumers pay to buy honey ecosystem from honey bees pollinating flowers
Graphing externalities	Supply and demands graphs can be used to represent the impact of externalities on the market

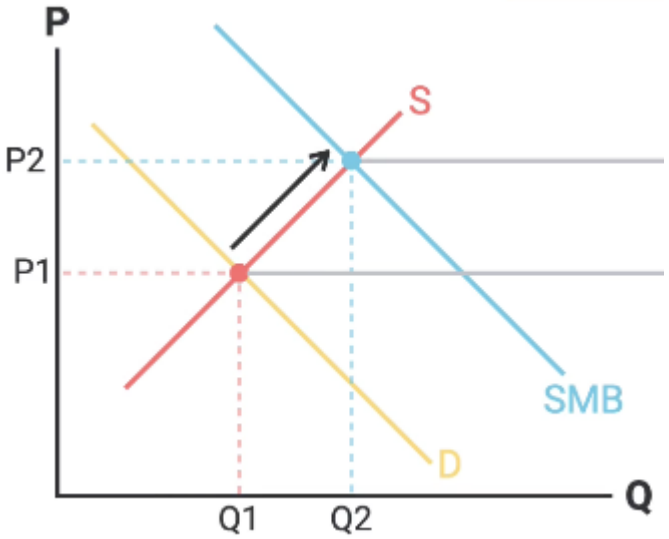
Example: Fish Market (negative externalities)



Demand curve (D)	The private cost of **purchasing** fish
Supply curve (S)	The private cost of **producing** fish
Socially marginal cost curve (SMC)	Considers the harmful environmental costs of fishing

- Q1 is the **free market equilibrium** and only considers the private costs and benefits, without externalities
- The SMC is **to the left of the supply curve** as the added social costs means fewer fish are supplied at each price point
- Q2 is the **socially optimal production level** where negative externalities are accounted for

Example: New Trees (positive externalities)



Demand curve (D)	The cost to each individual for purchasing a tree
Supply curve (S)	The cost of supplying a tree at a nursery
Social marginal benefit curve (SMB)	Considers the social and private benefits

- Planting trees helps to **improve** biodiversity and reduce carbon dioxide in the atmosphere, these are **positive externalities**
- Q2 represents **socially optimal production level** where positive externalities are accounted for

Environmental issues

Climate change

Introduction	• One of the main environmental issues facing Australia • Broadly refers to changes in **temperature and rainfall patterns** over time • Largely caused by the use of **non-renewable resources** • Leads to the release of **greenhouse gases** that trap **excess heat** in the atmosphere
Impacts on Australia	• Temperatures in Australia were **1°C above pre-industrial levels** (2019)

	• This has culminated in **extreme weather events** such as the Black Summer bushfires and 2022 floods • **Ecosystems** have been adversely impacted as **50%** of the Great Barrier Reef has been impacted by coral bleaching as a result of algae bloom
Managing climate change	• Commitment to the **2015 Paris Agreement** • Target of reducing emissions by **over 40%** by 2030, and **net zero** by 2050
Preserving the natural environment	
Introduction	• Australia is among the most biologically diverse countries in the world • Many of Australia's fauna and flora are **endemic** ○ This means Australia's natural environment has significant intrinsic value, and must be protected
Causes of biodiversity loss	• **Destruction of habitats** through human activities such as land clearing and agriculture • Natural resources are being cleared for **urban development** and **housing projects** ○ ~80% of developing approvals by the Federal Government did not satisfy requirements to protect biodiversity • **Introduced species** disrupt the dynamic equilibrium of food chains in ecosystems
Deterioration of Natural Resources	
Overgrazing	• **Intensive agriculture** has been detrimental to Australia's plains and has led to severe degradation of agricultural land • Results in a loss of **over $3 billion** in agricultural output yearly
Overfishing	• The removal of fish from the ocean at a higher rate than that of which they are naturally produced • Disrupts food chains and dampens biodiversity
Over-consumption	• The overconsumption of **non-renewable resources** has rapidly degraded the natural environment overtime • Includes minerals, which cannot be replenished • Changes the characteristics and composition of soils and other aspects of the environment, causing **environmental degradation**
Pollution	

Water pollution	• Overgrazing has severely damaged water and soil quality, especially along coastlines • **Hundreds of thousands of tonnes of nitrogen and phosphorus** are deposited into aquatic ecosystems • Disrupts the dynamic equilibrium of ecosystems and results in **algae blooms** • **Example:** Great Barrier Reef
Air pollution	• Almost **5000 Australians** die from air pollution yearly • Coal-fired power stations are among the most significant factors contributing to worsening air quality
Plastic pollution	• **Single-use plastics** such as cups, straws and bags aren't recycled, and often flow into ecosystems such as waterways • Has led to a substantial loss of wildlife due to the consumption of harmful plastics • Steps have been taken to **ban single-use plastics**

Policies for environmental sustainability	
Regulations	
Introduction	• **Laws** that are introduced to **control economic activity** and **production processes** • Traditional policy tool for achieving sustainability goals • Regulates households and firms • Discourages or prohibits **environmentally-destructive behaviour** • Encourages behaviour that protects the environment

Costs and benefits	• Regulations are effective provided there is a clear **social objective** that can only be achieved through regulation
	  ○ Useful if the only means to stop environmentally-destructive behaviour is to impose limits of bans on it
	• Only effective if it is **enforced**
	  ○ If the government fails to enforce regulations, this will propagate activities with negative externalities

Examples of regulations	• Limiting the **quantity of water** farms use for irrigation
	  ○ Prevents the overconsumption of resources
	  ○ **Critical** to enhancing environmental outcomes, but **diminishes agricultural output**

	• **Prohibiting** the production of certain goods
	  ○ The use and sale of **leaded fuel** was banned in 2002 due to the **air pollution** produced. This lead to the demise of Australia's fuel industry and negatively impacted **short-term growth**
	• **Legislation** such as the ***Environmental Protection and Biodiversity Conservation Act 1999 (Cth)*** established a framework for the protection and management of significant sites.
	  ○ It included protections of things such as Commonwealth marine areas, heritage sites, and endangered species
	  ○ Projects that bear national environmental significance must be approved by the **environmental minister**
	  ○ Regulates trade in wildlife and the management of endangered species
	  ○ Its implementation has been **cited as ineffective** as it only prevents the gradual decline of the environment, **as opposed to halting it**

Targets	

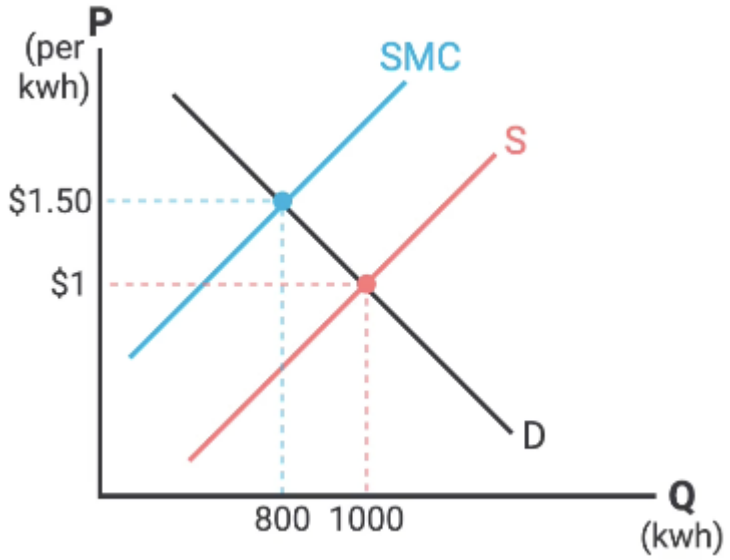
Introduction	• **Long-term goals** for environmental protection
	• Another policy tool that enhances environmental sustainability
	• Targets indicate:
	  ○ An issue that needs to be addressed
	  ○ How much the issue needs to be reduced
	  ○ A deadline for the issue's resolution

Costs and benefits	• Promote sustainability by setting a **timeline for change**
	  ○ Gives businesses deadlines to adapt production processes, and for households to modify consumer behaviour
	• Incentivises firms to invest in **more sustainable capital**
	  ○ Includes solar panels or carbon filters
	• Incentivises individuals to **reduce their household energy consumption**
	• Targets are limited in their capacity to enhance sustainability as targets **may be insufficient** and fall short of preventing environmental damage

Examples	**Renewable energy target** (successful) • Achieved in 2019, expiring in 2020 • Created **incentives** for the **increased use of renewable energy** such as wind and solar power • Set a goal of **23.5% renewable energy supply by 2020** • Energy providers were **legally obligated** to increase production of

	renewable energy • Smaller firms and households were also given **financial incentives** to install renewable energy systems **Emissions reduction target** • Aims to lower Australia's carbon emissions • Target of **26-28%** below 2005 levels **by 2030** • **Criticised** by scientists as being an insufficient target, as other countries have committed to stronger targets • Albanese **increased** the target to **43% by 2030**
International agreements	
Introduction	• There has been a push for **international cooperation on environmental policies** • Climate change affects the world as a whole, hence the need for multilateral cooperation
Costs and benefits	• Helps to promote **global action**, as individual nations are often reluctant to impose policies if other countries aren't adopting similar policies • Not as effective as **national targets** due to enforceability
Examples	**The Paris Agreement** (2016) • **Legally binding treaty** on **climate change** that was signed by 196 countries • Aimed to limit global warming **below 2°C** compared to pre-industrial levels • Countries committed to reducing greenhouse gas emissions

Market-based solutions	
Corrective taxes	• A tax designed to incentivise firms to **reduce** their production of environmentally harmful goods and services to a socially optimal level • Designed to eliminate **negative externalities,** such as carbon emissions **Example:** Coal-fired electricity market (negative externalities) This production creates a **negative externality** through **increased** carbon emissions

<table>
<tr>
<td></td>
<td>


The socially marginal cost curve (SMC) is 50c higher than the normal equilibrium, hence the government can levy a tax of 50c on firms producing electricity

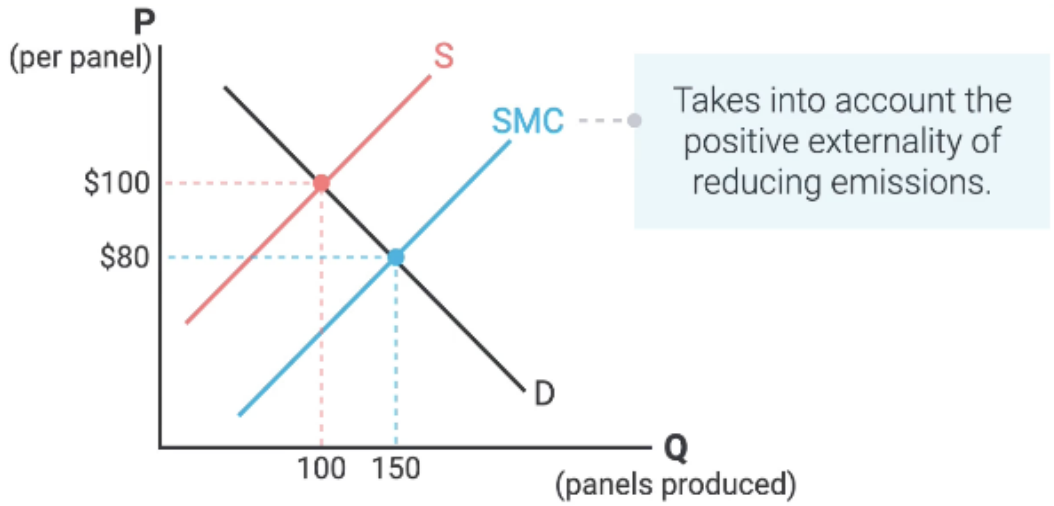
Taxes increase production costs meaning the supply curve shifts to the left
As the supply curve moves to the SMC, the externality is internalised
Beneficial for society

Examples

2012: The Gillard Government introduced a tax on carbon emissions known as the carbon tax

Carbon emissions fell by over 10 million tonnes between 2012 and 2014
Removed by the Abbott Government due to its unpopularity

</td>
</tr>
<tr>
<td>Corrective subsidies</td>
<td>
A cash payment provided to businesses to incentivise them to increase production of goods with positive externalities
<table>
<tr><td>Example: solar panels (positive externalities)</td></tr>
<tr><td>Producing solar panels results in a positive externality as it reduces reliance on non-renewable resources</td></tr>
</table>
</td>
</tr>
</table>

<table>
<tr>
<td></td>
<td>


Governments can provide a subsidy of $20 per unit to firms producing solar panels

Subsidies reduce production costs

Examples

Federal and state governments have increased subsidies for renewable energy in recent years to help meet emissions target

Subsidies are expected to reach $2.8 billion

</td>
</tr>
<tr>
<td>Quotas</td>
<td>

A restriction on the quantity of a good or service that can be produced
Can promote sustainability as the government can restrict the amount of non-renewable resources that can be extracted
The government, for instance, could set limits on forestry, fishing or mining
Governments may prefer quotas over subsidies as they don’t cost anything to implement
Quotas result in higher prices as a result of decreased supply, harming the purchasing power of households
The government may need to limit the number of firms who can produce or extract

Selling of rights: whichever firm pays the most to purchase rights is allowed to continue operating

Only the most efficient firm remain
They remain profitable after paying the cost of the quota due to their efficiency

Allocating rights to one firm: grants one firm monopoly power

Potentially more beneficial for the environment
E.g: only allowing one company to operate boats in

</td>
</tr>
</table>

<table>
<tr><td></td><td>sensitive areas of the Great Barrier Reef</td></tr>
<tr><td>Emissions Trading Scheme</td><td>

Businesses must buy permits from the government in order to emit greenhouse gases

Firms must pay a cost for their actions that were previously free

Firms are encouraged to devise more environmentally friendly production processes to avoid buying permits
Government revenue from permits incorporates the cost of carbon emissions into the price mechanism, therefore internalising the externality
Highly successful globally

The ETS implemented into the EU in 2008 eliminated carbon dioxide emissions by over a billion tonnes

<table>
<tr><td>Benefits</td></tr>
<tr><td>

Less efficient firms will not be able to pay for the permit
Only the most efficient firms will remain on the market
Ensures that resources are best allocated so their value can be maximised
Helps lower total emissions over time
Highly successful globally

</td></tr>
</table>
</td></tr>
</table>

External stability

Policies for stability	
Contractionary macroeconomic policy	• Slows down economic growth & rate of imports • Works by reducing the rate of wage growth • Improves the BOGS and lowers the CAD as a % of GDP overall • **Twin Deficits Hypothesis**: reductions in the budget deficit will reduce the size of the CAD • May cause a growth in unemployment or a decrease in national savings

	○ Increases the size of the savings-investment gap, making Australia more dependent on overseas borrowing ● **However:** higher interest rates used to slow rate of imports will increase the proportion of national income saved
Increasing the rate of national savings	● Helps to reduce our reliance on borrowing from overseas to finance domestic investment ● Bridges Australia's savings-investments gap ○ Foreign debt doesn't accumulate as quickly **Methods** ● Aiming to record higher budget surpluses in order to increase domestic savings ○ Not generally used as the budget generally addresses internal problems, rather than those externally based ● Taxes on consumption (such as increasing the GST) ○ Disincentivises consumption ○ Increases savings ● Creating compulsory savings ○ E.g compulsory superannuation contributions ○ Creates additional national savings over time
Microeconomic policy	● **Remember:** one of Australia's root causes of external imbalances is a result of high import rates as Australia does not have a comparative advantage over certain goods ● Hence, **Australia needs to have exports in order to reduce trade imbalances** ● Microeconomic policy is used to structure the economy around industries with a comparative advantage ● Increases export incomes, minimising trade deficits ● Increases in efficiency through microeconomic policy lowers production costs ○ Markets become more internationally competitive
Influencing exchange rates	● *Dirtying the float* ● The RBA will either buy or sell FOREX or AUD ● Resorted to if the currency is unstable ● **Rarely used**