ECONOMICS NOTES

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Chapter 1: Global Interdependence

- Rapid advances in communications and transport have increased access to all corners of the globe.
- It is now cheaper and quicker to fly to every major city in the world.
- Computers and the internet have enabled people to instantly access the world wide web for purchasing goods and services.
- Australian firms and households are constantly involved in economic transactions with other economies. e.g. Australian firms exporting coal, iron ore and education services. Consumers purchase cars from Japan, computers from China, iPads from United States and coffee from Brazil.
- Australia is a major recipient of foreign investment.
- Open economies grow faster because trade fosters investment, innovation , and institutional reform.
- The world has effectively become a global market with the spread and growth of multinational corporations (MNC's)
- Globalisation is widely regarded as a necessary condition for the continuation of sustained economic growth and rising living standards. The closer integration can be the key for Australia's economic growth.
- **Globalisation refers to the opening up of economies to international competitiveness.**
- **Globalisation refers to the freer movements of goods, services, investments, ideas and people around the world.**
- Globalisation is the increasing integration of economies around the world through the movement of goods, services, investments, ideas and people around the world.
- **It implies the opening of international borders to the flows of trade, workers, tourists and investments.**
- Globalisation has made the world more integrated and interdependent.
- Globalisation **means triumph of free trade and competitive markets over protection and restricted markets.**

- Globalisation has enabled the developing world new access to markets, technology and investments.
- Globalisation is also known as internationalisation.
- The world economy has become more integrated than it ever was through improvements in communications, transport and the application of the internet.

- The **WTO has identified four new trends** that have **affected the relationship between trade and development** since the start of globalisation.

I. the economic growth of many developing countries

II. the growing integration of global production through supply chains

III. the higher prices for agricultural goods and natural resources

IV. increasing interdependence of the world economy, which causes shocks to reverberate quickly and globally

Linkages Between Economies

1. **International trade:** International trade **is a stimulus to growth.** It **expands the global economy, creates wealth and increases living standards around the world.** Trade **creates jobs, raises incomes and encourages business to become more innovative.** It gives **consumers a greater choice of products at competitive prices and offers firms more options when sourcing production inputs.** Australia is part of a global trading system that is governed by the rules of the World Trade Organisation (WTO). These rules are designed to create an open, fair and transparent trading environment for all countries- both developed and developing. **Exchange of goods and services between countries.** Exports and imports of goods such as manufactures, raw materials and agricultural products, and services like transport and education.

Statistics: Exports contribute around 21 per cent of Australia's GDP and around 22 percent of Australian workers are directly involved in trade-related activities. Australia is a major exporter of resources to the world, including iron ore, coal, natural gas, gold and bauxite. Australia imports large quantities of capital goods,machinery, motor vehicles and consumer goods. Australia is the world's largest exporter of iron ore. Australia's global export position in 2013 was number 22 and global import position was number 20.

2. **Tourism: Residents of one country travel overseas to visit other countries.** International tourism has grown in **importance due to improvements in communications and transport and ranks fourth in global exports.** Tourism Australia aims to influence people to travel to an within Australia, to maximise tourist

spend and visitation throughout the county and deliver real economic benefits to regional areas as well as major cities.

Statistics: Tourism has also become an important industry in Australia. Overseas tourists coming to Australia is the 6th ranked export, while Australian tourists travelling to overseas destinations is Australia's highest ranked import.

3. Foreign investment: The Australian economy has relied on foreign investment to complement its domestic savings to help fund its economic development. Investment leads to future growth, economic development, employment and better technology. Foreign investment is financial capital flows into and out of the country. Investment leads to expanding markets, avoid trade barriers and increase profitability.

Statistics: The recent mining boom would not have been possible without direct foreign investment.

4. Immigration: The aim of immigration in Australia is to build Australia's future through the well-managed entry and settlement of people. Immigration is the permanent movement of people from one country to another. Australia is a multicultural nation. Immigration has been an important source of skilled labour and has helped to boost Australia's population growth.

Statistics: 28 percent of Australia's population was born overseas.

- Australia is an outward-looking country that is strongly engaged with the rest of the world. Australia has a number of globally significant industries: **agricultural products, international tourism, fuels and mining, foreign students and investment fund assets.**
- Australia plays an active role in a wide variety of global and regional groups. Some of these are: The United Nations (UN), The World Trade Organisation (WTO), Group of 20 major economies (G20) and Association of South East Asian Nations (ASEAN).

Extent, Patters and Trends in World Trade

Extent

- **World exports increased by a factor of 5 (500%) from 1990 to 2013, while world GDP increased by 70%.**
- **Increasing size and importance of private capital flows, increasing from 10% of GDP in 1990 to 34% in 2014.**
- **The exponential growth of the internet**

Patterns

- **Rapid emergence of Asian economies like China and India**
- A **rising share of world trade in GDP has been accompanied by rising per capita GDP.**
- **Growing international tourism because of improved communication and cheaper transportation which has resulted due to competitiveness**

Trends

- **Rapid growth in manufactured exports- especially high technology products like computers and electronic gadgets**

Why has world trade grown so fast?

- It is partly due to the success of world organisations such as the World Trade Organisation (WTO), the International Monetary Fund (IMF) and the World Bank in promoting the liberalisation of world trade.
- Due to improvements in transport and communication which has drastically lowered the costs of international commerce.
- Trade is seen as an 'engine for growth'.
- Specialisation and exchange is the cornerstone for all modern economies and is the catalyst for raising living standards.
- Economies becoming more open to trade and investment and as a result, economic growth and living standards have accelerated.
- The bulk of world trade is made up of merchandise or goods which accounts for 80 per cent of total trade with services comprising 20 per cent. This makes sense because goods and generally easier to trade than services. Many services in fact are non-tradable. Most services trade involves transport and travel. However, there has been recent growth is professional and businesses services trade including education and trade.
- Merchandise is divided into three main categories agriculture, fuels and mining and manufactured goods. Trade in manufactured goods dominated the global trade.
- Some of the major merchandise product groups exported in the world are: transport equipment, which includes motor vehicles is the 1st largest category. The 2nd largest category is chemicals. The 3rd largest category is agricultural products.
- Trade in services comprises of transport, travel and commercial services. Transport and travel, which includes tourist expenditure, each accounts for a quarter of services trade, while commercial services accounts for 50% of the services and includes

- categories such as insurance, telecommunications, financial services and construction.

- Countries that dominate world trade are the largest economies- China, the United States, and Germany. China is the world's largest exporter, while the United States is the largest importer. Japan's relative importance has slipped.

Statistics: Australia's trade as a proportion of GDP has been increasing.

Factors that affect economic transactions:

1.**The exchange rate:** Movements in the exchange rate affects the price of imports and exports. For example, If the Australian dollar falls in value, Australian exports become cheaper to overseas buyers, while imports increase in price to Australian buyers.

2.**World economic growth:** Australia's exports are dependent on foreign demand. Increased economic growth in foreign countries will increase the demand for Australia's exports. China and Japan, for example, are the most important customers for our mineral and energy resources. If their economies grows, then the demand for our resources increases.

Statistics: Most notably, there has been a gradual easing in the growth of demand for commodities in China, which accounts for a large share of internationally traded commodities and of Australia's resource exports. A decline in the growth in Chinese steel production has contributed to falling iron ore prices. Growth in the rest of east Asia has also eased a little while the Japanese economy has been weaker than expected. Growth in the euro area has been modest but the US economy has been growing at an above-trend pace over recent quarters. The sharp fall in oil prices since September 2014 is expected to provide additional support to growth in most of Australia's major trading partners given that they are net energy importers

3.**Domestic economic growth:** Australia's imports are determined by domestic economic growth. Higher economic activity in Australia raises domestic income which increases demand for imported consumer goods and services while increased investment will increase capital good imports.

Statistics: The Australian economy has grown at around 2½ per cent on average in the past two years. Declining mining investment has continued to weigh on activity, though growth of mining activity overall has remained firm, supported by an increase in resource exports. Over the past year, non-mining activity has picked up slightly. Dwelling investment has strengthened relative to a year ago, supported by low interest rates and rising housing prices, and consumption growth has picked up from its lows in 2013, although it remains below average. Although employment growth picked up, spare

capacity continued to increase over 2014. Nevertheless, consumption has been growing faster than household incomes, with the saving ratio declining gradually over the past couple of years.

4.**Relative inflation rates:** If Australia's inflation rate is greater than our trading partners it will reduce the competitiveness for domestic goods and increase the competitiveness for foreign goods.

5.**Relative interest rates (the interest rate differential)**: If interest rates in Australia are relatively higher in Australia than other economies, especially the United States than financial capital will flow into the Australian economy.

6.**Productivity and cost efficiency**: The cost efficiency of domestic firms relative to foreign firms will determine their success in global market. Productivity improves cost efficiency by increasing output per worker.

International competitiveness

- International competitiveness is the degree to which a country can produce goods and services which meets the test of international markets, while simultaneously maintaining and expanding the real incomes of its people over the long term.
- Globalisation has weakened traditional barriers to international trade, and virtually integrated the world's economies into one giant free market. This means that the achievement and maintenance of international competitiveness for countries has come to determine the difference between success and failure in national economic performance.
- Organisations that produce annual competitiveness reports are the World Economic Forum and the International Institute for Management Development (IMD).
- World economic forum's competitiveness report is based on an opinion and is done by a survey whilst International institute of management development report is more accurate and reputable.
- Countries such as Australia need to have exports competitively prices on world markets and domestically produced goods to be able to compete with imports.Australia's international competitiveness affects our international trade and hence our national production, employment and income. International competitiveness is important because a fall in our competitiveness implies that goods and services produced in Australia have difficulty finding buyers in both foreign and domestic markets. Competitiveness matters because it can effect a country's standard of living. Improving competitiveness implies that a country can increase it's national income.

- Factors that determine the competitiveness of a country's goods and services are:

1. **Trade liberalisation: removing trade barriers**
2. **Establishing free trade agreements: also known as preferential trade agreements between countries or between a country and a region**
3. **Structural change: Reducing transportation costs, improvement in communication and technology which will increase the speed and size of international trade.**
4. **Corporate behaviour: Increased global competition has driven the needs for companies to reduce costs in order to pursue higher profits and the reduced costs will result in higher production.**
5. **Changes in labour productivity due to factors such as technology, education and training.**
6. **Changes in a country's price level (inflation) relative to it's trading partners**
7. **Changes in a country's wages relative to its trading partners**
8. **Changes in the exchange rate**

- Productivity measures how much output can be produced from a given input, such as labour.
- Two of the commonly used measures to measure international competitiveness are: nation's real unit labour costs and the value of a country's exchange rate.
- Real unit labour costs reflect changes in a country's wages relative to it's productivity. It is usually measured by dividing total production (GDP) by number of hours worked. Real unit labour costs will fall if either productivity rises or if wage costs fall. This will cause an increase in competitiveness.
- An increase in productivity will increase competitiveness.
- To compare the value of Australia's exchange rate with other countries it is important to use a trade weighted index exchange rate rather than a single rate such as the US dollar. Australia's trade weighted index (TWI) measures the change in the value of Australian dollar relative to major trading partners. The real TWI takes into account changes in Australia's inflation rate relative to trading partners. If the real TWI falls (a depreciation) then this implies an improvement in competitiveness since the price of Australia's exports to overseas to overseas buyers will fall.

Statistics: In 2009 there was a sharp depreciation in the real TWI due to the global financial crisis. But the real trade weighted index increased again quickly to reach its

post float high in 2013. During 2014, the real exchange rate started to fall as commodity prices declined and the Chinese economy slowed.

Globalisation

- The term globalisation generally refers to the opening of international borders to the flows of trade, immigration, investment, information and technology.
- Benefits of globalisation include: higher average income, greater innovation, richer cultural exchanges and improved standards of living.
- Globalisation has been propelled by cheaper and faster transportation, more innovative information technology, fewer or lower trade barriers, and better economic management.

Indicators that illustrate how goods, capital and people have became more globalised:

- Growing importance of trade in the world economy. (from 40% of GDP in 1990 to 57% in 2014)
- Increasing size and importance of private capital flows, increasing from 10% of GDP in 1990 to 34% in 2014.
- Advances in technology have enabled the dramatic decrease in transport costs, increased the flow of information and the speed of communication enabling markets to become more integrated.
- World GDP has increased by a factor of 8 over the last 50 years- while global exports have increased 250 times.
- The rising value of trade (X and M) as a % of world GDP.
- The exponential growth of the internet
- Since 1980, inflows of foreign direct investment have increased by a factor or thirty. Multinational firms are now accounting for an even larger share of global trade.
- Increased migration of people and workers
- Growing international tourism
- Dramatic increase in trade intensity for countries such as China, India, Korea and Germany.
- The value of exports as a percentage of world GDP has increased
- Inflows of foreign direct investment have increased
- The number of broadband internet subscribers has increased
- The number of mobile phone subscriptions has increased

- The number of international tourist arrivals has increased

Causes of globalisation

- Structural change: Advances in transport, information and communication technologies has resulted in the ‘death of distance’. Transport costs and travel time have been drastically cut helping to boost the volume of merchandise trade and increase tourist travel to record numbers. Advances in information technology and the internet have enabled the growth of trade in services. Many services that were once thought as non-tradable are now being offshore to countries such as India- business services such as accounting, marketing and IT support. Technological advances that have brought the world closer together (Cheaper transport, persuasive IT and instant communications)
- Changes in individual tastes and preferences, enabling greater choice and variety in the purchase of goods and services.
- Multinational corporations have also played an important role in promoting globalisation. Multinational corporations (MNC’s) are very large firms with headquarters in one country and subsidiaries in one or more other countries for e.g.apple, nike and Microsoft from the Unites States and Toyota, Sony from Japan. These firms establish production and/or retail and distribution facilities in other countries. Even Australia has several MNC’s, including BHP and Rio Tinto. Multinational companies expand into foreign markets because:

1. Growth and expansion plans: Often when the company has saturated its domestic market, it wished to grow its operations in new territories. Thus it looks for fresh markets across the boundaries and set up its operations in a number of other countries.
2. Size of market: Organisations want to expand their customer base and this could be achieved by going international.
3. Cost reduction: Countries across the boundaries might be able to offer cheap labour and resources thereby helping the firm to achieve economies of scale.
4. There has been a reduction in transport and distribution costs
5. Multinational companies expand into foreign markets due to a reduction in transportation and distribution costs.
6. Increase in international competitors: Once the domestic market gets flooded with international competitors operating at a much lesser costs, the domestic firms try to enter international markets to stay competitive by achieving economies of scale.

- International organisations: Success of world organisations such as World Trade organisation, International monetary fund (IMF) and World bank in promoting the liberalisation of world trade.
- World trade organisation: The WTO deals with the rules of trade between nations at a global or near-global level. The WTO is the only organisation dealing with the global rules of trade between nations. It's main function is to ensure that trade flows as smoothly, predictably and freely as possible.
- The World Bank: The World Bank is a vital source of financial and technical assistance to developing countries and the world. The World Bank provides low-interest loans, interest-free credits and grants to developing countries for a wide array of purposes.
- The International Monetary Fund: The International Monetary Fund is an organisation of 186 countries, working to facilitate international trade, promote high employment and sustainable economic growth, and reduce poverty around the world. The IMF is helping countries tackle the the fallout from devastating financial crisis.
- Changes in government policy: The liberalisation of markets to the flow of goods, services and investment- the argument that free trade benefits all countries. A core element of globalisation is the expansion of world trade through the elimination or reduction of trade barriers.

The effects of globalisation

Arguments against globalisation

- Global poverty has not been reduced
- Income inequality around the world appears to have increased
- Free trade results in job losses in less competitive economies
- Free trade leads to greater environmental damage due to increased industrialisation
- Destroys cultural diversity with local markets being overrun by global brands
- The recent increase in global financial flows is also seen as the cause of financial crises in many developing economies
- Higher unemployment among low-skilled workers
- It entrenches the use of child labour
- It lowers wages

- Increased competitiveness from low wage countries will destroy jobs in richer nations and there will be a race to the bottom as countries reduce wages, taxes, welfare and environmental control so as to be more competitive.

Arguments for globalisation

- Provides access to a wider variety of goods and services
- Enables people to consume a greater variety of goods and services and a greater quantity.
- Results in lower prices for consumers and higher prices for producers. Everybody gains.
- Free trade lowers prices of goods
- It provides more and better-paying jobs
- It increase competition and efficiency. It provides strong incentives for domestic industries to remain competitive.
- It reduces global poverty
- It increase economic growth
- It increases overall living standards by boosting productivity
- It has enabled developing economies to access foreign investment which helps to boost domestic production and employment and is an important source for new technologies- thus promoting higher productivity.
- It increases multiculturalism
- Leads to greater innovation by firms
- Results in lower prices for consumers and higher prices for producers. Everybody gains.
- Increased economies of scale
- When a country exports its goods and services, domestic producers gain from higher prices and greater production.
- When a country imports, domestic consumers gain from lower prices and greater consumption

Chapter 2: Free trade and protection

The significance of international trade

- Australia has been a **great exporter of primary commodities (minerals and agricultural products)** and an **importer of financial capital.** This means that trade and foreign investment have played a very significant role in the economic development of our economy.
- Traditionally Australia has been identified as a small open economy . The 'small' refers **to the size of the economy in terms of both population and total production** (or gross domestic product). However, now it is a **medium size open economy.** The **'open' means that the moment of goods, services and capital are generally unrestricted, that is these things can move freely between Australia and the rest of the world.** Australia has **reduced it's levels of protection to domestic industry to historically low levels.**

Statistics: Australia's population has now grown to **23 million** and Australia's annual GDP is now around $1.6 trillion. Australia can no longer be described as a small economy in fact it is the world's **12th largest economy.**

- Trade is important because it can **expand a nation's consumption possibilities by providing access to other countries production through imports.**
- **Exporting increases a nation's production while importing increases consumption.**
- A **country gains when it exports goods it produces at a relatively low cost and import good it produces at a relatively high cost.**
- **Exports pays for the imports a country needs to enjoy high standards of living.**
- Exporting **enables Australian firms to produce for the world market- to sell to a potential market of 7 billion people.**
- Importing allows **Australian households to consume goods and services that are either not produced in Australia or are too costly to produce.**
- International trade **has caused nation's to engage in trade permits which leads to increased specialisation, economies of scale, increased productivity and higher real incomes.**
- There is a s***trong link between economic growth and trade:*** the ***countries that have experienced the fastest growth rates in trade have also achieved high rates of per capita income growth.***

- Trade has been been an important **'engine of growth'** for many countries and this has certainly been the case for **East Asia Regions- economies such as Japan, China , Korea.**

Statistics: In 1970's Australia's exports and imports accounted for 13% of Australia's GDP and in **2014 it accounts for over 20 per cent of GDP. This means that one in five jobs is directly linked to trade.** On the world stage, Australia is a relatively small exporter compared to China which is the world's largest exporter. Australia is **22nd as a world exporter of goods** and services and yet is the 12th largest economy.

- Australia is the **only economy located in the southern hemisphere** and most of the **world's largest economies are located in the northern hemisphere.** Australia is an **island continent, relatively isolated from the rest of the world and this is one of the reason why on the world stage Australia is a relatively small exporter.** If Australia shared a border with **United States, or if Australia was located in Europe, then Australia's ranking in world exports would be much higher.**
- A country's level of exports will be determined by a number of factors: 1. **size and structure of the economy,** 2. **its relative competitiveness** and its 3**.location.**
- A useful way to measure the **importance of international trade** is to calculate the share of trade in its gross domestic product (GDP). This trade-to-GDP ratio is often called the **'trade openness ratio'** or the **'trade intensity ratio'.**
- Factors that determine a country's trade intensity or trade openness are: **relative size of the economy, it's location relative to foreign markets and extent of barriers to trade- both natural and artificial.**

Statistics: ***Australia's trade openness has decreased in recent decades- only 20 in the world. This is due to Australia's isolation and 'tyranny of distance'.***

- Australia has been **lowering it's artificial barriers such as tariffs, but it is hindered by more natural barriers such as high transport costs as a result of its geographic isolation.**
- The purpose of economic growth is to **enable high levels of consumption and a high standard of living.**
- Exports add to **national income which can than be used to consume imports.**
- Given that Australia has a **small economic base in terms of labour and capital, producing for the world market is a rational strategy to provide for a higher rate of economic growth and higher living standards.**

The gains from specialisation and trade

- Nations trade because it is advantageous to do so. Any form of exchange or trade involves gains to both buyer and seller.
- **Specialisation is not possible unless trade takes place**
- **Countries specialise in the production of certain goods and services to which they are best suited.**
- **Surplus production can than be exchanged or traded for other goods and services.**
- The opposite of **specialisation is self- sufficiency.**
- No country is capable of being **totally self-sufficient, because no country has all the resources needed to satisfy all of its needs and wants. Countries rely on each other to supplement domestic production and increase their consumption possibilities.**
- International trade involves **specialisation and exchange.**
- International specialisation is made possible because of the **uneven distribution and quality of resources between countries. Australia for example is well endowed with natural resources such as land, forests, minerals and energy supplies while the Japanese economy is very rich in terms of capital and labour but lacks natural resources.**
- **Differences in the distribution of resources in terms of both quantity and quality will affect the cost of suppling goods and services.**
- **Labour differences, capital differences and enterprise differences.**
- If **production costs differ, then countries will benefit by specialising in the goods and services in which they are most efficient and exporting the surplus** and **importing those goods and services in which they are least efficient at producing domestically.**
- **Relative production efficiencies have been developed over time** (e.g. Japanese electronics, US cars, German machinery). From the world's point of view, it is better **to encourage specialisation and trade than it is to encourage inefficient self-sufficiency- more wants can be satisfied when resources are put to their best use.**

The principle of absolute advantage

- A **country is said to have an absolute advantage in the production of a good over another country if it can produce that good more efficiently than the other country.**
- 'More efficiently' can be defined **as using less resources to produce a given quantity of output,** or to **produce more output from a given quantity of resources.**
- The terms of trade represents the rate at which different commodities exchange for each other between countries. The terms of trade will always lie somewhere between the opportunity cost ratios for the two goods being traded.

For example:

- Read page 30 and 31 for diagrams

The principle of comparative advantage

- **When a country has an absolute advantage in the production of both goods, its comparative advantage lies where it'd absolute advantage is greatest.**
- The country that has **no absolute advantage has a comparative advantage where it's absolute disadvantage is smallest**.
- If a country has comparative advantage in both goods it's **comparative advantage lies where the absolute advantage is highest.**
- Comparative advantage refers to a country's relative advantage.
- The n**otion of 'efficiency**' is embodied in the principle of comparative advantage which assumes: 1. **a two- country, two-good world**, 2. **perfectly mobile resources** and 3. **no transport costs.**
- **A country is said to have an comparative advantage in the production of a good over another country, if the opportunity cost of producing that good is lower than in the other country.** For example, if Australia has an comparative advantage in producing clothes, **than it should devote all it's resources in producing clothing and then trade the surplus production**. Countries will gain if they specialise on the the basis of comparative advantage and then trade their surplus production.
- The theory of comparative advantage demonstrates **that countries gain by specialising in the production of goods in which they have an opportunity cost advantage.** That is, in goods which they are **relatively more cost efficient.**
- It is comparative advantage that is the basis of international trade.
- **If opportunity costs are same neither country has a comparative advantage.**

- (when finding the opportunity cost put the one you're finding at the bottom)
- Read page 32-35 for diagrams

Using the Demand/ Supply model

- Comparative advantage and gains from trade can be illustrated using the demand and supply model.
- The model of supply and demand determines the relative price of a good which is the same thing as opportunity cost. This means that by **comparing the domestic price with the world price we can determine wether a country has a comparative advantage.**
- A country will **export a good or service if it has a comparative advantage in producing that good.**
- **Comparing domestic price of a good with the world price we can determine whether a country has a comparative advantage or disadvantage.**
- If the **domestic price is lower than the world price, than the country has a comparative advantage in producing that good. The country will benefit by exporting that good to the rest of the world.** In other words, it **has a lower opportunity cost.** (**producers gain, producers will be selling more at a higher price, local consumers loose because they consume less and pay a higher price)**. However, producers gain more than consumers loose, so that overall economic welfare has increased.
- If the **domestic price is higher than the world price for a good than the country will benefit by importing that good.** This means that the rest of the world is **relatively more cost efficient at producing the good.** Producing that good has a **high opportunity cost.**(**domestic consumers gain from lower prices and increased consumption,** domestic producer**s loose because they receive a lower price and sell less**). However, **consumers gain more than producers loose, so that overall economic welfare has increased.**
- Trade always results in **one group gaining** and the **other group loosing but the gains always exceeds the looses.**
- Imports also create an **increase in economic welfare just like exports.** It is important to realise **that countries gain from both exports and imports.** Both result in a **net increase is total surplus.** In the case of exports, producers gain more than consumers loose, while in the case of imports, consumers gain more than producers loose.

- World trade patterns are influenced by the principle of comparative advantage,but the real world features protection and transport costs. In addition, advantage in opportunity cost may not be permanent, due to mobility of resources, technological change, resource finds and government decisions.

The sources of comparative advantage

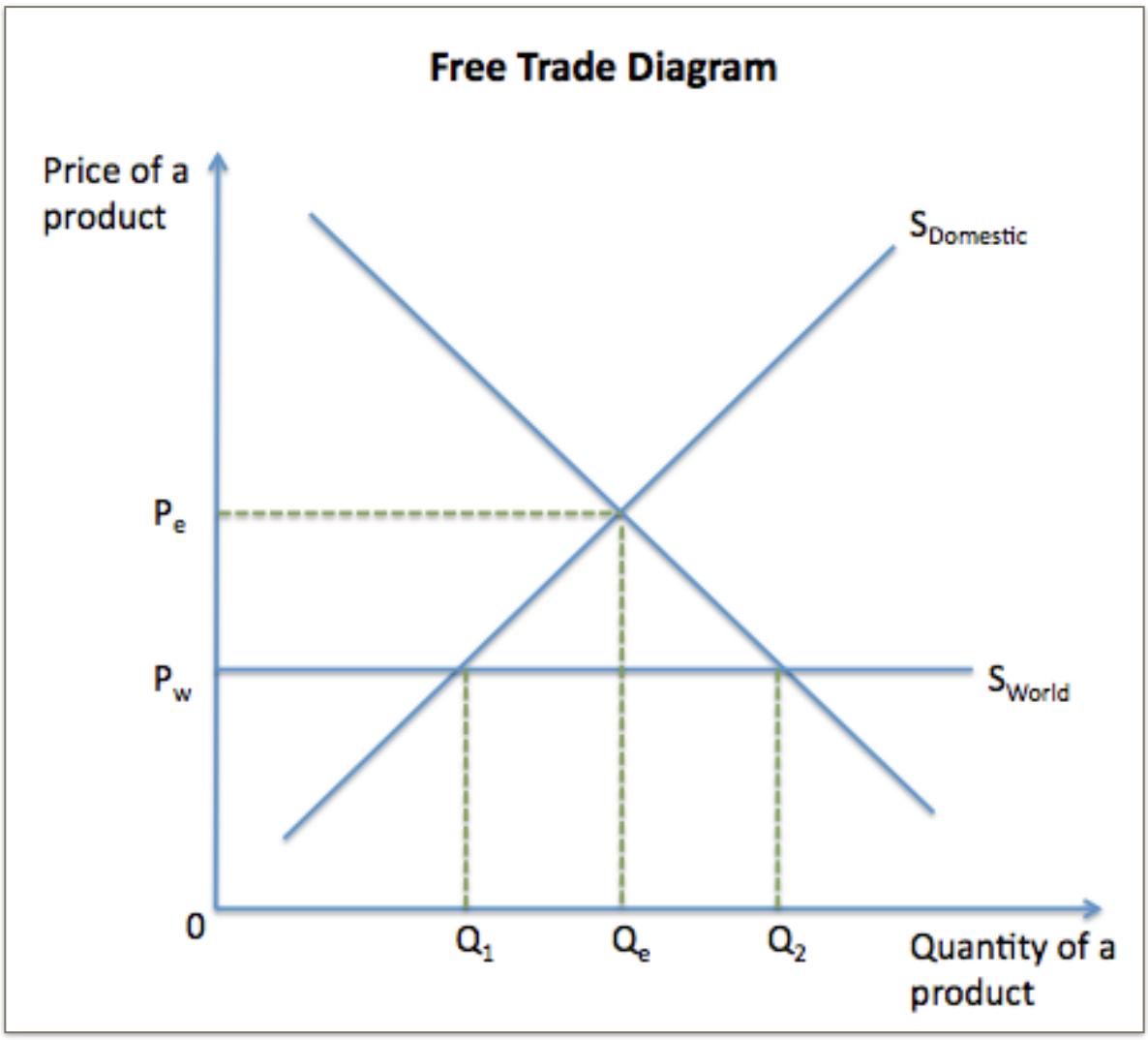
- Comparative advantage is **determined by a nation's resources**- its human, natural and capital resources and by technological processes.Comparative advantage can also be based on **differences in climate and endowment of natural resources.**
- Australia has traditionally had a comparative advantage in many primary industries such as **agriculture and mining:** wheat, wool, coal, iron ore and natural gas. The Middle East is endowed with vast oil supplies.
- Comparative advantage can also be determined by **quantity and quality of a country's labour and capital resources.** For example: the United States has developed a comparative advantage in the television and film making industry as well as computer software.
- Comparative advantage can **and does change over time with improvements in technology and productivity. F**or e.g. over time Japan developed a comparative advantage in motor vehicles and electronics. China has became a major producer of clothing and household appliances. Australia has now developed a comparative advantage in education purposes.
- Not all countries take advantage of comparative advantage because countries may **choose to support and protect industries that are not economically efficient for cultural and political reasons- the tradeoff is a lower level of national income.**
- The theory of **comparative advantage is the theory of free trade.**
- Specialisation and trade has enabled the spectacular increase in global living standards witnessed over the past century.
- Many people attempt to criticise the theory of comparative advantage by arguing that is based on simple assumptions such as ignoring transportation costs**. But transport costs can easily be incorporated into the model without affecting the validity of the theory.** The model also assumes that resources such as workers and capital equipment could be transferred from one industry to another at a constant cost. This is just a convenient simplification and has no relevance to the model's conclusions.

Statistics: Car manufactures (Holden, Ford and Toyota) are to cease production in Australia in **2018** due to low productivity, the high Australian dollar and high labour costs. The world price of cars is now below the domestic price- Australia is at a comparative disadvantage.

Protection

- The theory of comparative advantage **demonstrated that countries could increase their consumption of goods and services hence their standards of living by specialising in the production of those commodities for which the opportunity cost was lowest** compared to other countries (or when the domestic price was lower than the world price).
- **Protection refers to any action by the government designed to give the domestic producer an artificial advantage over a foreign producer.**
- Protective measures can be classified into **three types:**
- Those that **increase the domestic price of the foreign product**, such as tariffs.
- Those that **provide domestic producers with a cost advantage,** for example subsidies.
- Those that **impose a quantitative restriction on imports,** such as **quotas. M licences** are also similar to quotas, except the also restricted the number of imported goods.
- **Embargoes** is a **total ban** on an imported product. Consumers can only **buy the locally made product.**
- The goal of protection is to **increase domestic production in the protected industries** and ***decrease the consumption of imported goods and services.***
- Those that benefit from protection includes the **owners and the workers in the protected industries** and sometimes the **government in the case of a tariff revenue.**
- The industries given protection will **expand production and consume resources that other industries could have used.**
- Production in **non-protected industries will fall. These industries may also have a higher price for imported inputs which will reduce their competitiveness. Protection will decrease imports and also exports.**
- Consumers are disadvantaged since they have to pay **higher prices for both domestic goods and imported goods** and the **quantities of good they consume will also decrease.**
- All forms of protection **results in a net welfare loss for the economy and are inefficient.** The **looses from protection always outweighs the gains.** All types of protections **reduce total surplus and create a deadweight loss for the economy.**

Panel A: Free trade



The diagram above shows the economy opened to the rest of the world without any tariff. If the world price for cars (0w) is lower than the domestic price (0e) , then cars will be imported. The economy will import cars because it has a comparative disadvantage in producing cars which means it has a higher opportunity cost and the rest of the world can make cars relatively more cost efficiently.

The horizontal line labelled S world is the foreign supply curve- this implies that foreign producers will be prepared to **supply unlimited quantities of the good at the world price.** The supply of **imports is perfectly elastic.**The effect on the domestic industry of free trade is that local pro**duction of cars contracts to (0q1)** while the demand **expands to (0q2).** The domestic industry **will have to accept the price of 0Pw and the maximum quantity that they will be able to profitably produce is 0Q1**. The quantity demand **by consumers is 0Q2** so the shortfall between domestic production and domestic consumption-q1q2- is made up by imports.

Panel B: Removal of tariffs (Pg 27: study guide)

The effects on:

1. **Domestic consumers:** Gain from the reduction of protection. The price of the imports decreases and the quantity consumed by consumers increases (consumption increases and consumer surplus increases). Overall an increase in consumer welfare.
2. **Domestic producers:** The effect on domestic firms depends on **how they react to the removal of protection:**

- If they **do nothing than output in the industry will fall** (domestic production decreases and the producer surplus also decreases) and **structural unemployment will be created.** Capital intensive industries **would benefit from reduced protection,** whereas those who would suffer the most would be labour intensive industries. It is **unlikely that job losses would be matched by equivalent job gains.** However, the economy should **grow faster because of more efficient resource allocation and this faster growth should create higher income levels which will create more spending in the income which will further created more jobs in the future.** However:

- the effects of removal of protection can be minimised **if the reduction of protection is gradual and predictable**
- the resources released by the declining industry should **be relocated to areas where they will be used more efficiently, increasing level of output and income in the country.**

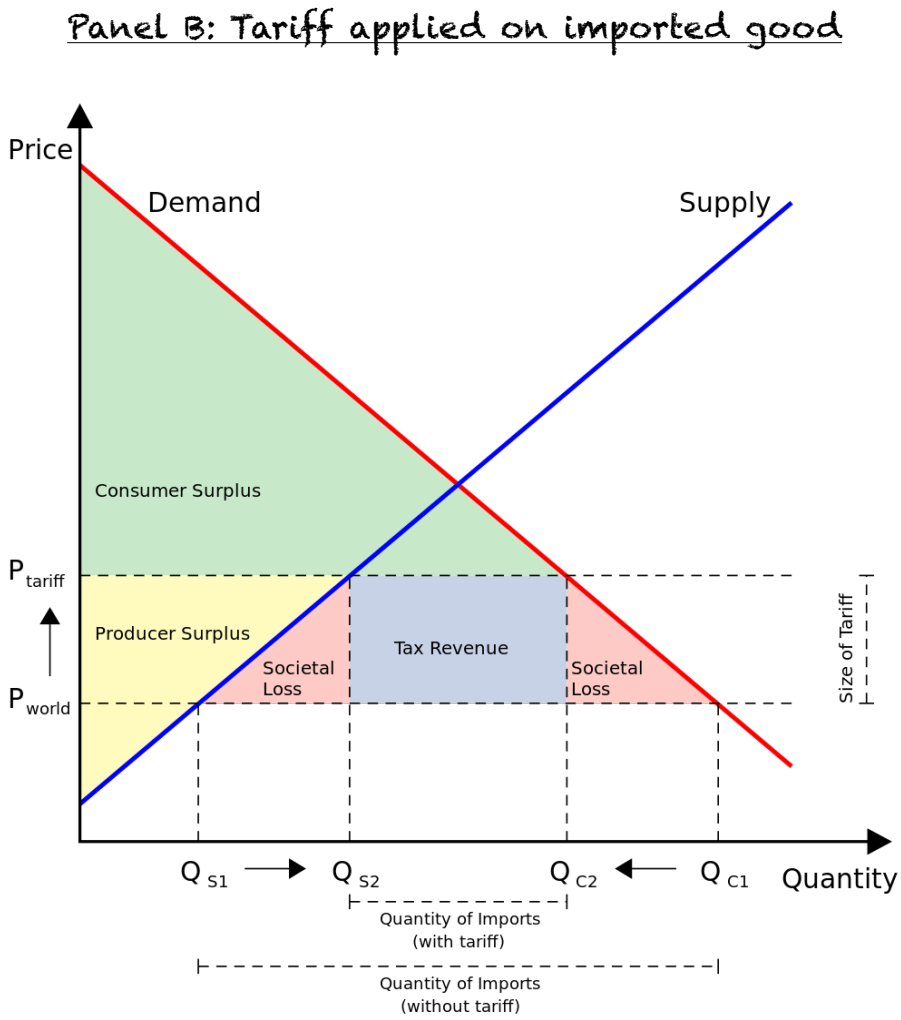
- They can respond by **improving the efficiency of their business and becoming more competitive, measures which can improve their competitiveness include:**

- **cost cutting- reduction in labour cost** by using strategies that lift worker efficiency and motivation
- **closing down or selling of inefficient branches**
- **encouraging production innovation**
- **expanding the use of technology to improve efficiency**
- **trying to gain maximum economies of large-scale production**

3. **Importers and exporters:** The **extent to which importers will increase their market share depends on the extent to which local industries fail to become internationally competitive** and **any increase in imports will increase the current account deficit. If the domestic producers of the protected industry fail to improve**

the efficiency and competitiveness of their good then the quantity of imports will increase.

4. **Government:** While the government loses tariff revenue (no revenue for the government) , **this may be offset by increased revenue from other taxes in the expanded economy due to efficient resource allocation**. **No deadweight loss due to efficient allocation of the resources and no loss of consumer surplus.**



Tariffs

- Most **widely used protective measure** in the Australian manufacturing sector
- Have been frequently **applied on imported motor vehicles**
- **A tariff is simply a tax placed on an import.**
- It is designed to **increase the price of foreign good or service so that the competing domestic good receives a price benefit**

- Important source of **revenue for the government**
- Tariff is only **placed on imported goods**, but this effectively raises the **price for both imports and locally produced goods.**
- If the government imposes a tariff on imports, then it has the same effect as placing a tax on the imported good.
- The tariff has the effect of **decreasing the foreign producers supply curve.** The world price **will move up by the amount of tax (P tariff)**. This will mean tha***t less imports*** will be sold on the domestic market, and they will be sold at a ***higher price.***
- The **price received by the importer remains at 0Pw** and the size of the tariff WT per unit and this goes to the **government as revenue.**
- The size of tariff is equal to **P world and P tariff (WT)** and the new price of the **good on the domestic market is OPt.** The **higher price benefits local producers because they can now compete more favourably against the imports.**
- Tariff is only placed on imported goods but this **raises the effective price for both imports and locally produced goods.**
- Domestic production expands from **Qs1 to Qs2,** consumption contracts from **Qc1 to Qc2.**
- The tariff results in **domestic producers gaining a bigger slice of the market. They now sell more and at a higher price.**
- The government **receives revenue from the tariff (shaded blue).** The revenue is equal to the **size of the tax (WT) multiplied by the number of imports** (Qs2-Qc2).
- Consumers are losing in a big way. Consumers are getting less of the product and have to pay a higher price. Thei**r loss is more than the gains to producers and the government.**
- The producer surplus increases, consumer surplus decreases, total surplus decreases and a deadweight loss is created (lost consumer surplus).
- The welfare of total surplus of society as a whole is reduced whenever a tariff is imposed. Other producers in the economy will also be affected by the tariff. **They will have to pay a higher price for the imported good which means there costs will increase which will result in reduced competitiveness.**

- **Tariffs while decreasing imports in the protected industry may actually result in lower exports for other producers and may result in a net decrease in employment.**

- The adverse effects of tariffs will ripple through the economy, **lowering production and consumption in other sectors of the economy.**
- The higher the tariff, **the greater the protection afforded to domestic producers** since **imports would contract while domestic production would increase.**
- The government revenue does not increase if the tariff rate increase because if the tariff was large enough it could raise the price back up to the old equilibrium price of 0p, then imports would fall to zero. There would be 100 percent protection for the domestic industry but government revenue would fall to zero.
- Benefits and Disadvantages of tariffs:

1. Domestic production expands
2. Consumption decreases
3. Imports are reduced
4. Domestic producers gain because they sell more at a higher price
5. Government receives revenue from tariff
6. Consumers get less of the product and have to pay a higher price
7. The loss of the consumers is more than the gains to domestic producers and government
8. Producer surplus increases
9. Consumer surplus decreases
10. Total surplus decreases
11. Deadweight loss is created
12. Net decrease in employment

Subsidies

- **Subsidies are grants or payments made by the government to domestic producers.**
- They are **paid out of general taxation revenue** and directly **lowers a producer's costs of production.**

- Has been **used in Australia to support the motor vehicle industry.**
- **Subsidy results in lowering the domestic producers costs so that they can compete more favourably against imports.**
- A subsidy enables a **domestic producer to sell their product at a lower price to compete against imports.**
- A subsidy has the **same affect as a decrease in costs**. Domestic firms can now supply more at the same price.
- Many people favour subsidy over tariffs because there are no direct adverse effects on consumers.
- Consumers pay **the same price and purchase the same quantity of the goods.**
- Consumers bear an **indirect burden in that the cost of the subsidy has to be paid for from government taxation revenue**. There is an **opportunity cost here because this revenue could have been used to spend on other goods and services such as education and health.**
- Subsidies **represent a type of hidden or invisible tax.**
- Inefficient producers are being rewarded at the expense of efficient producers.
- It might appear that no-one looses with a subsidy **because producer surplus increases and consumer surplus stays the same but the cost of the subsidy is more than the benefit of the subsidy.** This is the deadweight loss of the subsidy. So, even though a subsidy does not **decrease consumer surplus actually increases producer surplus, it still results in welfare loss of the society, a reduction in total surplus.**
- Total surplus decreases due to a deadweight loss that is created due to inefficient allocation of resources and the invisible burden that is being placed on consumers.

Tariffs Versus Subsidies

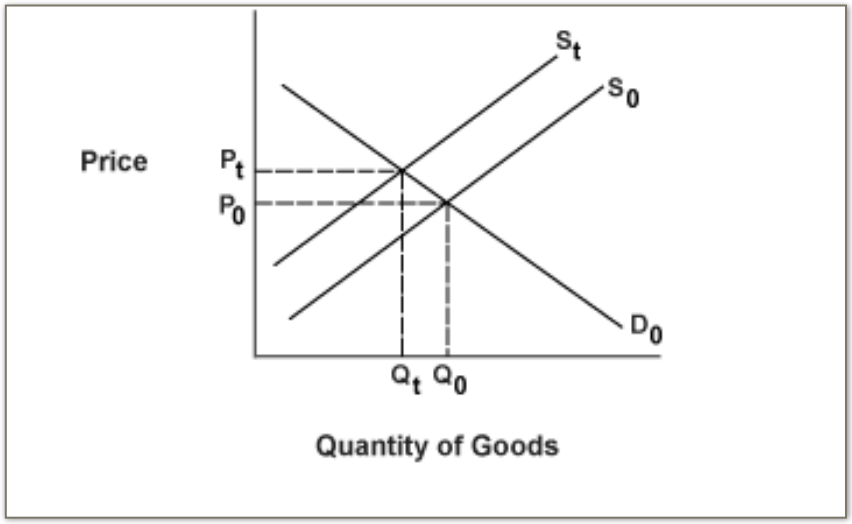
- It is suggested that a subsidy may be better in terms of economic welfare than a tariff because the price of the imported good and domestic good stays the same and the quantity consumed by consumers does not decrease. However, both types of protection have similar adverse affects on the economy.

1. Tariffs **raise the price level** (inflationary) and reduces **consumers purchasing power.** With a subsidy the price level and the consumer purchasing power are unchanged.
2. Tariffs raise **revenue for the government** whereas **subsidies cost the government money.**

3. Tariff- the tax imposed on the imported good is **payed by the purchaser of the imported good**
4. Subsidy- **every taxpayer payer**

Quotas (Page 26: study guide)

- **Quotas is a restriction on the quantity of a product imported which forces up the price of the product.** Domestic producers can then put up their prices.
- Has been used to protect the motor vehicle industry.
- **They are a direct quantity restriction on the amount of some product that importers can bring into a country.**
- Many domestic firms favour **quotas over tariffs because it gives the producers a degree of certainty as to the exact quantity of imports they will be competing against.**



- Quotas are equivalent to a **leftwards shift of supply**. If the market determines final selling price, **the price of imports will rise and domestic consumers will have to pay more and consume less.**
- The quantity of imports under the tariff system depends on the strength of demand. Quotas are more restrictive than tariffs **because they control the exact amount of the product imported.**
- Quotas have similar effects to tariffs. **Results in higher prices for both domestic and imported goods.**
- Consumers have to **pay higher prices and consume reduced quantity**
- Domestic **suppliers gain from the large market share**.
- Creates a deadweight loss because of a decrease in total surplus
- Quotas do not raise revenue for the government unless they are auctioned off to importers.

Arguments for protection

- The case for free trade is the case for **competition, high quality goods, economic growth and lower prices.**
- Free trade enables **countries to increase their real income and living standards.**
- Free trade allows **consumption to be greater than production.**
- Through specialisation and trade, countries can consume **beyond their production possibility frontier.** However, many countries still do use various measures to protect certain industries. The thing is that protection benefits a small group of special interests whereas free trade benefits the general public.
- Protection is politically motivated - **it brings significant gains to a selected group of producers, but imposes costs on consumers, other producers and taxpayers.**
- Governments use protection to gain political advantage- they ‘buy’ the votes of those industries that lobby for protection against foreign competition.

Argument	Supporting the argument	Against the argument
The infant industry argument	It is argued that infant industries need protection in their early years until they mature and can take advantages of economies of scale. The infant industry will over time become internationally competitive and develop a comparative advantage. Infant industry argument may be justifies for a short period of time but it is crucial that the level of protection is frequently reviewed and progressively reduced over time. This argument has been extensively used in support for Australian manufacturing industries.	Protection tends to become long term rather than short term as it was originally designed. The infant industry becomes used of little competition and the incentive to innovate and increase efficiency is removed. The infant industry assistance eventually turns into an old age pension.

The diversification argument	If a country completely applied to the principal of comparative advantage, then it may specialise in a narrow range of products If all resources were employed in those industries in which a country has a comparative advantage , than the changes in world demand and prices could have significant effect on the economies. A country may benefit by diversifying its industrial base. Protection may than be justified to establish a range of diversified industries. Over time, the industry may increase its efficiency and become competitive so in the long run protection could be reduced.	No country has comparative advantage in only one or two industries. Economies are dynamic and change over time as world demand and technology changes. The governments can not predict which industries will expand or contract in the future. The problem is that scarce resources are being diverted into industries that may not be able to survive once protection is removed.
The anti-dumping argument	**“ If a company exports a product at a lower price than the price it normally charges on it’s own home market, it is said to be “dumping” the product. “** It is argued that the foreign firms are engaging in unfair competition in order to drive out the domestic producers. Dumping may also occur when firms have large surpluses they cannot sell in their home market or their product has been banned because it is injurious to health or it is illegal. If dumping does cause harm to domestic producers, than temporary protection is justifiable.	Difficulty with the argument is providing whether dumping is actually taking place. Foreign goods may be lower priced because of productive efficiencies.

The national defence argument	Import barriers are necessary to protect those industries that are vital to the economy in case of a wartime emergency.	The problem is identifying the industries that are ‘vital’ to the economy. Every industry could probably present a case for why they are important at wartime emergencies.
The increased employment argument	This argument says that buying imports means employing foreign workers, whereas buying domestic goods means employing domestic workers. Protection will shift consumer’s spending from the foreign goods to the domestic good which will lead to an increase in employment in the protected industry.	While in the short run employment in the protected industry may rise or may be prevented from falling but employment in other domestic industries will suffer. Industries that uses the products of protected industries will face higher protection costs. Consumers will have less to spend on the output of other industries.
The cheap foreign labour argument	Australian industries need to be protected from countries where wages are lower. This argument could be turned around to say that less developed countries need protection from countries like Australia because it has superior capital equipment and technology.	The level of wage is a function of productivity. The reason why Australian workers receive a higher wage is because their productivity is higher. The theory of comparative advantage showed that the gains from trade occur because of the differences in the relative cost of production. Countries that have cheap labour will have comparative advantage in labour intensive goods. Countries like Australia would reap the benefits by importing these goods.

The favourable balance of trade argument	A trade deficit could be eliminated or reduced by restricting imports through protective measures. This argument assumes that imports are 'bad' and exports are 'good'. It implies that a trade surplus is favourable and a trade deficit in unfavourable.	Both imports and exports are beneficial to a country. Protectionist policies designed to decrease imports will cause exports to decrease as well. Protection raises the costs of other domestic industries which reduces their competitiveness and therefore their exports. Exports bring gain to producers, while imports brings gains to consumers.

Trade liberalisation

- Trade liberalisation is the opposite of protection.
- **Trade liberalisation refers to the removal of or reduction in the trade practices that minimises free flow of goods and services from one nation to another.** It includes dismantling of tariff as well as non-tariff barriers.
- Trade liberalisation is **achieved by removing or reducing any restrictions which limits trade in goods and services.**
- The World Trade Organisation (formerly GATT- The General Agreement of Tariffs and Trade) is the international body that deals with the promotion and liberalisation of world trade by helping to lower trade barriers and by discouraging 'unfair' practices such as export subsidies.
- The WTO's main activities are **negotiating the reduction or elimination of restrictions to trade** and **agreeing on rules governing the conduct of international trade.**
- The World Trade Organisation **promotes multilateralism-** trying to **persuade all countries to lower or remove their trade barriers together.**

Statistics: By opening world markets, WTO have enabled world trade to increase by a factor of 22 since 1950. The use of tariffs and other trade protection measures have diminished considerably over time.

- Two key principles of the WTO trading system is that **all countries should be treated equally, free of discrimination (most favoured nation treatment).** There are some exceptions to this rule- countries can set up a free trade agreement that applies only to goods traded within the group e.g. ANFTA. **Secondly, national treatment**

- **which means that imported goods and services should be treated same as domestic goods and services.** This means that there should be no discrimination between foreign goods and domestic goods, once the foreign goods have entered the country. Notice that this does not prevent a country from applying a tariff to an imported good or service before the good enters the market.

Arguments for trade liberalisation

- When **barriers to international trade fall, living standards rise**
- Trade liberalisation delivers a **more productive economy with higher levels of real income, greater consumption and more job opportunities.**
- Trade liberalisation delivers a **more appropriate use of resources**, **lower prices for consumer**s and **lower input costs for producers.**
- The **arguments of free trade are based on the theory of comparative advantage.** Countries gain **when they specialise in producing those goods and services that they can produce at lower opportunity cost than other nations.** By exporting goods that a country can produce more efficiently and importing goods and services that other nations produce more efficiently and at a lower opportunity cost, a country can increase **both consumption and production.**
- Exports add to **production** and imports add to **consumption** and free trade helps to increase both exports and imports.
- Trade liberalisation has gains for the Australian family's because they won't have to pay **increased prices of goods and services due to protection.**
- Benefits of Trade Liberalisation include:

1. Higher GDP
2. More employment opportunities
3. Economies of scale
4. Lower prices and lower inflation rates
5. Input costs fall
6. Higher consumption and spending
7. Increased productivity
8. Increased efficiency
9. Higher real incomes
10. Higher living standards

11. More outward looking economy

Statistics: **Clothing, footwear and motor vehicles are much less expensive** now in real terms than they were 25 years ago when **high tariffs and tight quotas were applied to imports**. Studies show that the gains from trade liberalisation in Australia amount to around $4,000 per year to the average Australian family.

- By specialising in a good a country can **produce outside it's production possibility frontier. This enables the country to increase both consumption and production.**
- The problem with protection is that i**nefficient industries benefit at the expense of efficient industries. Protection results in resources being attracted away from efficient sectors of the economy to the less efficient.**
- Lowering trade barriers **reduces costs for all industries in the economy making them more efficient and competitive.**
- Exports leads to **greater output and employment.** Imports leads to **greater variety and lower prices.**
- The advantage of removing or reducing protection is that the **industries concerned must increase there efficiency in order to compete.**
- Reducing or dismantling protection does have short term **costs in terms of creating unemployment in the affected industries, but over time these resources would be absorbed by more efficient sectors**.By reducing trade barriers employment in export and non-protected industry actually increases.
- By lowering protection, **input costs are lowered and efficient industries are able to grow and prosper.**
- The net result is a **more productive and competitive Australia.**

Free trade agreements

- **Free trade agreements increases trade between specific countries by removing or lowering trade barriers.**
- Free trade agreements are meant to complement the multilateral trading system.
- Free trade agreements can be attractive because it may be easier **for a small group of neighbouring countries with similar concerns to agree on market opening** in a particular area than to reach agreement in a wider forum such as the WTO.

- **Free trade agreements between two or more countries have become more popular** as **multilateral trade negotiations often break down since trying to reach agreement between all member countries of the WTO is sometimes difficult.**
- Unilateral: When a country makes independent decision of removing or lowering down trade barriers
- Bilateral: When two or more countries make a decision of removing or lowering down trade barriers.
- Multilateral: When all the countries make a decision of removing or lowering down trade barriers.
- Regional: **When countries within a region make a decision of removing or lowering down trade barriers. Australia is part of the ASEAN** (Association of South-east Asian Nations)
- Regional trade agreements are **discriminatory and go against the most favoured nation principle.**
- Regional trade agreements also risk **making it harder for countries outside the region to trade with those inside and may discourage further opening up of markets, ultimately limiting growth prospects for all.** On the other hand, multilateral negotiations deals with more players and more sectors, and so offers **greater potential for mutual gain than limited bilateral or regional deals.**
- Free trade agreements are both '**trade creating'** and **'trade diverting'.**
- Trade creation occurs when trade is created by the formation of a union. When a union is formed, the member nations establish a free trade area amongst themselves and a common external tariff on non-member nations. As a result, **the member nations establish greater trading ties between themselves now that protectionist barriers such as tariffs, quotas and subsidies have been eliminated. The result is an increase in trade among member nations in the good or service in each nation's comparative advantage.**
- Removing trade **barriers will help to increase volume of trade- this is trade creation.**
- Regional trade agreements are a**bout establishing preferential trade between specific countries. Often they will cause trade diversion, rather than trade creation. Trade diversion occurs when trade is diverted from a more efficient producer outside the free trade agreement, towards a less efficient producer within the FTA.**
- Trade diversion is seen as the potential disadvantage of free trade agreements. According to research on free trade agreements suggests **that there has been little**

- **trade diversion and that FTA's and regional trade agreements have been effective in encouraging trade liberalisation.** Diverted trade may hurt the non-member nation economically and politically and create a strained relationship between two nations.

- Free trade agreements are quicker and easier to negotiate than multilateral agreements because fewer parties are involved.

Australia's free trade agreements

- In 2014, Australia had seven Free trade agreements in force with **New Zealand, Singapore, Thailand, US, Chile, the Association of South East Asian Nations (ASEAN) and Malaysia.**

- During 2014, Australia signed an FTA with **Korea** and an economic partnership agreement (EPA) with **Japan** and concluded negotiations for an FTA with **China.** China and Japan are Australia's two largest trading partners, while Korea is ranked fourth.

- The free trade agreements with **China, Japan and Korea** are expected to reap significant benefits for Australian exporters and Australian consumers. The agreement with Japan for example, will deliver **significant benefits for Australian farmers, manufactures, exporters, service providers and consumers**. More than **97% of Australia's exports to Japan will receive preferential access or enter duty-free.** At the same time, the agreement will benefit Australian consumers. **Australian tariffs on Japanese imports will be eliminated. This includes removing the 5 percent tariff on Japanese motor vehicles, electronics and white goods.** Australian manufactures can **also gain access to cheaper inputs which reduces production costs.**

- The proposed **China-Australia FTA** is particularly significant given that **China is Australia's largest export market for both goods and services.** Some of the outcomes includes the **removal of Chinese tariffs on Australian dairy, beef, seafood, wine exports;** the removal of tariffs on all **Australian resource and energy exports;** new or significantly **improved market access into China for Australian banks, insurers, law firms, education service exporters, as well as health, aged care and construction companies.**

- FTA's will result in political and strategic benefits for the Australian government by securing free trade agreements with the large Asian economies of China, Japan and Korea is crucial for Australia's economic growth and prosperity.

Why trade matters

According to Department of Foreign Affairs and Trade, there are ten reasons why international trade is important for Australia:

1. **One in five Australians jobs are linked to exports and in regional Australia**, one in four jobs are export related.
2. **Exporting companies pay better wages and provide better working conditions.**
3. **Imports provide cheaper inputs into Australian manufactured goods and generate jobs in the manufacturing industry.**
4. Trade provides Australian with **a greater range of goods and services at competitive prices.**
5. **Trade lowers the cost of living through access to cheaper imported goods**. For example, if Australia had not opened its markets, Australian would pay $10,000 more for a $30,000 car.
6. **Exporting companies generate local jobs, higher incomes, better public infrastructure and improved services.**
7. Trade liberalisation **helps Australian businesses increase their exports of goods and services to overseas markets, contributing to world trade growth.**
8. **Competition from imports encourages innovation and greater efficiencies in our local businesses.**
9. International trade **increases our market reach to the world's 6.6 billion plus people**

Chapter 3: Australia's pattern of trade

The Composition of Trade	***The Direction of Trade***	***Patterns of trade***
The composition of exports reflects Australia's areas of comparative advantage, while the composition of imports reflects Australia's areas of comparative disadvantage.	Australia's direction of trade has shifted from **Europe to the Pacific-East Asian region**	Since the **1980's Australian economy has become more exposed to trade.**
Australia basically **exports primary goods (resources and rural) and imports manufactured goods.** This is not surprising given Australia's large natural resource endowment and substantial mineral wealth. Australia has had a comparative advantage in **agricultural and mineral goods.**	East Asia is the **dominant region for Australia's trade,** accounting for **76% of our exports** and **50% of our imports.** The reasons for the change in direction of Australia's trade from Europe to East Asia is: • Geographically, Australia is part of the **Asia-Pacific region** but historically Australia has had strong ties with the **United Kingdom and Europe.** When the United Kingdom join the European Economic Community and Australia was forced to establish new markets. • The Asia-Pacific region had the advantage of **much lower transport costs** for Australia compared to Europe and the region has the advantage of a **large and growing population that is very near to Australia's shores.** • East Asia has a **limited supply of raw materials relative to population,** Australia provides an **obvious complement in terms of its very small population and rich endowment of natural resources.** • The fast growing economies of **East Asia require long term supplies of cheap energy such as coal and natural gas as wells as minerals including iron ore, aluminium and copper.** • The Asia region is also home to **two thirds of the global population and Australia has a comparative advantage in the supply of food crops and livestock.**	The **volume of trade has increased from 30% to 40%.**

Australia trades both goods and services and **merchandise trade accounts for 80%** which means **services trade accounts for 20%.**	**China and Japan** accounts for nearly half of Australia's exports.	
Australia has been a leading world producer in **wool and wheat** and Australia is also a leading producer in **coal, iron ore, bauxite** , natural gas , gold, mineral sands and uranium.	China has displaced Japan to become Australia's most important trading partner.	
Over the past few decades there has been a **significant increase in the relative importance of mineral** and **energy exports** and a **decline in the importance of rural exports**. However, **agricultural exports still comprise of a relatively large proportion of Australia's exports.**	Australia's top 5 export markets are: **China** (32.5%) of our exports, **Japan** (15.4%), **Republic of Korea** (6.8%), **United States** (5.1%) and **New Zealand** (3.5%).	
Commodities (rural and resources) accounts for around two thirds of Australia's total goods and services exports.	Australia's top 5 import sources are: **China** (15.4%), **United States** (12.2%), **Japan** (6.3%), **Singapore** (5.5%) and **Germany** (4.1%).	
Since the 1970's rural exports have declined quite dramatically falling from **40 percent to just 12 percent in 2014.** Today resources such as **minerals and energy exports have become the dominant category.**	Over the past **40 years the share of exports to Europe has fallen dramatically. While the pattern of import has also followed the similar trend.**	
The mineral and energy resources **exports have risen dramatically since 2000**. The reason for this **is the rapid growth of China and other Asian economies that resulted in a** major resources boom in Australia from 2001-2012, boosting the demand for resources such as iron ore, coal, and natural gas. Over the same time period, **there has been a relative decline in both manufacturing and services exports.**	If we count the value of exports and imports, then Australia's **most important trading partners are China, Japan and USA.**	

So, the major trends in the composition of Australia's exports have been: • a **dramatic decline in rural exports** • a s**ignificant in resources (minerals & energy & fuels) exports** • a r**elative decline in manufacturing and services exports**		
The primary commodity sector (rural, mineral and fuels) accounts for **64% of total exports by Australia**. The total **manufactures accounts for 13%** of total exports by Australia, **other goods(inc gold) accounts for 6%** and services accounts for 17% of exports by Australia.		
For imports: **intermediate goods (fuels)accounts for 35%** of total goods imported and is the largest category. The second largest category is **consumption good** which accounts for 24%. **Services accounts** for 21% and **capital goods** accounts for 19% of Australian imports.		
The composition of our trade is a reflection of the structure of the economy. Australia has a very **efficient and internationally competitive primary sector** while our **manufacturing sector is smaller** and **relatively less efficient**. However, the elaborately transformed manufactured exports (ETMs) share of total merchandise exports has increased. ETM's consist of more highly processed **manufactures such as machinery and transport equipment.** Simply transformed manufactured exports **(STM's) consist of relatively unprocessed goods such as steel, aluminium and other metals.** About two thirds of Australia's manufactured exports are now 'elaborately transformed'.		

The resources boom has had a dramatic effect on the composition of exports, attracting resources out of manufacturing and services and causing their relative share to fall.		
Top 5 exports of Australia: i**ron ore, coal, natural gas, education services and personal travel.** These top 5 exports account for close to half of Australia's goods and services export.		
Top 5 imports of Australia: **personal travel, crude petroleum, refined petroleum, passenger cars and freight services.** The top 4 imports account for around one quarter of all imported goods and services.		
Australia is fortunate to be on the doorstep of the fastest developing region of the world with a massive want for our natural resource wealth. The **bulk of Australia's trade will continue to be in the primary sector given the strong demand for our resources from the fast growing economies of China and India.**		
Australia's imports, **are mainly manufacture goods** with most of these being industrial goods- **machinery, transport, computer and electronic equipment.** Australian industry is **heavily dependent on the overseas sector for capital equipment and intermediate goods.**		
Recent event: The **Chinese infrastructure investment boom appears to have slowed in the last two years,** reducing **demand for Australian commodity exports.** Iron ore prices are half of what they used to be.		

The major trends: 1. A **steady increase in service exports** 2. A **large increase in manufactured exports** 3. A **large increase in minerals and fuels exports** 4. A **significant fall in rural exports** 5. A fall in the importance of primary products		

The Balance of Payments

- **The balance of payments is a systematic record of all economic transactions between the residents of Australia and the residents of the rest of the world.**
- The residents of a country includes **individuals, firm and the government.**
- The balance of payments is concerned with **all international transactions.**
- **An economic transaction occurs when something of value is provided by one party to another. Most transactions involve an exchange, for example, a good or service is traded for foreign exchange (money).**
- Some economic transaction are one-sided, such as gift or foreign aid.
- Economic transactions include :

  - exports and imports of goods, such as iron ore, coal , gold, wheat, wool, computers, motor vehicles, machinery and clothing
  - exports and imports of services such as shipping, freight, insurance, expenditure by tourists and overseas students
  - income flows such as dividend and interest payments associated with foreign investment
  - transfers such as foreign aid and funds brought by migrants and
  - financial flows such as investment in shares and securities and loans

- Whenever transactions occur involving any of these categories between a resident in Australia and a non-resident , then it will be recorded in the balance of payments.
- Australia's balance of payments is divided into two broad accounts- **the current account and the capital and financial account.**
- The current account is concerned with transactions **involving goods, services and income.**
- The capital account records **capital transfers and the acquisition/ disposal of non-produced, non financial assets for example, copyrights,**
- The financial account includes **transactions in financial assets and liabilities.**
- The **Australian Bureau of Statistics records transactions in the balance of payments by using the internationally accepted convention of the double entry recording system.**

- Every transaction is **represented by two entries of equal and opposite value, reflecting the inflow and outflow element of each exchange. For each transaction, each party records a matching credit and debit entry.** So for each transaction there are two offsetting entries.

- Credit- exports of goods and services, income receivable, increase in foreign liabilities, export of currency.
- Debit- imports of goods and services, income payable , foreign assets, import of currency

For example, An Australian resident purchases a TV from Japan for $AUD1,000 and a Japanese resident buying an Australian government bond for $5,000. Remember for each transaction there are two offsetting entries. The value of the imported TV will be recorded in the current account as debit of $1,000, while in the financial account it will be recorded as a $1,000 credit, because $1,000 of Australian currency is exported to Japan. When the Japanese resident purchases the $5,000 bond it will be recorded as a credit in the financial account and as debit entry of $5,000 which was imported. The current account shows a deficit of $1,000 and the capital and financial account shows a surplus of $1,000.

	CREDIT	DEBIT
CURRENT ACCOUNT		- $1,000 (TV)
CAPITAL/ FINANCIAL ACCOUNT	$1,000 (CURRENCY) $5,000 (BOND)	- $ 5,000 (CURRENCY)

- A **credit entry is recorded as a plus (+)** on the BOP- **they represent a flow of funds into the country.**
- A **debit entry is recorded as a minus (-)** on the BOP- **they represent a flow of funds out of the country.**
- If an overseas firm purchased shares in an Australian company then this would increase Australia’s foreign liabilities. If an Australian company borrowed funds from offshore, then this would also be an increase in Australia’s foreign liabilities. An increase in foreign investment into Australia is recorded a credit in the financial account, while an increase in Australian investment abroad is recorded as a debit in the financial account.
- Since for each transaction there are two offsetting entries of equal and opposite value, the overall balance of payments must always balance. The balance of payments will always be 0.

The Current Account

Categories	Credit	Debit	Statistical point
Goods	Exports: Trade in goods includes exporting of raw materials, manufacture, minerals and fuels, food and rural products. Australian exports are concentrated in the agricultural and mining sectors.	Imports: Consists of intermediate goods, capital goods used by industries and consumer goods.	Goods exports in 2013-14 amounted to $274 billion, of which $166 billion (61%) were resources, including iron ore, coal, natural gas and petroleum. In terms of absolute size,trade in goods is the largest item in the current account.
The difference between good credits and good debits is net goods- also known as **trade balance.**	Net goods = goods credit - goods debits		
Services	Exports: People from other countries visiting Australia, educational services, travel by workers and students from other countries	Imports: freight, shipping, and insurance, Australian residents visiting other countries, travel by Australian workers and students to other countries	The export of education services has become an important service export for Australia and Australia has a large deficit in freight.
The difference between service credits and service debits is **net services**	Net services= service credits- service debits		
Balance on goods and services	BOGS= net goods + net services	The CAD is largely determined by the balance on goods and services. • a surplus BOGS - reduces the overall CAD • a deficit BOGS- increases the overall CAD	

Primary income consists of two categories compensation of employees: for the use of labour (payments of wages and salaries to workers) Investment income:Investment income comprises of income earned from the provision of financial capital or foreign investment and consists of three main categories dividends, reinvested earnings and interest.	Income earned by Australian residents from non-residents and depends on Australia' investment abroad.	Income paid to overseas residents depends on the past inflow of foreign capital into Australia.	Primary income is the largest and most important out of the two types of income. In 2013-14 Australia received $46 billion of investment income from overseas countries, but paid $81 billion to overseas residents. **This means that foreign investment into Australia far exceeds Australian investment offshore .** The primary income deficit is the largest component of the current account deficit.
The difference between income credits and income debits is net income.	Net income = income credits - income debits		
Secondary income involves transactions where real or financial resources are provided but nothing of economic value is received in return. These transactions could be labelled as 'one sided'.	Gifts received by Australian residents from residents in a foreign country.	Transactions in foreign aid, gifts , donations and pensions.	
	Net secondary income= secondary income credits - secondary income debits		
Balance on the current account	The balance on goods and services is added to the income balance	Balance on current account = net goods + net services + net primary income + net secondary income	

The Capital & Financial account

Category	Credit	Debit	Statistical point
Capital transfers includes migrants funds and types of aid funds related to fixed capital formation	People from other country moving to Australia	People from Australia moving to other countries	Most dominant component on the capital account. Australia **traditionally records a surplus on the capital account mainly due to net migration.**
Acquisition and disposal of non-produced, non-financial assets	Australia selling patents, copyrights, trademarks and franchises.	Australia buying patents, copyrights, trademarks and franchises.	The size of transactions **in the capital account are small and insignificant and the balance is usually close to zero.**

Foreign investment Transactions in the financial account are classified by type of investment: **direct investment:** obtaining a lasting interest in a foreign enterprise and exercising a significant degree of influence in its management. If a investor obtains 10 per cent or more of the ordinary shares or voting stock of a foreign enterprise, then it is deemed to be direct investment. **portfolio investment:** Is more short term in nature and speculative- the investor is not assumed to have any influence in the operation or decision-making of the enterprise. **other investment:** loans, currency and deposits. **reserve assets: Are those financial assets controlled by the RBA. Reserve assets includes foreign exchange, monetary gold and** special drawing rights.	Credit: Are net inflows resulting from a reduction in Australian investment abroad and/ or an increase in foreign investment into Australia.	Debit: Are net outflows resulting from an increase in Australian investment abroad and/ or an decrease in foreign investment into Australia	

- In reality, the **two separate accounts rarely balance-** this is due to **statistical errors and omissions.** To ensure the two accounts do balance the category **"net errors omissions" (the difference between CAD and KAS) is included.**
- The overall **balance of payments must sum to zero** which means if the **current account is in a deficit** than the **capital and financial account will be in surplus** and **equal to the current account in absolute value.**
- Overall the BOP must balance: this means that the balance on current account + balance on capital/ financial account + net errors = zero.

- Changes in the balance of payments reflects changes in both the world economy and the Australian economy.
- The balance of payments is an important economic indicator providing information on a **nation's trade account** and it's **financial position** with the rest of the world.
- The current account reflects the nation's trading performance which directly impacts on GDP. GDP= C+I+G+(X-M)
- Changes in consumption, investment and government spending also has an impact on the current account. For e.g. an increase in investment and consumption will increase imports.
- Financial account and current account both have **the same importance and changes in the financial account will affect the current account and changes in the current account will affect the financial account**. For example, an increase in foreign investment in Australia will increase the financial account surplus which will cause an increase in the income deficit in the current account in terms of greater servicing costs, thereby increasing the current account deficit.

Trends in current account

- The **net goods balance in the current account fluctuates considerably from year to year.** In **2010-11 the goods balance recorded a significant surplus** of $22 billion. This was due to very **high commodity prices for coal and iron ore** which resulted in high export values.
- **The net good balance fluctuates considerably because the value of traded goods is very much influenced by their prices.** If there were to be **high commodity prices for coal and iron the export values will increase. Australian exports are mainly primary products- agricultural and mineral products which are called commodities.** Both the **demand and supply of these commodities are very price inelastic and are subject to large price fluctuations**. For example wheat and wool prices can fluctuate from year to year based on world's climatic conditions.
- **An increase in world economic growth would increase the demand for Australia's minerals and fuel exports(A surge in economic growth in China will result in an increase demand for Australia's commodities)** while an increase in domestic economic growth would **boost the demand for both consumer and capital good imports.**
- Events in the world economy can have a major impact on Australia's balance of trade.
- **External shocks such as a rise in the price of oil, a recession in one or more of our leading trading partners or a serious drought would result in the Australia's**

- **trade deficit increasing.** Conversely, **a surge in economic growth in China will result in a boost to Australia's resources sector.**

- **At the start of the mining boom the current deficit increased due to increase in investment and importing of capital equipment and machinery.** Since, **2009 the net goods balance has recorded large trade surpluses due to the strong demand for Australia's minerals resources.**

- Whenever the **Australian economy experiences a high rate of economic growth , the demand for imports increases, especially capital good imports and consumer goods.** An increase in **investment requires goods such as machinery, transport equipment and computers which leads to an increase in imports.** Australia imports much of its capital good requirements.

- **Australia recorded relatively large deficits in the net goods balance between 2002-2008 as a result of the increased investment associated with the mining boom.** In 2007-2008 ***Australia recorded a very large current account deficit due to the strong domestic investment and consumption which increased import spending***. At the same time, **buoyant profits in the resources sector increased the outflow of dividends to foreign investor increasing the net income deficit.**

- From **2006 Australia's export performance has benefitted from strong economic growth in countries such as China and India**. **Resource exports have grown particularly strong over these years and led to a resources boom in Western Australia.**The surge in Australia's commodity exports during the last few years has turned the trade deficit into trade surplus.

- **Australia's services balance has been in a deficit for most of the years due to Australia's large imports of travel and freight services.** Australia is **relatively isolated from the rest of the world which results in huge transport services, such as freight being a significant debt item.** The primary income deficit always accounts for most of Australia's current account deficit.

- Tourism and education exports have become important because Australia is a close neighbour to the world's most populous region- East and South Asia.

- Whenever the Australian economy is growing strongly, company profits and dividends will automatically increase which contributes to the increase in the primary income deficit.

- In **2013-14 the CAD decreased by $13 billion on the previous year to record a lower figure of $47 billion**. The reasons for **this was that there was a growth in export revenue associated with the completion of many mining projects.**

- Secondly, the **mining investment decreased which reduced the demand for capital goods imports. At the same time, slower economic growth reduced the demand for consumption good imports.**

- The main factor responsible for the **volatile pattern** seen in the current account balance is the **balance on goods and services.**
- Whenever there is a **significant decrease in the goods and services trade balance, the current account balance also decreased.** Likewise, whenever there has been an increase in the goods and services balance the current account balance has also increased.
- The **primary income balance is not as volatile as the goods and services balance.**
- The **current account deficit follows a cyclical pattern and often tracks movements in the business cycle.** Whenever the **economy expands at a rapid rate, the current account deficit will increase due to increased spending on imports from both consumption and investment.** The CAD declines in the years of **very weak economic activity, the current account deficit has fallen to around 2% of GDP in 2014**

Significance of the current account deficit

- There is no **optimal or correct size** for a current account balance.
- Over the past 30 years, Australia's CAD has **averaged around 4.5% of GDP.** This means that the **capital and financial account surplus has also averaged around 4.5% of GDP.**
- Wether the current or (financial) account is in surplus or deficit depends on a number of factors: 1. **the growth rate of the economy,** 2. **the relationship between a country's saving and investment and 3. the level of economic development.**
- Countries that rely more on **foreign investment will have a current account deficit.** Countries that have **excess savings lend to other countries** which means they will have a **current account surplus.**

A Current Account Deficit (Financial Account Surplus) could increase if one or more of the following factors occurred:

1. **A fall in terms of trade:** If export prices relative to import prices declined then ceteris paribus, export receipts will fall, while import payments will increase. Normally, whenever the terms of trade falls, the balance on goods and services will also fall.

2. **A decline in international competitiveness:** if the productivity levels decrease or if real wages rise more than productivity then a country's exports will be less competitive in overseas markets. A rise in inflation will also reduce a nation's competitiveness compared to other trading partners resulting in a decrease in export volume sold.
3. **A high rate of economic growth:** A high rate of Australian economic growth will lead to an **increase in national income** and an increase in both **consumption and investment spending** boosting the demand for **imports , increasing the current account deficit.**
4. **Foreign investment:** An increase in foreign investment will increase the financial account surplus which will lead to a increase in the current account deficit because of the servicing costs that comes with foreign investment. Australia is a **country rich in natural resources which attracts a substantial flow of foreign investment from countries such as United States and Japan.** If **interest rates of Australia are higher than the rest of the world that there will be large capital inflow into Australia.** This will automatically increase the current account deficit via the servicing costs associated with foreign investment.
5. **A decline in national savings:** A decline in the national savings of households, governments and firm, ceteris paribus, will lead to an increase in current account deficit because of increased borrowing that will occur to maintain investment in the economy. Government budgets will go into a deficit which will lead the government to borrowing funds adding to the public foreign debt. Savings may fall when an economy experiences a recession. Households will draw on savings to maintain consumption, firms profits will fall and the government budget surplus will shrink.
6. **An increase in national investment:** If investment increases either by the public or private sector (relative to savings) then the current account deficit will also increase because Australia's savings rate is low compared to the investment rate so to maintain the investment rate ,funds will be borrowed and invested into Australia which will lead to an increase in CAD. An increased investment requires capital equipment which will increase capital imports resulting in an increase in CAD. If a CAD increases due to a lack in competitiveness than it is a cause of concern.

- It is important to understand that an increase in the CAD should not necessarily be labelled as a deterioration.
- If a **strong economy and increased investment** contributes to a higher CAD then this is **a positive change**. If a CAD increase because of a **decline in competitiveness,** then this may be a cause of concern.
- The CAD is really an indicator of changes in the economy- it reflects changes in spending, savings, investment, productivity and external shocks.

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Chapter 6: Exchange Rates

- Every country has their own currency, meaning that a rate of exchange has to be established in order for trade to take place.
- **The trade weighted index, is a 'basket' of currencies weighted according to their importance in trade flows with Australia. It is the trade weighted index which more accurately reflects changes in the value of the currency.**
- **An exchange rate is simply the price of one country's currency in terms of another country's currency.** For e.g. one Australia dollar was equal to $US0.70 on September 2015. This means that if a good in Australia costs $100 then an American would need to be $70 of their currency to purchase the Australia good.

Statistics: The Australian dollar decreased in value against the US dollar by 6 per cent on 30th September 2014.

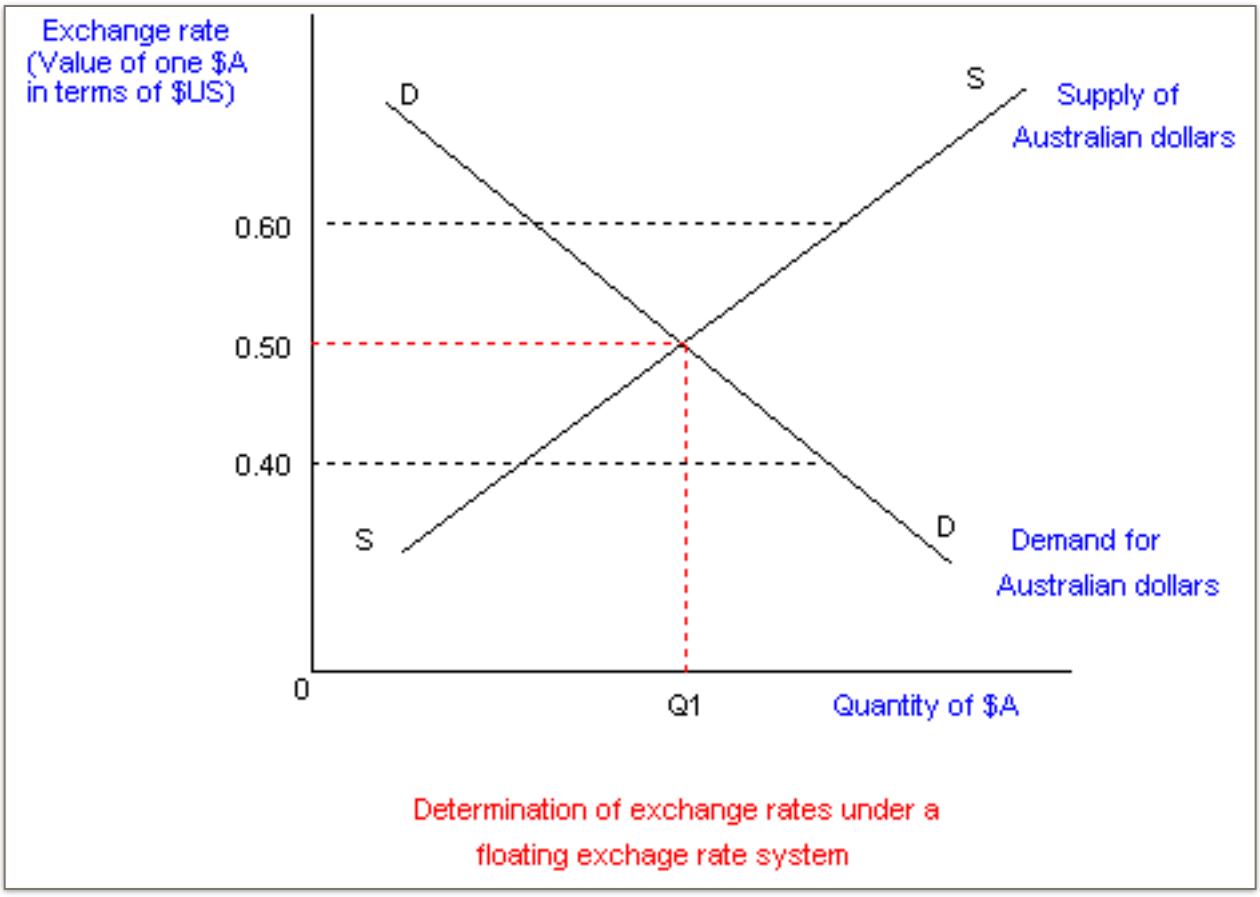
- **The foreign exchange market is the market in which the currencies of different countries are bought and sold.**
- **Foreign exchange is the currency of another country that is needed to carry out international transactions.**
- The foreign exchange market between Australian dollars and United States consists o**f two groups of peopl**e: those demanding US dollars- an Australian importer of US goods; and those demanding Australian dollars; an American importer of Australian goods. A demand for US dollars is matched by a supply of Australian dollars, while a demand for Australian dollars is matched by a supply of US dollars.
- An Australian farmer selling wool will wish to be paid in Australian dollars, while an American computer manufacturer will prefer to receive United States dollars.
- **The currencies being traded can be thought of as goods, with the price of those goods being determined by the forces of supply and demand.**
- Read page 108 and 109 for diagrams
- **The Australian dollar is said to have depreciated if one unit buys less units of another currency.**
- **The Australia dollar is said to have appreciated if one unit buys more units of another currency.**
- A country's exchange rate is closely related to its balance of payments. The balance of payments records all international transactions in goods, services, income and

financial assets and liabilities. The exchange rate is the means by which these transactions are facilitated.

- There are **two basic methods for determining the price of a country's currency**- by **allowing the market forces of supply and demand to freely set the value or by artificially setting the price at a fixed rate.** Exchange rates therefore can be either **fixed or floating**. Both methods have their own advantages and disadvantages.
- A **fixed exchange rate system implies that the value of the currency is maintained at the same rate for long periods of time.**
- Most countries now use a **floating exchange rate system with differing degrees of intervention by their central bank.**

International transactions

- **The demand for and the supply of a currency are determined by the international transactions that are recorded in the balance of payments.**
- **All transactions that are recorded as credits, in both the current account and the capital and financial account, represents a demand for a country's currency.** All transactions that are recorded as **debit transactions represent the supply of a country's currency.**



Determination of exchange rates under a floating exchage rate system

- In the figure above:

- At the equilibrium exchange rate of 1AUD= 1US 0.50 the equilibrium quantity supplied and demanded is q1 Australian dollars.
- At an exchange rate above equilibrium, such as $A1.00 = $US0.60 an excess supply of Australian dollars exists and market forces will force the exchange rate towards the equilibrium.
- At any exchange rate below equilibrium , such as A$1.00=$US 0.40 an excess demand situation exists and market forces will put upward pressure on the value of the Australian dollar.

Statistics: In terms of Australia's trade, around **two thirds of exports and one half of imports are contracted in US dollars.** The remainder of Australia's trade is contracted in Australian dollars.

- **The demand curve (DD) indicates the quantity of Australian dollars that buyers (those who want to sell US dollars) are willing to purchase as each possible exchange rate.** Essentially, the **demand for a currency will be determined by:** (These are all credits in the balance of payments)

- Exports of goods and services
- Receipts of income from overseas
- Capital inflow (foreign investment)
- Speculators
- The RBA

- **The supply curve (SS) shows the quantity of Australian dollars that will be offered for sale (those people who want US dollars) at each exchange rate.** The **supply of a currency will be determined by:** (These are all debits in the balance of payments)

- Imports of goods and services
- Payment of income to overseas
- Capital outflow (both investment and borrowing)
- Speculators
- The RBA

- **Changes in balance of payments transactions involving goods, services, income or financial capital, will affect either the demand and/or the supply of the currency and thus affect its value.**

Floating exchange rate

- **A floating or free exchange rate is one whose value is determined by the market forces of demand and supply which means the value of the currency fluctuates in response to changes in demand and supply.** Its value can change daily and even by the minute as it reflects changes in the demand and supply of the currency.
- A floating exchange rate **simply means the equilibrium price will change whenever the demand or the supply curves shift.**
- Technically Australia has a floating exchange rate.
- If the **demand for Australian dollar increases** because there is an increase in the demand for **Australian export, receipts of income from overseas or if there was an increase in capital inflow into Australia,** then the value of Australian dollar will rise, which means the **Australian dollar will appreciate.**
- If the **supply for Australian dollar decreases** because of **reduced imports of goods and services, payments of income to overseas or if there was an decrease in capital outflow (foreign investment abroad),** then the value of Australian dollar will rise, which means the **Australian dollar will appreciate.**
- If the **demand for Australian dollar decreases** because of decreased imports of **goods and services, receipts of income from overseas or if there was an decrease in capital inflow into Australia,** then the value of Australia dollar will fall, which means the **Australian dollar will depreciate.**
- If the **supply of Australian dollar increases** due to increased imports of goods and **services, payments of income to overseas or if there was an increase in capital outflow (foreign investment abroad), then the value of Australian dollar will fall,** which means the Australian dollar would **depreciate.**
- As long as the **value of the Australian dollar is allowed to move in accordance with shifts in demand and supply, then it is a free or floating exchange rate.**
- **A floating exchange rate means that the total balance of payments will always balance.** The sum of all credit transactions (the demand for $A) will equal the sum of all debit transactions (the supply of $A). This means that if there is a deficit on the current account, then under a free exchange rate, a matching surplus will occur on the capital and financial account. **The balance of payments must balance because with a free exchange rate, the demand for the currency equals the supply of the currency.**

An appreciation of the Australian dollar

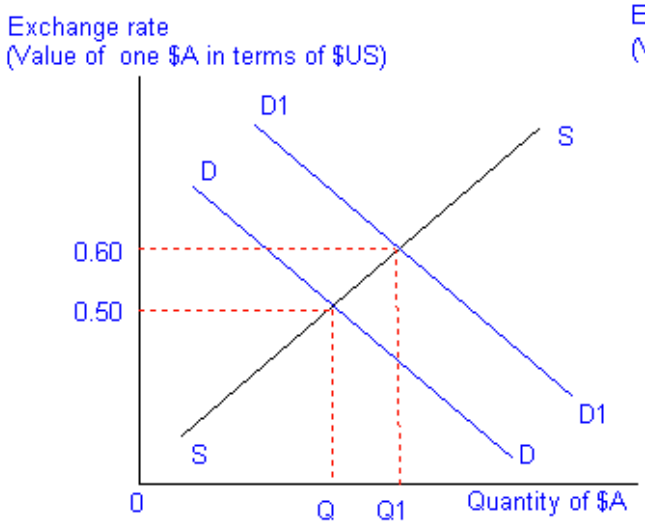


Figure 2a

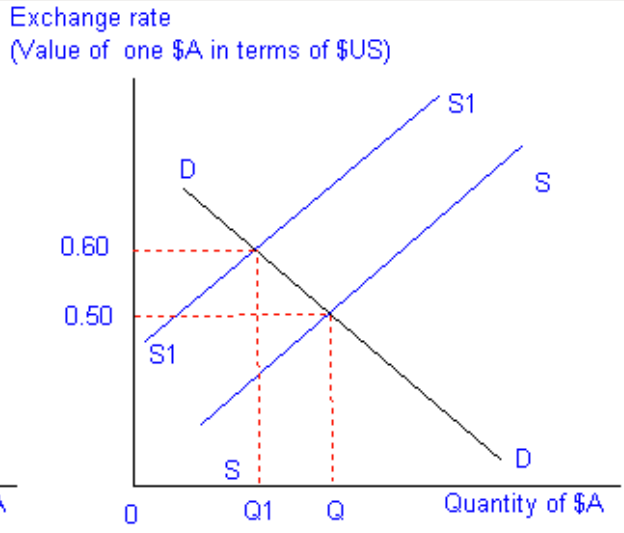


Figure 2b

An appreciation of the Australian dollar

An depreciation of the Australian dollar

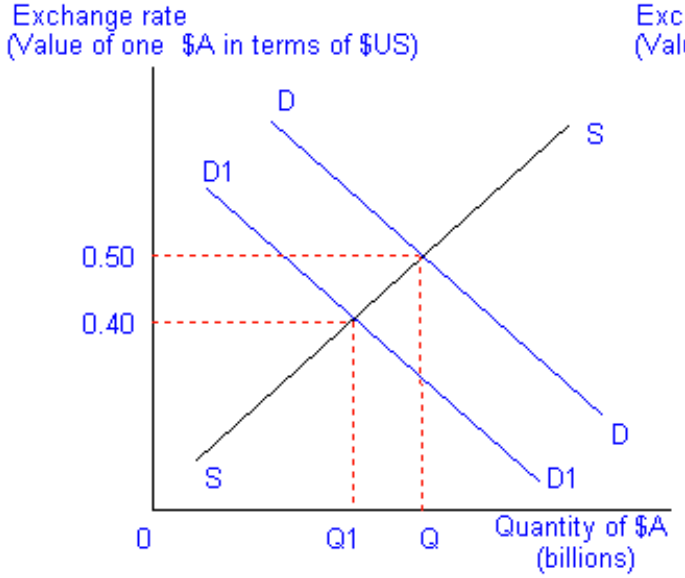


Figure 3a

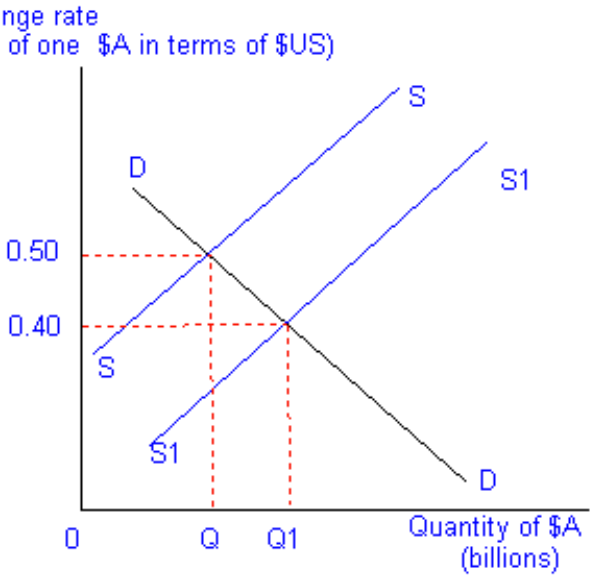


Figure 3b

A depreciation of the Australian dollar

- When the currency is allowed to float free from the interference of the central bank (in Australia, the Reserve Bank) then it is referred to as a **'clean'** float.

- A **managed exchange rate occurs whenever there is official intervention in the foreign exchange market by the Reserve Bank.** The Reserve Bank can **act either as a buyer or a seller of the currency, indirectly influencing its rate through the market system**. If for example, it wanted to prevent the exchange rate from falling to too low of a level, it would enter **the market as a buyer of the Australian dollars and use its reserve of foreign exchange to bid up the price.** Conversely, if the bank wished to stop the currency from appreciating, **it would sell the Australian dollars, increasing the supply and hence reducing any upward pressure on the exchange rate.**
- A second method the Reserve Bank could use to affect the value of the exchange rate is through **monetary policy.** Monetary policy is used to set **short term interest rates.** If interest rates are increased, **then foreign investment will be attracted to the Australian economy increasing the demand for Australian dollars and appreciating the currency.**
- Whenever the central bank intervenes in the foreign exchange market to influence the movement of the currency, or to set its value in a particular 'range' then this is referred to as a **'dirty'** float.
- The Reserve Bank of Australia claims that it only enters the foreign exchange market occasionally with a view of 'testing and smoothing' the underlying trend in the exchange rate . This is sometimes referred to as a '**lightly managed** float'.

Movements in the exchange rate

- The exchange rate changes whenever **demand or supply conditions change.**
- An exchange rate appreciation will occur if either the **demand for the currency increases or the supply of the currency decreases.**
- Demand for the $A increases when the exports and services provided to overseas increases, increase in payments of income or increase in capital inflow (foreign investment) into Australia. The demand curve for $A will shift to the right appreciating the currency. Supply for the $A decreases when the imports and services imports decrease, decrease in payments of income to overseas or decrease in capital outflow (investment abroad).The supply curve for $A will shift to the left appreciating the currency.
- An exchange rate depreciation will occur if either the demand for the currency decreases or the supply of the currency increases.
- Demand for the $A decreases when the exports and service provided to exports decreases, decrease in payments of income or decrease in capital inflow (foreign investment) into Australia. The demand curve for $A will shift to the left. Supply for the

- $A increases when the imports and service imports increases, increase in payments of income to overseas or increase in capital outflow (investment abroad). The supply curve for $A would shifts to the right depreciating the currency.

- **The trade weighted index does not fluctuate as much since it is an average of Australia's major trading currencies.**

Factors affecting the exchange rate

1.Commodity Prices: Anything that affects the demand for a country's goods and services by overseas buyers or affects the flows of international capital funds (foreign investment) will be reflected in the exchange rate.

2. Relative inflation rates also plays a huge role in influencing Australia's exchange rate. **Inflation is a sustained increase in the general price level of goods and services in an economy over a period of time.** The demand for **Australia's exports will be influenced by the degree of international competitiveness of domestic exporters.** Inflation reduces the **competitiveness of domestic industries against other foreign industries.** For example, if Australia's inflation rate was high compared to our trading partners, exports will be relatively expensive and less attractive to foreign buyers. Relative **inflation rates also affects demand for imports.** If Australia's **inflation rate is relatively high, this worsens the competitiveness of domestic import-competing producers, which increases the demand for imports and increases the supply of AUD.**

3. A third important factor that can affect the value of Australia's exchange rate is *world economic growth.* Australia is a major **exporter of commodities such as minerals and energy resources.** If world economic growth increases than the **demand for Australian commodities will also increase because growing economies need these resources to sustain their growth**. An **increase in the demand for Australian exports will increase the demand for Australian dollars resulting in the currency appreciating.** The Australian dollar is often referred to as a **'commodity driven**' currency since a large proportion of Australia's exports are commodity based. High demand from the USA and Japan and the **emergence of China and India increased Australia's exports volume and led to an appreciation of AUD in the past.**

4. Interest rate differential is an important factor that influences Australia's exchange rate. The **level of capital inflow will be affected the level of Australia's interest rates as well as the level of confidence in the Australian economy**. **Relatively high interest rates compared to overseas competitors and the stronger confidence in the Australian economy, especially compared to US, then foreign**

investment will increase which will increase the demand for Australian dollars and lead to appreciation of the currency. On the other hand, If interest rates are relatively lower in Australia than overseas competitors will cause the foreign investment to decrease because **investment in Australia wouldn't seem attractive to foreign investors because they wouldn't get the highest return for their funds which will decrease the demand for Australian dollars and will lead to the depreciation of the currency.**

Statistics: On 7 July 2015, the interest rate was **2.0 per cent**. In Australia, the available information suggests that the economy has continued to grow over the past year, but at a rate somewhat below its longer-term average. The rate of unemployment, though elevated, has been little changed recently. Overall, the economy is likely to be operating with a degree of spare capacity for some time yet. With very slow growth in labour costs, inflation is forecast to remain consistent with the target over the next one to two years, even with a **lower exchange rate.**Low interest rates are acting to support borrowing and spending. Credit is recording moderate growth overall, with stronger borrowing by businesses and growth in lending to the housing market broadly steady over recent months.

5. Domestic economic growth: When the **domestic economy is growing, output, employment and income are rising and the demand for imports will also rise, increasing the supply of AUD.** When the domestic economy is growing strongly the **firms sector undertakes investment on capital equipment which is predominantly sources from overseas.** Thus, an increase in **capital and intermediate good imports.** The household sector will experience **improved employment conditions and increased income which will lead to an increase in spending on consumer durables and luxuries.** Thus, leading to an **increase in consumption goods.** Overall, there will be increased amounts of imports which will **increase the supply of Australian dollars and lead to the currency depreciating.**

6. Movements in the terms of trade: This has major influence on Australia's exchange rate. Terms of trade means commodity prices. **Changes in the prices of these commodities have a significant effect on export values and ultimately on Australia's national income**. A general **increase in commodity prices will result in an appreciation of the Australian dollar because of increased demand for the currency and vice versa.**

7. International capital flows: **Foreign investor confidence in Australia and expectations about the performance of the Australian economy will influence investment decisions and the demand for the AUD.** If investors found Australia to be

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a relatively more attractive destination for their funds compared to other economies then the Australian dollar would appreciate. On the other hand, Australians **perceptions of overseas investment opportunities will influence the level of capital outflow and therefore the supply of AUD. Low inflation rates, increased productivity and high interest rate differentials and stable political and legal environments are all examples of the fundamental strength of the Australian economy and act as incentives for foreign investment.**

8. RBA intervention: The RBA may intervene in the foreign exchange market by buying or selling currency if it wishes to prevent sharp falls or rises in the value of $A.

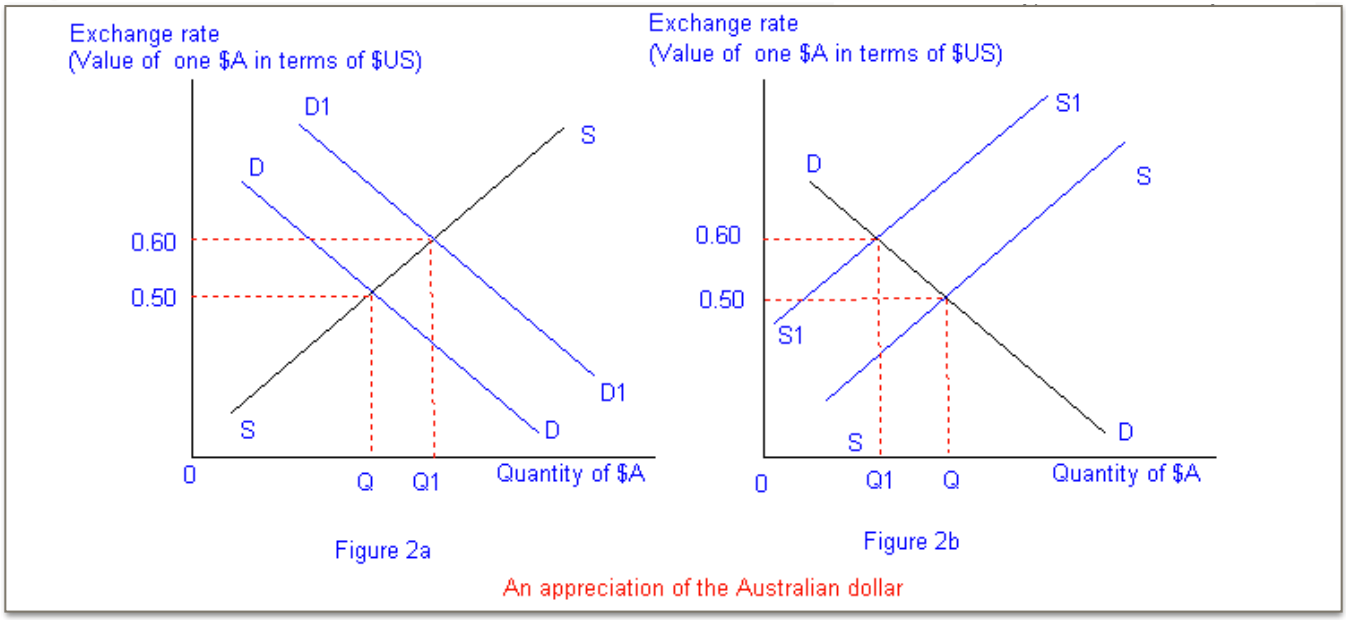
9. Speculators: The majority of foreign currency purchased and sold is done by speculators, buying and selling currencies, with the aim of making relatively short term gains. If speculators think the AUD will appreciate they will buy the currency and vice versa.

- The key factors affecting the Australian dollar are:

1. Commodity prices: Around **67 percent of Australia's exports are made up of primary commodities-rural goods and resources.** These commodities include wheat, beef, wool, iron ore, coal, gold, bauxite and natural gas. Changes in the **prices of these commodities have a significant effect on export values and ultimately on Australia's national income.** The Australian dollar is often referred to **as a commodity currency. There is a very strong positive correlation between movements in commodity prices and the Australian dollar**. Strong growth overseas will increase the demand for our resources & thus increase the demand for $A, appreciating the currency.
2. Interest rate differential: If Australia's interest rates are higher than the rest of the world especially USA, then financial capital will be attracted to the Australian economy which means an increase in capital inflow into Australia, increasing the demand for Australian dollar, thus an appreciation of the Australian dollar. The interest rate differential attracts foreign investors. International investors seek out the highest returns for their funds. Much of the financial capital that flows into Australia is in the form of portfolio investment. An increase in the interest rate differential, ceteris paribus, will lead to an inflow of foreign investment into the Australian economy, increasing the demand for $A and appreciating the currency.

- ***Read page 118 for diagrams***

Statistics: In October 2014, the cash rate in Australia was 2.5 per cent while in the Unites States, the Federal funds rate was 0.09 per cent. Interest rates were also depressed in both Japan and Europe during 2014, which meant that Australia's cash rate of 2.5% was the highest in the developed world.



An exchange rate appreciation

Causes:

An increase in demand ($A)

- Increase in exports
- Increase in income credits
- Increased capital inflow
- Higher terms of trade
- Higher interest rate differential
- Lower relative inflation
- Improvement in international competitiveness

A decrease in supply ($A)

- Decreased imports
- Decreased income debits
- Decreased capital outflow

Effects

- Prices of Australian exports increases
- Price of imports falls
- Net exports will decrease, increase trade deficit & CAD
- Aggregate demand decreases
- Inflation falls from lower import prices

Effects of exchange rate movements

- A high exchange rate is good for some groups in the economy, but bad for others. Similarly, a low exchange rate can be good news for some but impose costs on others.

Currency depreciation	Currency appreciation
The prices of Australian goods and services in foreign currency (Australia's exports) falls.	
The prices of overseas goods and services (Australian imports) in Australian currency rise.	
Will encourage resources to flow into the traded goods industries- both export and import competing industries	
Should increase exports and decrease imports, increasing aggregate demand in the economy.	
Can work in a **way to reduce a trade deficit** (or increase a trade surplus) and a **current account deficit.**	An appreciation is likely t**o increase the trade deficit (or reduce the trade surplus) and thereby increase the current account deficit.**
Good news for Australian exporters and domestic producers who compete against imports.	Good news for Australian consumers and producers because **it reduces the price of overseas goods** . Price of **imports falls for Australian consumers and producers**, **increasing import spending if imports are elastic.**
Hurts consumers since they need to pay **higher prices for imported goods such as cars, petrol or overseas travel etc.**	Hurts Australian exporters because it results in **Australian exports becoming more expensive to overseas buyers.** Prices of **export rises which will decrease export revenue if exports are price elastic**. Domestic manufactures and retailers **are disadvantaged because consumers are attracted to lower price imports.**
A depreciating currency **is also potentially inflationary because the higher priced imports feed into the consumer price index** and the **increase in net exports will boost national income thereby increasing spending in the economy.**	An appreciating dollar will **reduce the net exports and decrease aggregate demand.** An appreciation **helps to reduce the inflation rate by reducing the price of imports.** A **decrease in net exports will decrease the national income thereby decreasing spending in the economy and employment.**
Increases the servicing costs of foreign liabilities	**Decreases the servicing costs of foreign liabilities**

Statistics: The **AUD appreciated strongly against the USD, GBP, and EUR over most of 2000-2012,** due **to the surge in Australia's TOT (rising commodity prices) and positive interest rate differential.** The **strength of the dollar has ended- the AUD fell below 'parity' in April 2013, and buys $0.79 in April 2015.**

Chapter 7: Foreign Investment

- Australia has always relied on a **net inflow of foreign investment to develop its economy and to supplement its domestic savings.**
- Australia records a current account deficit and a financial account surplus. This occurs because **Australia's total investment exceeds its savings and we import foreign savings from the rest of the world.** The foreign savings is capital inflow or foreign investment into the Australian economy.
- Whenever Australia records a current account deficit, **Australia's stock of foreign liabilities increase.**
- **Foreign investment into Australia is referred to as foreign liabilities** while **Australian investment abroad is known as foreign assets.**
- **A liability is something you owe** while **an asset is something you own.**
- So if a United States firm invests in the Australian financial market or Australian share market, this represents an increase in foreign liabilities- an increase in net capital inflow or inbound foreign investment.
- If an Australian firm buys shares in an overseas company or invests money into a foreign bank then this would represent an increase in Australia's foreign assets- an outflow of capital or foreign investment abroad.
- **Foreign investment (equity) in Australia refers to the stock of financial assets in Australia owned by foreign residents.**

Foreign liabilities and foreign assets

- **Foreign liabilities are created when Australian residents borrow money from overseas or sell assets such as shares to foreign residents**. It is called an **foreign investment in Australia and is an inflow of money.**
- **Foreign assets are created when Australian residents lend money to foreign residents or purchase foreign assets.** It is called Australian investment abroad and is an outflow of money.

Statistics: Over the past 35 years, both foreign investment in Australia and Australian investment abroad increased at considerably stronger rates than the rate of GDP growth. Australia's net foreign liabilities have increased over time from around 43% of GDP in 1990 to 55% in 2014.

- If **we subtract Australia's foreign assets from foreign liabilities** we are left with Australia's **net international investment position.**
- Foreign liabilities represents foreign investment into Australia which has enabled Australia to develop and grow over time, increasing our national income and standard of living.
- **Foreign liabilities are financial obligations residents of one country have to residents of another country.**
- Foreign investment can be in the **form of borrowing known as foreign debt** or in the form of **foreign ownership known as foreign equity.**
- If Australian residents (firms, consumers or government) borrow from overseas, then this **increases Australia's foreign debt.**
- If Australian residents (firms, consumers or government) sells assets to overseas residents, **then this increases foreign equity.**
- Net foreign liabilities= foreign liabilities - foreign assets

Statistics: In 2014 net foreign liabilities equalled 55% of GDP all all of this comprise of foreign debt. In 2014, Australia's foreign investment abroad (foreign assets) was $1745 billion and foreign liabilities was $2609 billion. Australia's net foreign debt has increased from 40% of GDP to 55% of GDPin 2014, while the foreign equity has fallen from 10% of GDP to zero. This means that now all of **Australia's net foreign liabilities are in the form of foreign debt.** This is quite rational- borrowing **provides a far more flexible** and prudent approach than selling ownership of one's assets.

- Australia's foreign liabilities and foreign assets appear large but it **consists of accumulation of net capital inflow over many years.** In other words, the stock of foreign investment or foreign liabilities e**quals the sum of all of Australia's past financial account surpluses (or current account deficit).**
- Foreign liabilities consist of **foreign debt and equity.**
- Both types of liabilities: foreign debt and foreign equity involve an income payment to foreign residents. **Foreign debt needs to be serviced with interest payments,** while **foreign equity involves the remittance of dividends and profits.**
- These income payments are recorded in the current account in the balance of payments.
- The foreign investment flows are recorded in the financial account.
- Each year Australia **records a financial account surplus due to the net inflow of capital, mainly in the form of borrowing.** The income payments associated with this

- foreign investment are recorded in the the **primary income account which adds to the current account deficit.**

Foreign liabilities and the current account

- **The financial account records transactions in financial assets and financial liabilities between Australia and the rest of the world.** Foreign investment into Australia increases foreign liabilities and foreign investment abroad increases Australia foreign assets.
- When foreign residents invest in Australia it increases our foreign liabilities but when Australian residents invest overseas it increases Australia's foreign assets.
- **Australia's foreign liabilities are greater than its foreign assets, which means that more foreign investment flows into Australia than flows out and most of this capital inflow is in the form of borrowing**. A financial account surplus adds to the stock of foreign liabilities.
- The income flows associated with **foreign liabilities are recorded in the current account.**The servicing costs associated with foreign liabilities results in a large **primary income deficit in Australia's current account**. Whether the current account deficit is financed by either equity or debt will result in outflows of income to overseas residents in the form of dividends, interest rates and profits.

Statistics: Australia has a large primary income deficit due to high levels of foreign investment.

- Outflows of income to overseas residents will be done in the form of dividends and profits or interest payments.

- Some commentators worry that these income payments are a drain on the economy and will cause the current account deficit to widen and become unsustainable. But this is incorrect.

1. Because the **current account deficit reflects the gap between national investment and national savings,** the higher level of investment will increase nation's capital stock. This will expand the **economy's productive capacity and provide for future income growth that will help service the current account deficit.**

2.Running a CAD can actually lead to a **country increasing its national wealth and standard of living over time.**

3. Expressing **foreign liabilities as a proportion of an economy's GDP is also not the most relevant measure** and in fact can be quite misleading. **Foreign liabilities are a stock variable (accumulated over time)** while **GDP is a flow variable**.Expressing net foreign liabilities as a percentage of the total financing in the economy is relevant,

since it gives some indication of the proportion of the economy's funding that is coming from offshore. In Australia, this ratio has remained steady since the late 1980's at a little over 20 per cent. Foreign liabilities can also be measured relative to the physical capital stock of the country, giving an indication of the proportion of the capital stock being funded by foreign residents. This ratio too has been relatively steady in Australia since the last 1980's at around 10 per cent. Both of these measures show that rise is Australia's foreign liabilities can not be viewed as problematic.

4. **Most of the offshore capital that has flowed into Australia has been used essentially to fund high levels of investment.**

Statistics: Australia uses foreign financial capital not because its national saving ratio is low, but because it's investment ratio is high. Australia's saving ratio is 22% and investment ratio is 27% both these ratios are higher than the average for both the US and UK

Australia's foreign debt

- Currently, all **of Australia's net foreign liabilities is in the form of foreign debt.**
- Every time **Australia records a current account deficit in the balance of payments, total foreign liabilities increase, either because of an increase in foreign debt and/or foreign equity.** Examples of debt includes government securities issued to overseas residents and borrowing by Australian firms from overseas financial institutions.
- The **foreign debt is the amount of money that Australian residents, both public and private owe to the rest of the world.** Public is the debt **owed by the government** and **private debt is owed by privately concerns.** Most of Australia's debt is private debt , 74% of Australia's debt in 2014 was private debt and 26% of Australia's debt in 2014 was public debt.
- **Foreign equity represents the extent to which foreign residents own Australian assets.**
- Gross foreign debt: the total of Australia's overseas borrowing
- Net foreign debt: gross debt minus Australian lending money to overseas residents, Net foreign debt provides the best view of our debt situation.

Statistics: **Australia's net foreign debt actually decreased** by $69 billion during 2014 and net foreign equity, decreased by $33 billion.

- Prior to 2009 the **government share of foreign debt has been falling over time with the government running budget surpluses.** Since 2009, the government's

- budget has been in deficit which has meant that it had to borrow since government spending has been greater than government revenue. The reason for this was the impact of global financial crisis on the economy. When the economy is in a period of contraction, the government's budget balance automatically falls as spending rises and the government is forced to borrow funds. As the economy recovers, the budget deficit falls and moves into surplus enabling the government to pay back it's debt.
- Many people also think that the foreign debt represents a large burden on future generations, but this is a misconception.

1. A large proportion of Australia's **foreign debt is paid within a very short period of time.** Moreover, a large proportion of foreign debt is due within a relatively short period. In 2014, 33% of the loans were due within a year and 70% was due to be paid in 5 years. In conclusion, Australia's foreign debt has a **relatively short maturity period.**

Trends in Australia's foreign debt

Statistics: Between 1990 and 2014, net foreign debt has increased from around 32% of GDP to 55% of GDP. This reflects the accumulation of debt over time resulting from continued current account deficits. Foreign debt grew rapidly in the 1980's due to rapid Economic Growth and financial deregulation

- **Australia must use foreign savings to fund its national investment since its domestic savings are insufficient.** Australia relies on **net capital inflow or foreign investment to add to domestic savings.**
- If foreign investment into the economy is in the **form of borrowing, then it adds to Australia's foreign debt.**
- If the foreign investment is in the form of **buying Australian assets, then it adds to foreign equity.**
- The financial account surplus **reflects the flow of overseas savings into the Australian economy, and over time the stock of foreign liabilities increases.**
- Over the past decade, foreign equity has fallen while foreign debt has increased. Australian firms have preferred to borrow against rather than sell their assets and this has resulted in the increase in foreign debt as a proportion of GDP.
- The government sector has also recorded a series of deficits since the global financial crisis (2008-09) and this has led to increased government borrowing, some of which is sourced from overseas.

- The issue with the large size of foreign borrowing is that interest payments on the debt feed into the current account deficit.

Statistics: While Australia's net foreign debt has increased as a per cent of GDP, the servicing of the debt has fallen. Interest payments as a per cent of exports have decline to 7% in 2014. The interest rate burden has fallen significantly over time due to world interest rates decline and by the fact that Australia's export performance has improved.

- One important difference between Australia's debt position and that of other economies with large foreign debt has been the relatively small share owned by the government sector. Private debt is more likely to result in **increased investment and therefore to increase future income to service the debt.**
- Government debt **could result in a burden to future generations if it was used to fund government current expenditure rather than government investment in public infrastructure.**

Is Foreign debt a problem?

- Borrowing can be of benefit to the individual, the firm and the nation. When borrowing **is used for investment, living standards rise.** Families borrow for housing, firms borrow for capital equipment and expansion.
- **A current account deficit occurs when total investment excess total savings.** The difference is **equal to the net capital inflow.**
- A current account deficit occurs when total investment exceeds total savings. The difference between total investment is equal to net capital inflow.
- Foreign debt is a stock variable and it represents the accumulation of debt over time, whereas GDP is a flow variable- it represents the monetary value of all finished goods and services in one year. Measuring foreign debt as a proportion of GDP is therefore an inaccurate way to measure foreign debt's relative importance. **Foreign debt should be compared with Australia's total wealth, rather than GDP.**
- The Australian Bureau Of Statistics has recently started to publish a balance sheet for Australia which details changes in Australia's liabilities, assets and net worth or wealth.
- Australia's national balance sheet shows that **while Australia's foreign liabilities are increasing , so also is Australia's assets measured in terms such as buildings, machinery, equipment, land, mineral resources.** The balance sheet shows that **Australia's assets have increased at a faster rate than liabilities. Australia's net worth or wealth has been rising over time** and per capita wealth in Australia has also increased.This shows that the buildup of foreign liabilities has been used to increase Australia's net worth. Foreign investment has enabled Australia to increase it's national income.

- If Australian economy is hit with positive shocks- the terms of trade could improve, the $A would appreciate, world interest rates could decline or world growth may increase, In each of these circumstances Australia's foreign debt will be reduce. Certain costs can be identified with foreign debt, but there are also potential benefits. If debt results in a higher rate of economic growth and a higher level of investment, than the economy will gain.

Foreign investment

- Foreign investment (umbrella term) transactions involves changes in the levels of Australian foreign assets and liabilities.
- Foreign investment in Australia refers to the stock of financial assets in Australia owned by foreign interests, and any additions to this stock. Foreign investment is actually equivalent to **gross foreign liabilities - that is gross foreign debt + gross foreign equity.**
- Foreign investment (equity) occurs **when a foreign individual or business decides to establish a new business in Australia or purchase property or shares in an Australian-owned business**. (Net foreign equity= Assets that foreign residents own in Australia - overseas assets that Australian residents own)
- Foreign investment may take the form of borrowing or it may be in the form of equity- the selling of assets (shares of companies, resources) to overseas residents.
- Most foreign investment into Australia is in the form of debt securities (65%) with equity comprising the other 35 per cent.
- Australia, has, for most of its history been a financial capital importer. This means it has relied on foreign capital inflow to boost domestic savings. **Australia is a small nation in terms of population and it cannot raise enough savings to facilitate the development of its resources**. Foreign investment is making use of overseas savings to fund Australia's investment and it has been of a great benefit to the Australian economy.
- Foreign investment has enabled Australia's living standards and rate of economic development to be much higher.

Statistics: The level of foreign investment (umbrella term) into Australia, increasing from around $800 billion in 2000 to just over $2,600 billion in 2014.

- Foreign investment (umbrella term) is recorded in the financial account in the balance of payments and are divided into **direct, portfolio, financial derivatives, other investment and reserve assets**. The two most important categories are **direct and portfolio investment.**

- Financial derivatives are linked to a specific financial instrument or indicator, or to a particular commodity.
- Other investment is a residual group that comprises of many different kinds of investment. It includes borrowing and the reinvestment of earnings. The reinvestment **of earnings is specific to direct investment and refers to the income retained from after tax profits that could have otherwise left the economy and travelled to the direct investor.** Not **all profits and income accruing from foreign investment leaves the economy,** but this is not the case.
- Reserve assets are those external financial assets controlled by the Reserve Bank for use in financing payment imbalances or intervention in the foreign exchange market.

Statistics: Portfolio investment is the dominant type of foreign investment in Australian, accounting for 56% while direct investment makes up 25% of the total foreign investment.

- Types of foreign investment

- official: government and RBA borrowing
- Private: direct (through equity, borrowing or reinvestment of earnings). Foreign direct investment is regarded as an equity interest of 10 per cent or more in an enterprise. More long term.
- Private: portfolio (investment other than direct) tends to be more speculative and short term

- Direct investment occurs when a **foreign investor establishes a new business or acquires 10 per cent or more of an Australian enterprise.** The 10 per cent measure provides the **foreign investor with a "significant influence" over that enterprise.** Examples of foreign direct investment includes the **establishment of Australian branches of multinational companies or joint ventures between Australian and foreign companies**. Direct investment is thus associated with either **the ownership and/or control of Australian enterprises and resources.** Direct investment comprises of both equity securities and debt instruments(borrowing). **Equity securities** forms the most the most important source of direct investment.
- Purchasing of shares is an equity investment.
- Portfolio investment refers to all other foreign investment that is is not direct investment- ***when an overseas investor or firm purchases less than 10% of the shares of an Australian company.*** Portfolio investment **tends to be more speculative and short term.** Portfolio investment **does not result in foreign investor having a control over the Australian enterprise.** Examples of portfolio investment include**: the purchase of property and or shares in Australian**

- **companies,** purchase of government bonds by foreign superannuation and pensions funds. Portfolio investment comprises of both equity securities and debt securities (borrowing). **Debt securities** forms the most important source of portfolio investment.

- Foreign investment is influenced by a number of factors: **profit expectations,interest rate differentials and political stability** are all important factors in attracting foreign investment into the Australian economy. The Australian economy represents a secure and save haven for financial capital.

- The Australian economy is **one of the fast growing economies of east and south-east Asia** and in the past decade the Australian economy has been performing better than OECD economies, including the United States which has contributes to the large inflow of foreign investment.

- **Until recently Australian interest rates have been relatively higher than most other developed economies which attracts portfolio investment** chasing relatively high returns.

- Australia has a **well developed and regulated financial market** which offers investors low risk returns.

- Australia is a **resource rich nation which depends on international investment to supplement its own domestic savings to enable it to develop its vast mineral and energy resources.**

- Main target for foreign investment are the finance sector, manufacturing and mining.

Statistics: The mining industry comprised the largest share of the stock of foreign direct investment in Australia in 2013, with 37% of total foreign direct investment.

- Australian business firms do not have a high level of foreign ownership. 97 percent of all business firms are wholly Australian owned.

- The United States and United Kingdom are Australia's largest source of foreign investment (equity).

- In recent years, there has been an increase in capital inflows from Asia- Japan, Singapore and China- which reflects Australia's closer ties to the economies of the fast-growing region.

- The Mining industry comprised the largest share of the stock in foreign direct investment in Australia in 2013.

Costs and benefits of foreign investment

- Investment refers to the creation of capital goods whereas foreign investment is a flow of funds, some of which may be used to finance investment and some of which may be used for speculative purposes.
- Investment expenditure affects both aggregate demand and aggregate supply.
- Investment is a component of aggregate demand, investment increases the level of economic activity, employment and national income. So an increase in investment will shift the aggregate demand curve to the right.

(AD) = C + I + G + (X-M)

- Investment also expands the productive capacity of the economy by increasing the stock of physical capacity- it moves the economy's production possibility frontier outwards. This means that an increase in investment will also shift the aggregate supply curve to the right.
- The amount of investment an economy can undertake is determined by the level of savings. **If domestic savings are low, then for investment to expand, foreign savings must be used.** This has been the situation for the Australian economy. Australia has had to rely on foreign savings to supplement national savings.

Statistics: Since 2001 Australia's total investment has exceeded total savings.

- The difference between total investment and total savings represents the inflow of foreign investment into the Australian economy.
- Foreign investment has enabled Australia to **fund a much higher rate of investment which enables the economy to grow at a higher rate, higher standard of living.** Foreign investment increase the **economy's infrastructure, increase productivity by increasing capital-labour ratio, development of industries and resources.**
- The most important benefit of foreign investment for **Australia has been the development of our industries and resources.** Without the large amount of foreign investment that has flowed into Australia, the mining and manufacturing sectors would have been much smaller.
- If the funds from foreign investment were to fall, **then Australia's standard of living would decline since less goods and services (imports) could be consumed.** Australia's economic growth would **decline because there would be insufficient savings to finance economy's capital needs.**
- Foreign investment not only provides additional capital for Australian growth, it is also a source of **additional competition, of new technologies, management and marketing techniques and of skills developmen**t.

Arguments for foreign investment in Australia:

1. Foreign investment is a source of finance for Australia's industry.

- This allows Australia to access new capital which would otherwise not have available. Australia is a resource rich country and in order to develop our vast resources we need foreign investment because we have low savings.
- Foreign investment has allowed Australia to supplement its domestic savings and this has allowed higher levels of savings.

2. Foreign investment that is directed towards productive investment has a multiplier effect on national income, and output which will increase employment and therefore economic growth.

3. Foreign investment can be used to develop import competition industries or to increase production of output and therefore exports.

4. The inflow of foreign investment provides foreign exchange to help finance the purchase of imports (finance the CAD).

5. New investment from overseas brings with it new ideas in management practices or introduces new technologies and knowledge that leads to increased productivity in the workforce.

6. Foreign investment has increased the diversity of Australia's industry by allowing for investment in industries with high capital establishment costs and which do not show a high rate of return for some time as mineral exploration.

Arguments against foreign investment

1. Direct investment involves a loss of control and ownership of Australian resources and industry:

- Decision making can occur overseas without consideration of the interests of Australians can lead to public hostility, e.g. Vegemite going offshore

2. Interests, dividends and profit payments flow overseas and out of the domestic economy creating a net leakage and adding to the net income deficit on the current account.

3. The multiplier effect on national income may also serve to weaken the CAD by increasing spending on imports.

4. Portfolio investment can be destabilising in that the funds may leave the country as quickly as they arrived.

5. Some of the investment funds do not go to wealth creating activity :

- Funds used for speculative property investment do not enhance the productive potential of the economy.

Foreign investment (equity)

COSTS	BENEFITS
Portfolio investment can be short term and speculative, and therefore may be destabilising.	**Direct foreign investment can bring with it new technology and managerial expertise.**
Possible loss of control of assets. Foreign control might conflict with government economic policy, and profits would be send back to the parent company.	**Overseas firms establishing new subsidiaries will directly add to employment and contribute to increased taxation revenue for the government.**
Profits are remitted back to 'home' country	Most of the foreign investment in Australia comes from UK, USA AND Japan. Their technological know-how and managerial skills can help improve efficiency of Australian industry. A large percentage of the profits of these firms are also retained and invested back into enterprise.
Creates foreign debt- but this isn't a problem as long as the funds are used productively	**Expands the productive capacity of the economy**
	Supplements Australia's savings pool
	Generates economic growth

ADVANTAGE OF DIRECT INVESTMENT: Long term investment

COSTS OF PORTFOLIO INVESTMENT: Could be withdrawn at any time. Factors that affect short short term capital movements are: general state of the economy, the level of interest rates, government elections and the stock market.

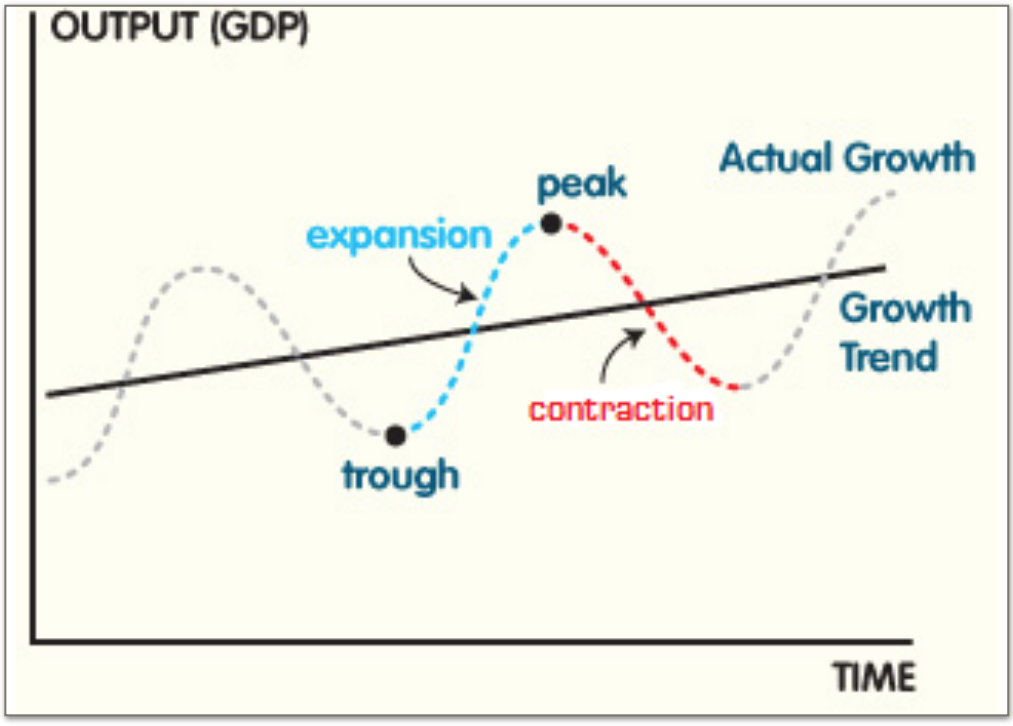
- Portfolio investment is a function **of short term profitability** and is **highly sensitive to interest rates.**
- When interest rates in Australia rise relative to the rest of the world, then capital inflow in the form of portfolio investment increase.

Foreign debt

COSTS (high foreign debt can lead to :)	BENEFITS
Interest payments divert income away from current consumption	**Gives Australia access to overseas financial capital markets**
Credit rating may be at risk if the debt becomes excessive- which raises interest rates on the loan	**If used productively leads to higher output, increased employment and higher standards of living**
Higher demand for funds can push the interest rates up	
A depreciation increases the debt in $A terms	
Debt increases every month due to current account deficit	

Chapter 8: The Business Cycle

- An inherent characteristic of developed economies is that the level of economic activity fluctuates about the trend or average rate of growth.
- **The cycle of booms and troughs is known as the business cycle.**
- The cycle is characterised by four phases- **boom (peak), downswing (contraction), trough and upswing (expansion).**
- The **peak of the boom and the bottom of the trough**, are known as **'turning points'.**
- Cycle duration tends to be around 5-7 years.



- **The business cycle is a regular oscillation of economic activity.**
- Whilst the model depicts a smooth and regular cycle, the reality is likely to be highly irregular, both in terms of the length of the phases, and their amplitude (the height of the boom or depth of the trough).
- Durable goods are those expected to deliver satisfaction to buyers for an extended period.
- Non-durable goods are goods that are consumed more frequently such as food and clothing.

The Boom	The Contraction(upper turning point)	The Trough	The Expansion (lower turning point)
A boom occurs when the level of economic activity is higher than normal.	**Consumption:** Is levelling off and decreasing as phase progresses because of demand pull inflation which has caused the prices of goods to be high which decreases demand.	**A trough is a period of economic malaise in which the level of aggregate expenditure (income, consumption and investment) is below the economy's potential.**	**Consumption:** Increases as phase progresses because the income in the economy is increasing and the level of savings is decreasing because of increasing confidence which leads to high demand for goods.
The level of aggregate expenditure is at, or beyond, the level required for full employment of productive resources. Higher levels of labour participation in the workforce.	**Investment:** Investment is decreasing as the phase progresses. Investment is decreasing because the rate of return from investment is decreasing as the phase progresses which discourages producers to invest. The contraction phase can be caused due to the decreasing investment.	**Consumption:** Low consumption and lower demand of durable goods and luxuries due to low income in the economy which leads to higher savings.	**Investment:** New investment starts to occur as phase progresses because the rate of return from investment is increasing as phase progresses and investment doesn't seem like a high risk to both consumers and producers because of increasing confidence .Moreover, because of increasing confidence in the economy consumers and produces reluctancy to invest is decreasing.
Confidence: A strong feeling of confidence throughout the economy.	**Confidence:** Throughout the economy confidence is decreasing as phase progresses because of falling aggregate expenditure.	**Confidence:** Lower levels of business and consumer confidence. A lack of confidence throughout the economy and reluctance to spend.	**Confidence:** Confidence increases as phase progresses due to increasing aggregate expenditure.
Consumption: High levels of consumption expenditure, particularly on durable goods and luxuries because of high income during the boom phase.	**Profits:** Profits in the business sector are decreasing because of decreasing demand for goods.	**Profits:** Profits in the business sector are low due to low demand.	**Profits:** Profits in the business sector increases due to demand for goods increases as the phase progresses.

The Boom	The Contraction(upper turning point)	The Trough	The Expansion (lower turning point)
Profits: High levels of profitability in the business sector because of high demand for luxury , durable and non-durable goods.	**Excess capacity:** Increasing due to decreasing utilisation of productive capacity as phase progresses. The utilisation of productive capacity is decreasing due to falling demand for goods as the phase progresses.	**Investment:** Investment is low because rate of return from investment is low in this phase which discourages producers to invest and investment seems like a risk to both consumers and producers. Moreover, because of low confidence in the economy consumers and producers are reluctant to invest.	**Excess capacity:** Excess capacity is decreasing due to increasing utilisation of productive capacity as the phase progresses due to increasing demand for goods.
Excess capacity: **Low or no excess capacity.** A high level of utilisation of productive capacity, perhaps with 'bottlenecks' in some sectors	**Inflation:** Inflation is decreasing as the phase progresses due to decreasing demand for goods which leads to a decrease in demand pull inflation.	**Inflation:** Low or no inflation due to reduced pressure on prices because of low demand for goods which means low or no demand pull inflation.	**Inflation:** Inflation is low at the start of the phase but increases as the phase progresses because of increasing demand for goods which causes demand pull inflation.
Unemployment: Relatively low cyclical unemployment and there is a natural rate of unemployment.When the economy is said to be at full employment, it is at its natural rate of unemployment.	**Unemployment:** Cyclical unemployment increases as phase progresses.	**Unemployment:** High levels of cyclical unemployment.	**Unemployment:** Falling cyclical unemployment as the phase progresses.

The Boom	The Contraction(upper turning point)	The Trough	The Expansion (lower turning point)
Interest rates: The RBA would increase interest rates to decrease investment and spending because businesses will be less inclined to spend due to higher costs from interest rates. The main objective of RBA is to ensure price stability so an increase in interest rate will reduce demand pull inflation.	**Interest rates:** Interest rates starts to decrease as economic growth slows down to initiate investment because businesses will be more inclined to spend due to lower costs from interest rates. Interest rates decreases as the phase progresses because the goal is to stabilise the economy by smoothing out the peaks and troughs so the economy runs at the long term trend. The decreasing interest rate will cause the economic growth to occur at a suitable rate for the economy and stop the economy from entering a trough.	**Interest rates:** Lower interest rate to initiate investment because businesses will be more inclined to spend due to lower costs from interest rate which will move the economy from trough phase.	**Interest rates:** Interest rates increases as the phase progresses because the goal is to stabilise the economy by smoothing out the peaks and troughs so the economy runs at the long term trend. The increasing interest rate will cause the economic growth to occur at a suitable rate for the economy.
Inflation: Upward pressure on price levels of final goods and factor markets due to high demand which causes demand pull inflation to occur.	**Fiscal policy:** The government spending increases to stop the economy from entering a trough.The idea of government spending is to boost aggregate demand because if everyone has a bit of extra money then hopefully they will go out and spend it which will increase demand for goods which will eventually stop the economy from entering a trough. The government taxes decrease because the income is decreasing as the phase progresses which means the income tax is also decreasing.	**Excess capacity:** High excess capacity due to low utilisation of the productive capacity because of low demand.	**Fiscal policy:** Government taxation increases as the phase progresses because income is increasing which causes the income taxation to increase. Gov spending is decreasing as the phase progresses because the idea of government spending is to boost aggregate demand because if everyone has a bit of extra money then hopefully they will go out and spend it which will increase demand for goods but in the contraction phase demand increases as the phase progresses which means the government spending also decreases as phase progresses.

The Boom	The Contraction(upper turning point)	The Trough	The Expansion (lower turning point)
Investment: High levels of borrowing because borrowing is being used to invest in the economy which is driving the boom phase. High confidence in the economy during the boom phase causes the producers and consumers to borrow and invest more because they think it is beneficial. In the boom phase typically the rate of returns are higher so people will borrow more to invest.	**Monetary Policy:** Interest rates starts to decrease as economic activity slows down to initiate investment because businesses will be more inclined to spend due to lower costs from interest rates.The RBA decreases interest rate during the contraction phase because the goal is to stabilise the economy by smoothing out the peaks and troughs so the economy runs at the long term trend. The decreasing of interest rate will increase investment and stop the economy from entering a trough.	**Fiscal policy:** High government spending to increase economic growth and move the economy from trough phase of the business cycle. The idea of government spending is to boost aggregate demand because if everyone has a bit of extra money then hopefully they will go out and spend it which will increase demand for goods which will cause the economy to grow and move from the trough phase. Government taxation is low because in this phase income is low which means people will have to pay less income tax to the government.	**Monetary Policy:** The RBA increases interest rates as phase progresses because the goal is to stabilise the economy by smoothing out the peaks and troughs so the economy runs at the long term trend. The increasing interest rate will cause the economic growth to occur at a suitable rate for the economy.
Fiscal policy: Government taxes are high because in the boom phase people earn more income which means they pay more income tax to the government. This will automatically stabilise the economy. Government spending is low because the idea of government spending is to boost aggregate demand but the demand in the boom phase is already high which means the government spending isn't required.		**Monetary Policy:** The RBA would lower interest rates to initiate investment and spending because business will be more inclined to spend due to lower costs from interest rates.	

The Boom	The Contraction(upper turning point)	The Trough	The Expansion (lower turning point)
Monetary Policy: The RBA would increase interest rates to decrease investment and spending because businesses will be less inclined to spend due to higher costs from interest rates. The main objective of RBA is to ensure price stability so an increase in interest rate will reduce demand pull inflation.		**Savings:** Higher savings rate due to the lack of confidence in the economy.	

Reasons why the business cycle turns down. (Upper Turning Point)

1. Businesses sense that they have enough capacity to meet anticipated demand, which means further investment would be at a greater risk. Once investment slows down the multiplier process will operate in reverse to decrease income.
2. Bottlenecks occur (shortages of labour and productive capacity)
3. The increases of income, output and expenditure that characterised the boom starts to level off.
4. Producers realise that demand won't increase anymore because the demand pull inflation caused the prices of goods to increase which resulted in the consumers buying less.
5. Government policies designed to restrain high level of economic activity increase like decrease in government spending and increase in interest rates will discourage borrowing because repayments will be high and consumer spending on durable goods will decrease.
6. Investment starts to slow because firms think the return is unlikely to justify the risk of purchasing new capital equipment.
7. Real income starts to fall because prices of goods is increasing which causes demand to decrease.

Reasons why the business cycle turns up. (Lower Turning Point)

1. Trough can not continue forever
2. Productive machinery is eventually worn out and requires replacement, bringing on new investment.

3. Businesses innovate with new products and more efficient processes as they try to attract buyers, and try gain competitive advantage over their rivals.
4. The level of economic activity and confidence gradually rises as the economy resumes its long term growth path.
5. The expansion often takes longer period of time than the downturn, which tends to be short and sharp.

Other factors that influence the path of the business cycle

- External factors such as **drought, flood or war** may impact economic activity.

Economic indicators and the business cycle

- Economic indicator refers to data or information that helps us describe and measure the current state of the economy.
- The most valuable economic indicator is also the broadest.Gross domestic product (GDP) is the total value of new final goods and services produced in the country during the year. Being an aggregate measure, GDP provides a key summery of economic trends.
- Leading indicators predicts changes in economic activity before a direction becomes evident in the economy. Leading indicators often reflects the expectations of households and firms. Examples of leading indicators include **building approvals, share prices, levels of inventory held by firms and employment vacancies.**
- Coincident indicators appears to move in line with the level of economic activity like **manufacturing output, growth in GDP, sales of consumer durables, retail sales and interest rates.**
- Lagging indicators are not expected to show any change until after trends in the rest of the economy has been confirmed. Lagging indicators react to developments that occurred some time in the past. Examples are **unemployment levels, savings bank deposit levels and consumer debt levels.**
- A **pro-cyclical indicator is one that moves in the same direction as the level of economic activity.** For example, Gross Domestic Product.
- A **countercyclical indicator moves in the opposite direction to the economy. For example, the unemployment rate rises as economic activity slows.**
- **Official statistics** are published by government institutions such as **the Reserve Bank , Australian Bureau of Statistics and the productivity Commission.**
- Many **private organisations** collect economic data e.g. the **major banks** and the economic faculties of major universities.

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Trends

- The early 2015 indicators suggest that uncertain and patchy growth, with mining states such as WA and Queensland growing more slowly than NSW and Victoria which is a reversal of what was happening three years ago.
- Increase in exports could be attributed to the expansion in the productive capacity of the mining sector that has taken place as a result of higher investment spending.
- Falling levels of business investment have contributed to lower import volumes and has made a negative contribution to economic growth.
- The lack of growth in business investment has come to a time when the interest cost of borrowing to invest is at a record low. A reason for reducing willingness of firms to invest is that the demand has been below business expectation. There has been an increase in stock in the march quarter but it is yet to be sold. A rise in stock could be an indication that demand is less than what is expected by producers.
- Other components of domestic demand were generally weak.
- A healthy jump in new residential dwelling construction, reflecting the ongoing strength of the housing industry. The housing investment has been stimulated by low interest rates.
- Recent boom that occurred in Australia was in 2012 due to the mining boom which resulted from high commodity prices and high investment in the mining sector.
- Australia's estimated seasonally adjusted unemployment rate for June 2015 was 6.0 per cent, an increase of 0.1 percentage points from a revised 5.9 per cent for May 2015.

Chapter 9: The Aggregate Expenditure Model

- **Aggregate expenditure is the sum of all spending on goods and services produced in the economy.**
- Aggregate expenditure consists of consumption (household expenditure on final goods and services), investment (spending on capital equipment), government spending and net exports (exports-imports).

$$AE = C+I+G+(X-M)$$

The components of aggregate expenditure

Component	Symbol	Description	Statistics
Consumption	C	Consumption consists of: • ***Expenditure on non-durable goods*** - Goods are tangible (they can be seen and touched) - Non durable goods are consumed shortly after purchase (technically, up to three years). - Non-durable goods includes perishables such as food, drink , packaged products, clothing and footwear. - Much of the spending on non-durable goods is regarded as essential. - Non-durable consumption is fairly stable over time, and typically accounts for **35%** of total consumption expenditure. • ***Expenditure on durable goods*** - Durable goods last for a longer period of time by definition, three or more years. - Durable goods include white goods (washing machines, fridges, ovens), brown goods (furniture, carpets), toys, sporting equipment and motor vehicles. - Spending on durable goods can be postponed, depending on an individual household's circumstances. - Expenditure on durable goods is thought to account for about 15% of consumption spending.	Australia's gross domestic product in 2013-2014 amounted to nearly **1.6** trillion dollars **and the largest component of AE is consumption expenditure.** Consumption accounted for **55.7%** of the total GDP.

Component	Symbol	Description	Statistics
		• ***Expenditure on services*** - Services are intangible. - Services include items such as education, transport, health, and recreation. - In modern economies, spending on services makes up the largest of the three types of consumption, accounting for **50%** of all households expenditure. - Some services are regarded as essential such as health services and transport, while others are discretionary such as spending on entertainment and leisure.	

Component	Symbol	Description	Statistics
Investment	Ip	**Investment is spending on new capital goods and additions to inventories. A capital good is any item of machinery that is used to assist labour in the production process.** • ***Business investment:*** Privately funded expenditure on capital goods-equipment, machinery and buildings used in production. • ***Housing investment:*** Private expenditure on new housing. • ***Inventories:*** Unsold goods, also referred to as stock. - Inventories rise when all current production is not sold. Inventories are excluded from investment spending in the aggregate expenditure equation. The term planned investment (Ip) includes the planned spending by firms on business investment and residential investment by households - Actual investment comprises of planned investment plus inventories.	In **2013-14** private investment amounted to **22.5%** of aggregate expenditure in the Australian economy. Investment spending is the most volatile component of AE.

Component	Symbol	Description	Statistics
Government Expenditure	G	Government spending in often divided into current spending (G1) and capital spending (G2). ***Current Spending (G1):*** Current spending refers to expenditure on the day-to-day business of government in its core functions like health, education, social welfare and defence- wages and salaries, purchases of goods and services and so on. ***Capital Spending (G2)***: Capital spending refers to spending on productive machinery and essential public infrastructure such as power and water supply, roads, railways and communications networks.	In **2013-14**, total government spending in Australia amounted to **$350 billion**, which represented **22.3%** of aggregate expenditure.
Net Exports	X-M	***Exports:*** Exports occur when overseas residents purchase goods and services produced in Australia. - Spending on exports adds to aggregate expenditure on goods and services produced in Australia. ***Imports:*** Australian households,firms, and governments purchase goods and services from overseas. - Imports are a withdrawal from the circular flow of income, and thus reduces the aggregate expenditure on Australian goods and services.	In 2013-2014, net exports were -22 billion. **The negative value indicates that the aggregate value of imports exceeds the value of exports.**

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The determinants of Aggregate Expenditure

Component	Determinants
Factors influencing aggregate consumption expenditure **C**	1. ***Level of disposable income (Yd)*** is the **income households receive after tax.** - A **positive relationship between the amount households spend on consumption and their disposable income** but the **proportion of income spent on consumption declines as income rises.** 2. ***Cost of credit (the interest rate):*** Interest rate represents the cost of borrowing. - Low interest rates have a **positive effect on household spending for two reasons:** I. Interest payments represent a small slice of disposable income when interest rates of low II. The opportunity cost of consumption falls. Households are faced with two choices- to spend or save the income. Saving is less attractive when interest rates are low, because holding surplus funds in interest rate bearing deposit offers a lower rate of return. - Rising interest rates, on the other hand, may cause households to postpone consumption decisions. Higher interest rates means repayments take up a larger proportion of disposable income, and that the opportunity cost of consumption increases, giving households more incentive to save. 3. ***Current stock of wealth:*** Households that hold real assets such as property or shares tend to feel wealthier when prices in those markets are high. For e.g. durable consumer spending rose during the boom in share and house prices during the early 2000's. On the onset of GFC many households saw the market value of their personal investments falling considerably which caused a decrease in consumption expenditure. Decline in the stock of wealth causes significant changes in savings and spending patterns in the economy because it changed people's perceptions of their wealth. 4. ***Consumer expectations:*** Expectations are the positive or negative sentiments that people hold about the state of the economy. Consumer expectations plays a key role in their current and future spending decisions. - The impact of changing expectations on spending on non-durable commodities, such as food, clothing and transport is probably small. Consumer's expectations have a greater impact on the purchase of discretionary items such as holidays, motor vehicles etc. 5.***Government economic policy***: The RBA administers monetary policy using the 'cash rate'. If the cash rate rises, higher interest rates generally flow through the financial markets. For example, banks are likely to lift their interest rates on

Component	Determinants
	households have less spending power. The Commonwealth Government is responsible for fiscal policy- using the government's spending and taxing powers to influence households spending decisions. 6. ***Other factors:*** Exchange rates, the distribution of income and wealth, and demographic factors (such as the changing age structure of the population, the attitudes of different age groups to spending and saving).

Component	Determinants
Factors influencing aggregate planned investment expenditure **Ip**	**Investment is spending on producer or capital goods that will be used to produce final goods and services in the future.** *Investment decisions concern the future because the future is unknown, it involves risk. Investment rises and falls according to the perceived risk which the future has. Many factors both economic and non-economic influence the decision of investment- political decisions, international events and changes in consumer expectations.* 1. ***Interest rate:*** Interest rates and the level of investment expenditure are **negatively related. Lower rates of interest (r) tend to induce higher investment expenditure (I).** There are two explanations for the **inverse relationship** between interest rates and investment: I. Interest rates represent the price of borrowed money, so when rates rise, so do the periodic repayments for capital items purchased with borrowed funds. II. Interest rates represent the opportunity cost of money. Firms have the choice of using retained profit for new investment or some alternative purpose. The opportunity cost of investment increases when interest rates are high. For example, if business interest rates were 12 per cent p.a, the prospective rate of return on capital equipment should exceed 12 per cent before a rational firm would consider the investment to be a wise decision. - There are two types of interest ***nominal interest*** and ***real rates of interest.*** Nominal interest rates are the **current price of borrowed money.** However, the real rates of interest takes the rate of inflation into account. Real rates of interest and more important determinants of investment than nominal rates. - The responsiveness of investment to changes in interest rate is less certain. This is referred to as the **elasticity of investment** with respect to interest rate. The elasticity of investment is influenced by the **current stage of the business cycle and producer expectations**. For e.g. during a contraction or a trough phase , expectations of lower levels of economic activity and profits are likely to reduce investment even though interest rates may be relatively low. 2. ***Levels of past profit:*** Investment spending is linked to profitability in the business sector. Many firms **retain a portion of their profits for expansion- to build new premises or buy new equipment.** When economic conditions are **challenging and profits are low, firms may tend to use capital equipment over a longer period of time.**

Component	Determinants
	3***.Technology:*** **Technological process is embodied in new capital equipments**. This means **firms invest to take advantage of the lower average costs of production and increased efficiency that the capital equipment can deliver.** Investment in more efficient equipment is **an important business strategy to lower unit costs, even when the level of economic activity is low.** 4. ***Business expectations:*** Business expectations are **what business thinks about the current level of economic activity and forecasts about the future.** Business perceptions are **formed as a result of events such as levels of sales and enquires from buyers.** If expectations about **future sales and profit levels are positive, than it is likely that investment expenditure will increase.** 5. ***Government policies:*** **Fiscal and monetary policies affect investment decisions** because they affect cost and expected returns. **Taxing the earnings of an industry can change the risk and reward relationship in that sector.** Moreover, **tax incentives may attract funds to an industry.**
Factors influencing government expenditure **G**	1. Discretionary changes in accordance with government policy objectives e.g. social policies, health, education: 2. Automatic changes due to business cycle: 3. Can be used to stabilise macroeconomic fluctuations:

Component	Determinants
Factors influencing net exports **X-M**	1. ***Level of domestic and overseas economic activity:*** Overseas demand for Australian commodity exports fluctuates according to regional and world economic conditions. For e.g. the strong demand for Australia's resources associated with the development of the Chinese and Indian economies. Domestic levels of economic activity influence Australians willingness to import. Australia's imports are relatively elastic because of the small size of Australia's manufacturing sector. In periods of strong economic activity, consumers import goods that cannot be sourced from local manufactures, and businesses capital equipment not produced domestically. ***2. Exchange rate:*** When the Australian dollar rises in value, domestic residents can buy more units of other currencies, and overseas residents can buy less units of the Australian currency (AUD). Australian exports become less competitive in overseas markets and imports become cheaper. Appreciation of the currency has a contractionary effect on aggregate expenditure because of decreasing net exports. On the other hand, if the AUD depreciated against the other currencies the price of Australian exports falls for overseas buyers, but import prices increases. This has an expansionary effect on the economy and net exports will increase. ***3. Terms of Trade:*** Australia's exports are dominated by **resources such as coal, iron ore, gold and bauxite.** The recent growth of the **Chinese and Indian economies meant that demand for these commodities rose and their price reached record levels, boosting Australia's export price index**. This means that **Australia's export income rises.** Australia's **import price index has fallen and the reason for this is cheaper foreign labour.** A rise in **Australia's terms of trade tends to increase Australia's net exports and has an expansionary effect on the economy.**

Equilibrium/ Keynesian cross model

The Keynesian expenditure model explains the importance of Aggregate expenditure (AE) in determining the level of economic activity (output/ spending).

The economy will be in equilibrium when the level of aggregate expenditure (total spending) is equal to the aggregate supply (total output).

When the **level of total output exceeds total spending**, firms will not be able to sell all their **output and inventories will increase as the economy is spending less than firms anticipated**. This is a signal to firms to **reduce their output.** As output falls, so does the employment, income and spending. The adjustment process will continue until new equilibrium is reached.

When the level of total spending is more than total output , **firms cannot meet the current demand for goods and services because spending is more than firms anticipated. Inventories will decrease.** This is **a signal to the firms to increase output.** As **output rises, so does the employment, income and spending.** The economy moves towards equilibrium, the gap between AE and output diminishes as they converge. The adjustment process will continue until new equilibrium is reached.

Consumption

- The level of income is the major determinant of consumption.
- Dis-savings: every person must consume a minimum quantity of goods in order to survive even when the income is zero. Dis- saving is the use of borrowing and past-savings when income is less than spending.
- Autonomous consumption: is defined as that part of total consumption which occurs even when income is zero. It is constant, it does not vary with the level of income.
- Income induced consumption: is defined as that part of consumption which occurs because income increases.
- Consumption therefore has two components: autonomous and induced.

C= a+bY

a represents the autonomous consumption

b is the **proportion of additional income spent on consumption**/ Marginal Propensity to Consume

MPC: *the fraction of any increase in income spent on consumption*

MPS: The proportion of any increase in income saved

The slope of the consumption function comes from the MPC.

A change in income will cause a movement along the consumption function, while a change in the non-income determinants of consumption will cause shift of the line upwards or downwards.

Savings : Y= C+S OR S=Y-C

If the consumption function is : C=100 + 0.50Y

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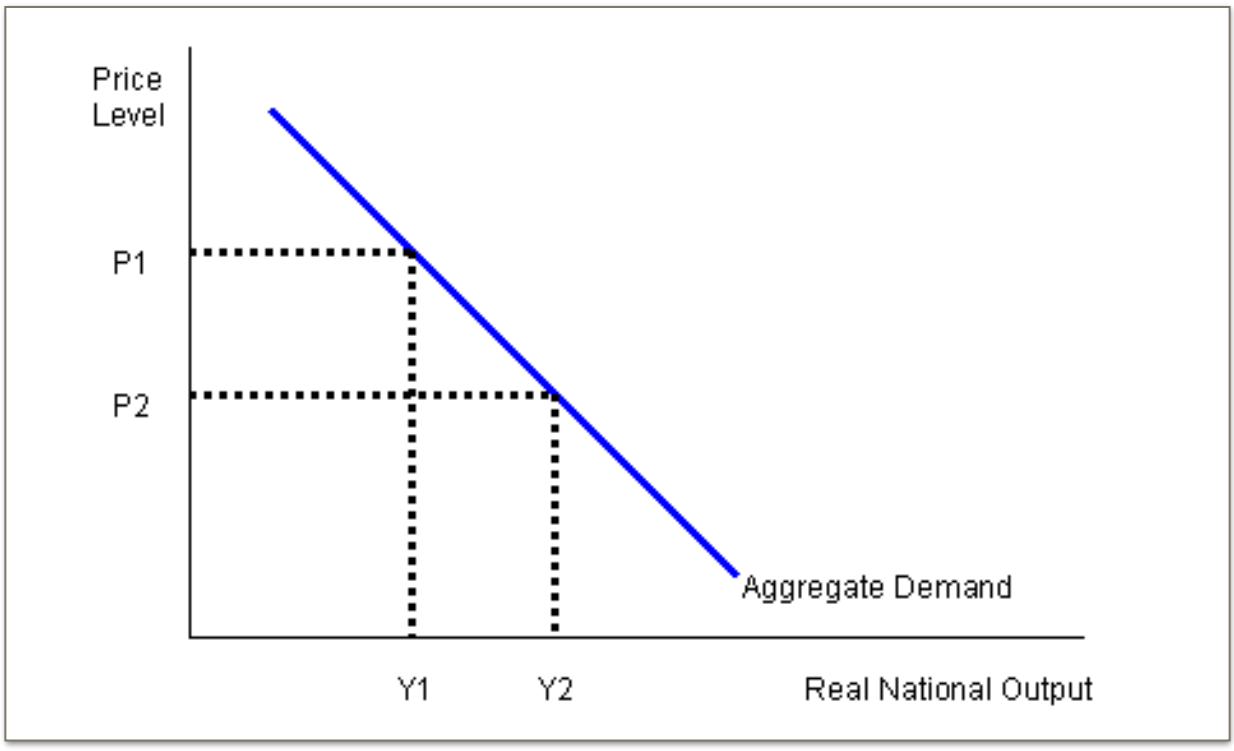
Savings function: S=-100+0.50Y (-1000 is the level of dis-savings)

Chapter 10: Aggregate demand and supply

Aggregate demand

- **Aggregate demand is the total amount of spending in the economy.**
- Aggregate demand includes the effects of **changes in the price level on total spending in the economy.**
- The aggregate demand (AD) curve shows the **relationship between the price level and the quantity of real GDP demanded by each of the different sectors: households (C) firms (I), government (G) and overseas (NX).**
- The curve slopes downwards, and describes a ***negative or inverse relationship between the level of aggregate demand and the price level.***



- There are three ways to explain this inverse relationship:

1. **the income effect**
2. **the interest rate effect**
3. **the open economy effect**

- Firstly, **Inflation reduces the purchasing power of household income** or wealth. Imagine you had $100 to spend today- what could you buy? If all prices were to rise by 10 per cent tomorrow, will you be able to buy more or less goods and services? The answer, of course, is less. This means that as the price level increases, the purchasing power of your income falls and consumption decreases.
- Secondly, inflation effects interest rates. A rise in the general price level means that **households and firms demand more funds to finance their transactions**. They could do this **by withdrawing money from banks, by borrowing, or by selling financial assets such as bonds.** The rising demand for money drives interest rate upwards, increasing the cost of borrowing, which is a disincentive to spend. This is called the interest rate effect- **inflation brings upward pressure on interest rates, which has a negative impact on investment and consumption spending.**
- Thirdly, the AD curve slopes downward as a result of the '**international' or 'open economy' effect.** If the domestic price level (inflation) rises relative to other countries, domestic goods and services become less competitive in those countries, leading to less demand for exports. At the same time, a rise in the domestic price level will mean that consumers and business firms will purchase more goods and services from foreign producers and less from domestic producers. So spending on imports will increase and net exports (X-M) will fall.
- Increase in the general price level which is inflation can be expected to reduce total spending in the economy and cause a movement upwards and to the left along the AD curve.
- Falls in the general price level which is a reduction in inflation can be expected to increase total spending in the economy and cause a movement downwards and to the right along the AD curve.

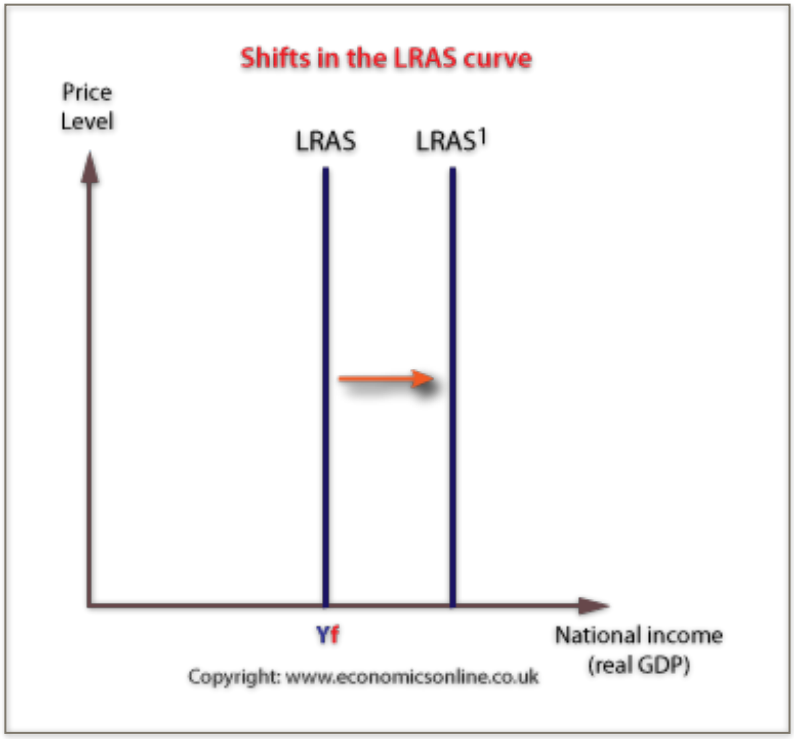
Shifts in the aggregate demand curve

- The whole AD curve will shift to the left or the right **if factors other than the price level were to change.**
- This means that **any factor that changes C,I,G or NX will bring about a shift** in the entire aggregate demand curve.
- If consumption were to increase because the government decreased income taxes, then the Ad curve with shift to the right- this is referred to as an increase in AD.
- An increase in AD **increases real GDP and employment.**
- **Factors that could cause an increase in consumption are:** a rise in consumer confidence, a rise in share prices, increasing household wealth, fall in interest rates, decreased income taxes.

- If investment spending were to fall because of a decline in business confidence or a rise in interest rates, then the AD curve would shift to the left- this is referred to as a decrease in AD.
- A decrease in AD will reduce **real GDP and employment.**
- Changes in government spending will also shift the aggregate demand curve. An increase in government spending will shift the AD curve to the right, while a decrease in government spending will decrease the AD curve to the left.
- Changes in global economic growth will have an impact on Australia's exports. Higher economic growth in China will increase Australia's exports and shift the AD curve to the right increasing real GDP and employment.
- **Factors that can affect net exports:** Australia's terms of trade and Australia's exchange rate.

The Aggregate supply curve

- The aggregate supply curve is the **relationship between the total production of goods and services and the general price level.**
- We distinguish two aggregate supply curves- the short run aggregate supply curve (SRAS) and the long run aggregate supply curve (LRAS).

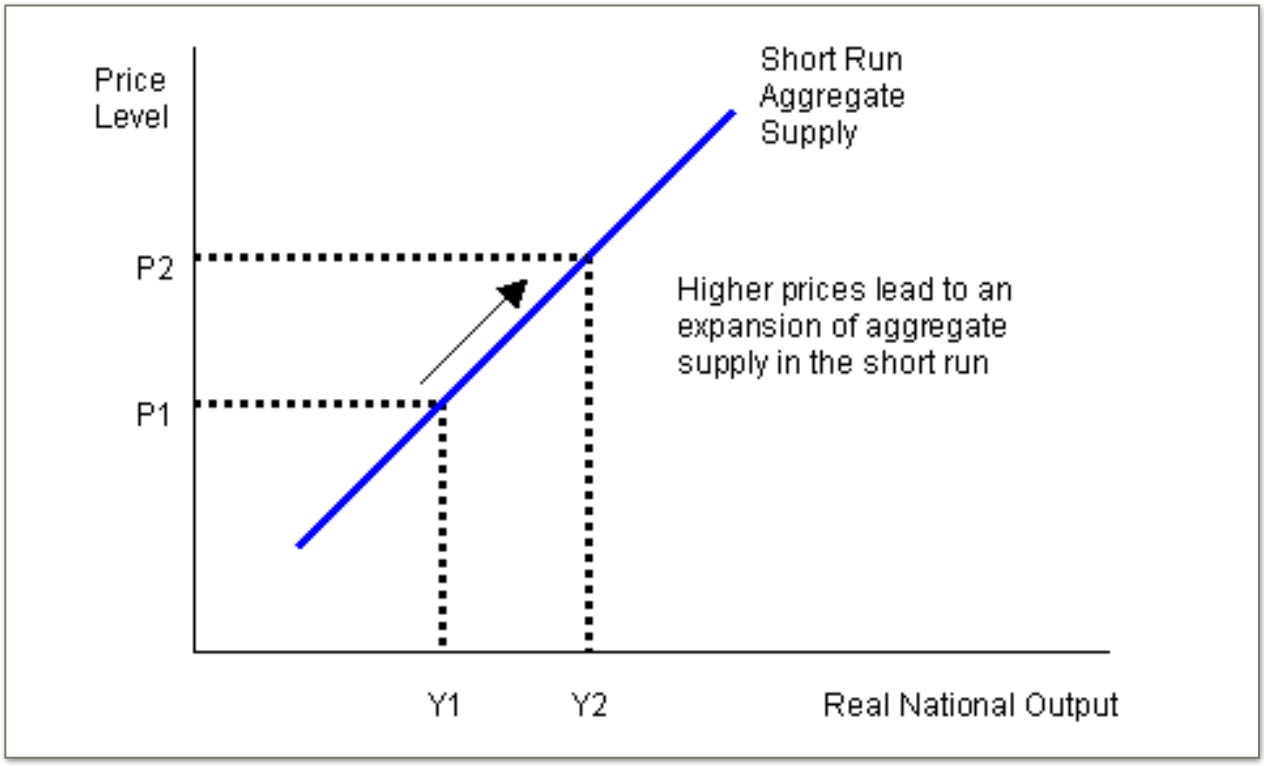


- **The long run aggregate supply curve shows the economy's potential level of real GDP when all resources are fully employed.**

-The LRAS curve shows the **economy's full employment level of output**. This is referred to as the economy's **natural level of output with the natural rate of unemployment** which is around 5% for the Australian economy.

-The LRAS curve is vertical **because it represents the maximum level of output at a particular point in time**. This means that the **level of real GDP does not change as the price levels change.**

- The position of the LRAS curve is determined **by the size of the economy's work force, the quantity of capital and the state of technology.**
- Overtime, the potential level of output increases because **technology improves**, and both the **labour force and the capital stock increase.** This means that the vertical LRAS curve shifts to the right over time.

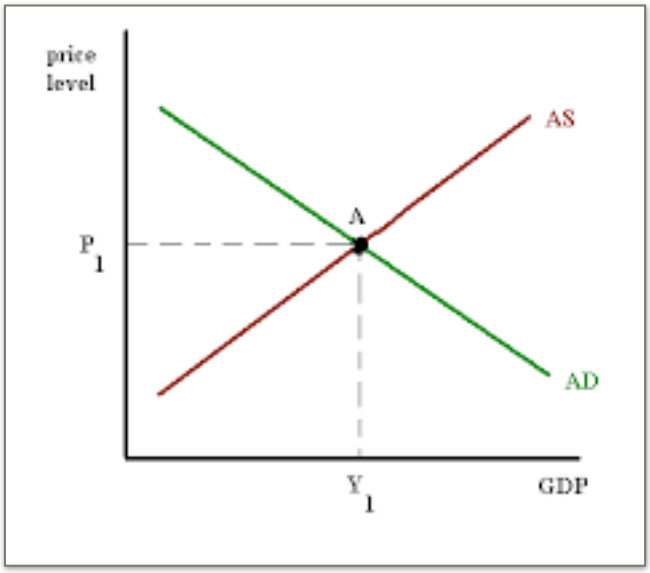


- This curve shows the impact of an increase in total production (GDP) on the inflation rate.
- The **short run aggregate supply curve is upward sloping (positive slope).**
- This means that as the **level of economic activity increases, the price level rises.** This occurs because rising production **required increased resources of labour and capital and this puts pressure on resource prices.**
- The most important cost of production is the **price of labour-wages.** As production in **the economy increases, wages begin to rise** and this causes the general price level to rise. This is especially true as the economy approaches full capacity or full employment.
- Higher input prices for both labour and capital raises production costs which causes an increase in the general price level. (Pg 205)

Shifts in the aggregate supply curve

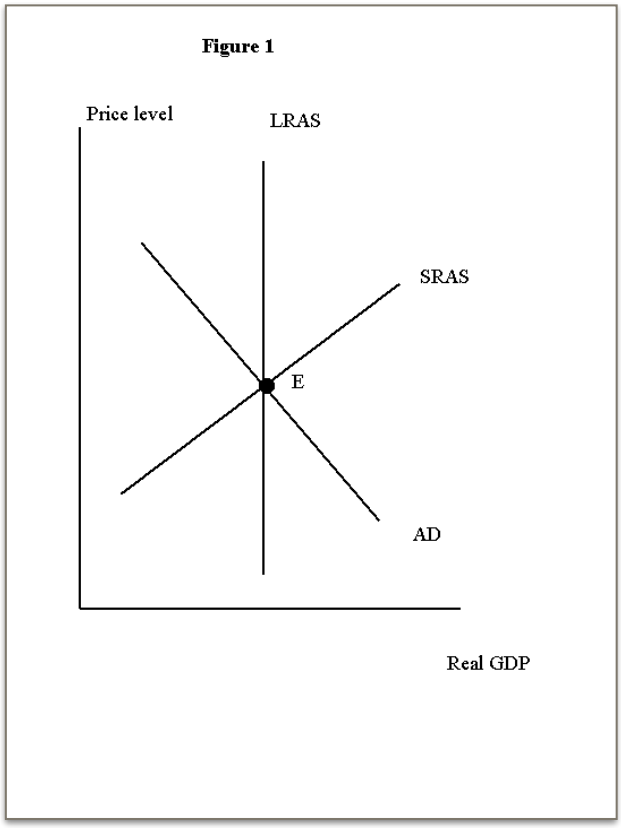
- Shifts in the SRAS curve are caused by **factors that can affect the costs of production across the entire economy.**
- If real wage fall we would show the whole short run aggregate supply curve shifting down the right. This is referred to as an **increase in aggregate supply.** The level of **real GDP and employment would both increase.**
- On the other hand, a***n increase in oil prices, w***ould have a major effect on all sectors of the economy, increasing the price of fuel and transport costs. This would cause the SRAS curve to shift up and to the left. This is referred to as a decrease in SRAS and would cause the level of **real GDP and employment to fall.**
- Shifts in the SRAS curve are often referred to as supply shocks. (Pg 206)
- Negative supply shocks cause an upward shift in the SRAS curve, while a positive supply shock causes a downward shift.
- A good example of negative supply shock would be any **natural disasters.**
- A good example of positive supply shock would be increase in labour productivity due to a more educated workforce.
- Any changes in the **input prices** such as oil, the price of labour (wages) and raw materials will only shift the SRAS curve.
- Factors that **will shift LRAS and the SRAS:** changes in the quantities of factors of production, an increase in the size of the labour force or capital stock, increase in productivity and improvements in technology.

Macroeconomic equilibrium

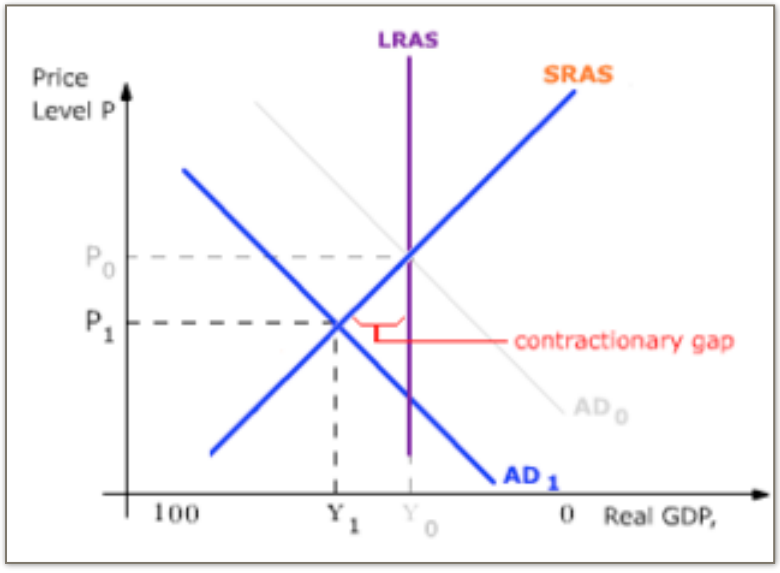


- By combining the economy's aggregate demand (AD) curve with the supply side of the economy (AS) we can show the economy's equilibrium level of real GDP and the equilibrium price level.
- The economy is said to be in short run equilibrium at the point where **the AD curve intersects the short run AS curve.** This is the economy's actual level of production.
- The economy is said to be in **long run equilibrium** when all three curves (AD, SRAS & LRAS). This would mean that actual GDP would equa**l potential GDP** and the economy would be

operating on the LRAS curve. Short run equilibrium would concede with long run equilibrium.



- Figure 1 shows that the economy is in macroeconomic equilibrium at potential GDP and the economy is at **its natural rate of unemployment with a low rate of inflation.**
- The economy does not always operate at **long run equilibrium.**
- Each year, all three curves- the AD, SRAS and the LRAS tend to shift to the right due to increase in economic growth.
- The population and labour force increases, the capital stock grows, new resources are discovered and technology is constantly improving.
- At the same time AD tends to increase as well due to increasing consumption from rising income levels, increasing investment and rising exports and government spending.
- But the **AD curve may not shift at the same rate as the AS curves.**
- This means that at any point in time the **economy's short run equilibrium may be either below or above the LRAS curve.**
- We can distinguish two two types of short run equilibrium: **a contractionary gap** and an **expansionary gap.**



- In the diagram on the right the SRAS curve **is below the full employment level of real GDP** (Y0).

-The AD curve intersects the short run AS curve **to the left of the long run AS curve.**

-This is known as the **contractionary gap because the equilibrium level of GDP (Y1) is less than potential GDP.**

- During a contractionary gap, the economy suffers from **higher levels of cyclical unemployment.** The unemployment rate **will be above the natural rate. Inflationary pressures are not usually present** because there is **spare capacity in the economy.**

- Characteristics of a contractionary gap include:

1. **Higher levels of cyclical unemployment** because the **demand for final goods and services has fallen.**
2. A **fall in the labour force participation rate-** many people believe they have less **chance finding a job, so they withdraw from the work force.**
3. A **fall in company profits** which reduces **business confidence**
4. **Slower growth of consumer expenditure**, and **a reduction in sales of consumer durables**
5. **Falling share prices which has a negative effect on investment**
6. **Increased government spending on welfare**
7. **Lower interest rates** due to reduced demand for funds
8. **Spending on imports falls reducing the current account deficit**

- The economy will not become stick in a contractionary or recessionary gap because the **economy has a self correcting mechanism to push the economy to its long run equilibrium.**

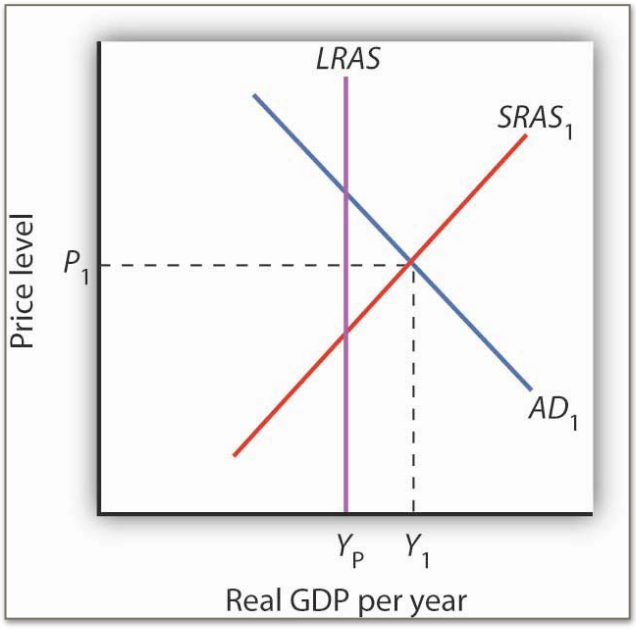
- If actual GDP is below potential GDP, then **unemployment is above the natural rate.** This causes **wages to fall which reduces price level** and **shifts the SRAS curve down and to the right**, moving the **economy back towards potential GDP.** At the same time, **aggregate demand may begin to increase as consumer and business confidence begin to improve** or as the **government and/or RBA implement expansionary policies to shift the aggregate demand to the right.**

- The diagram on the right shows the short run equilibrium above the full employment level of real GDP (Yp).

- The AD curve intersects the short run AS curve to the right of the long run AS curve.

- This is known as the **expansionary gap because the equilibrium level of real GDP (Y1) is greater than potential GDP.**

- During an expansionary gap the economy suffers



- from **higher levels of inflation.** Inflation will be present because there will be **competition for limited resources. The unemployment rate will be below the natural rate of unemployment.**
- Characteristics of an expansionary gap include:

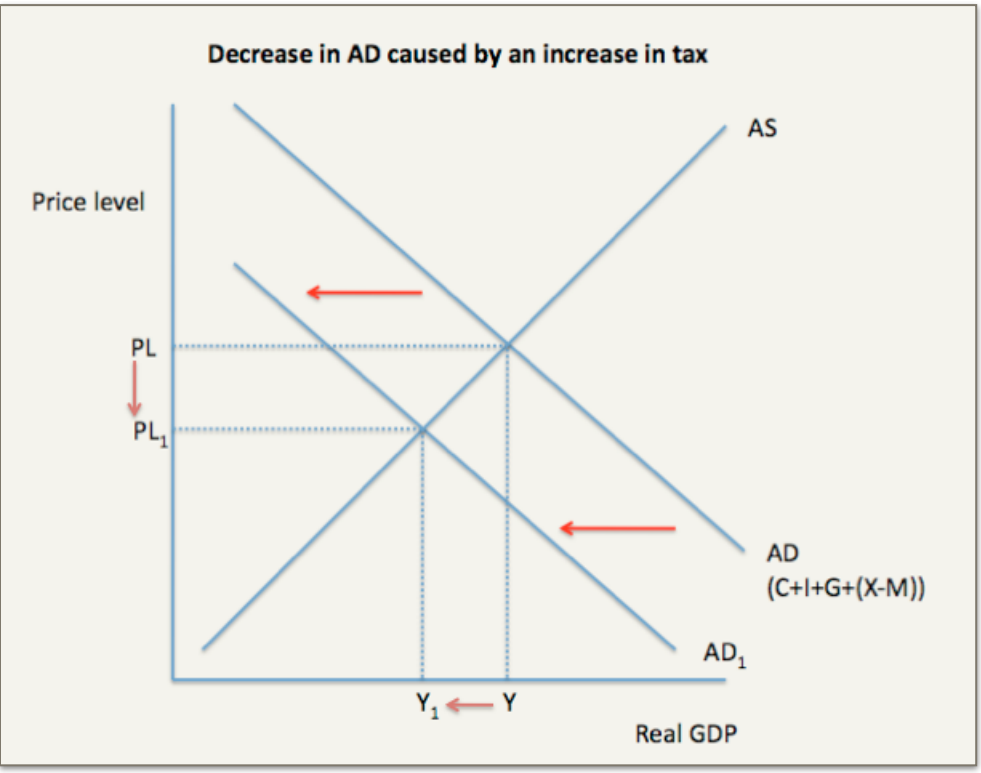
1. Low levels of cyclical unemployment- consumer demand for goods and service is high and firms need to employ labour to produce those goods and services
2. A rise in the **labour force participation rate,** as people expect they will be successful in finding a job
3. A rise in inflationary pressure as competition amongst buyers in both final and factor markets causes prices to rise
4. Increase in company profits and **business confidence**
5. Increased consumer confidence and an increase in sales of consumer durables
6. Rising share prices
7. Decreased government spending on welfare
8. Higher interest rates due to increased demand for funds
9. Spending on import rises increasing the current account deficit

- The economy will not be stuck in the inflationary or expansionary gap because the economy has a **self correcting mechanism to push the economy back to its long run equilibrium.**
- If actual GDP is above potential GDP, **then the natural rate of unemployment is below the natural rate. This causes wages to rise which shifts the SRAS curve up and to the left, moving the economy back towards potential GDP.**
- The **price level (inflation) rises which will reduce consumer and business confidence and causes aggregate demand to decrease,** the government may also **implement contractionary policies to reduce spending in the economy which will shift the aggregate demand to the left.**

The AD/AS model and the business cycle

- A recession occurs when the **rate of economic growth decreases- the level of real GDP falls and unemployment mainly cyclical increases above the natural rate.**
- A recession can occur for two reasons: **a decrease in the AD curve** or a d**ecrease in the SRAS curve.** Both will reduce real GDP and increase unemployment.

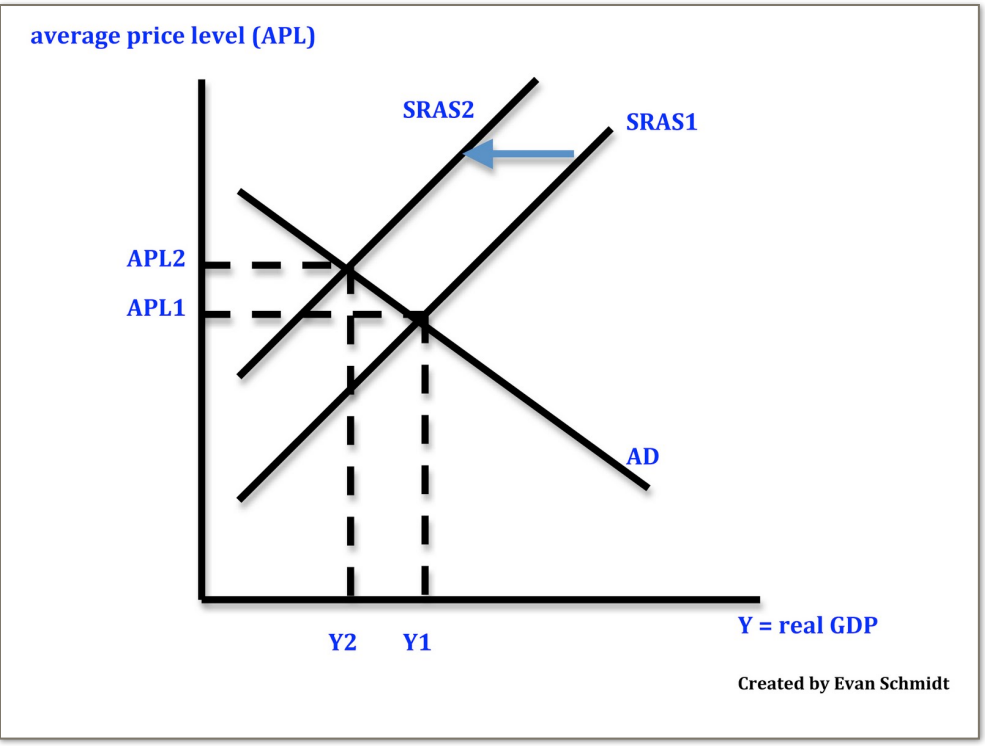
- A decrease in aggregate demand is **referred to as a demand shock.** It could occur as a result of a **fall in consumer and business confidence reducing investment and a collapse in the share market.**



- A decrease in AD also reduces the price level (inflation rate) and real GDP also decreases.

-An aggregate demand shock can be quickly countered by economic policy.

- This diagram shown a business cycle contraction caused by aggregate supply shock.



-A decrease in SRAS curve could be caused by a steep and prolonged rise in world oil prices or a natural disaster such as droughts.

-The Australian economy is often subjected to major droughts.

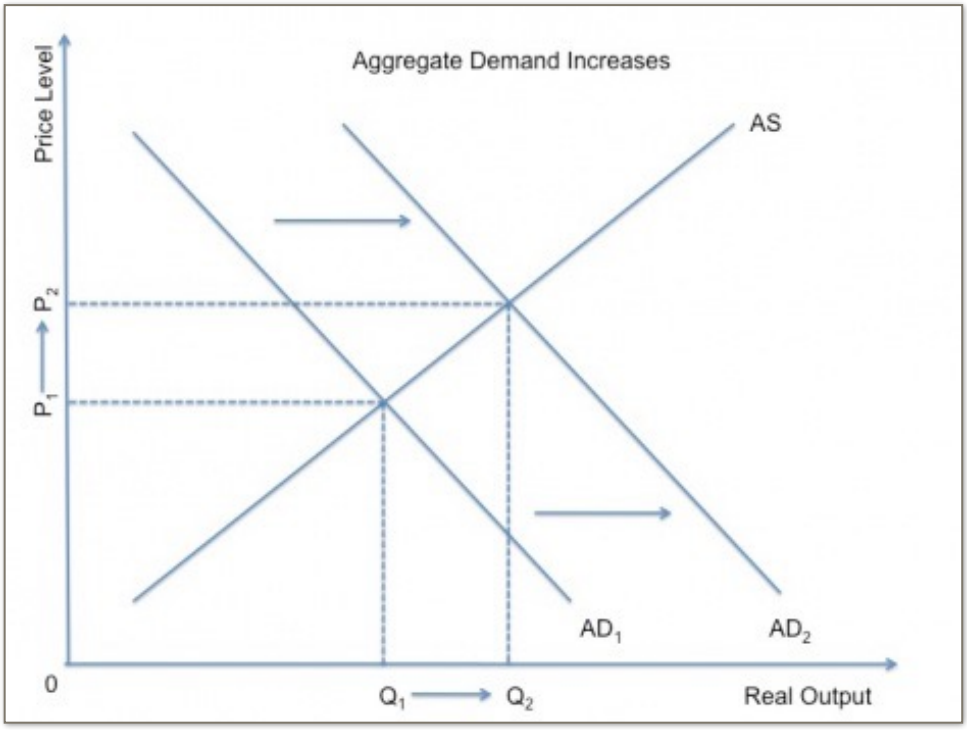
-A decrease in the short run AS not only increases unemployment but also increases the price level.

-The economy is said to experience a bout of **cost inflation.**

-Cost pull inflation is worst type of inflation because it is associated with a contractionary economy.

What can cause a business cycle expansion?

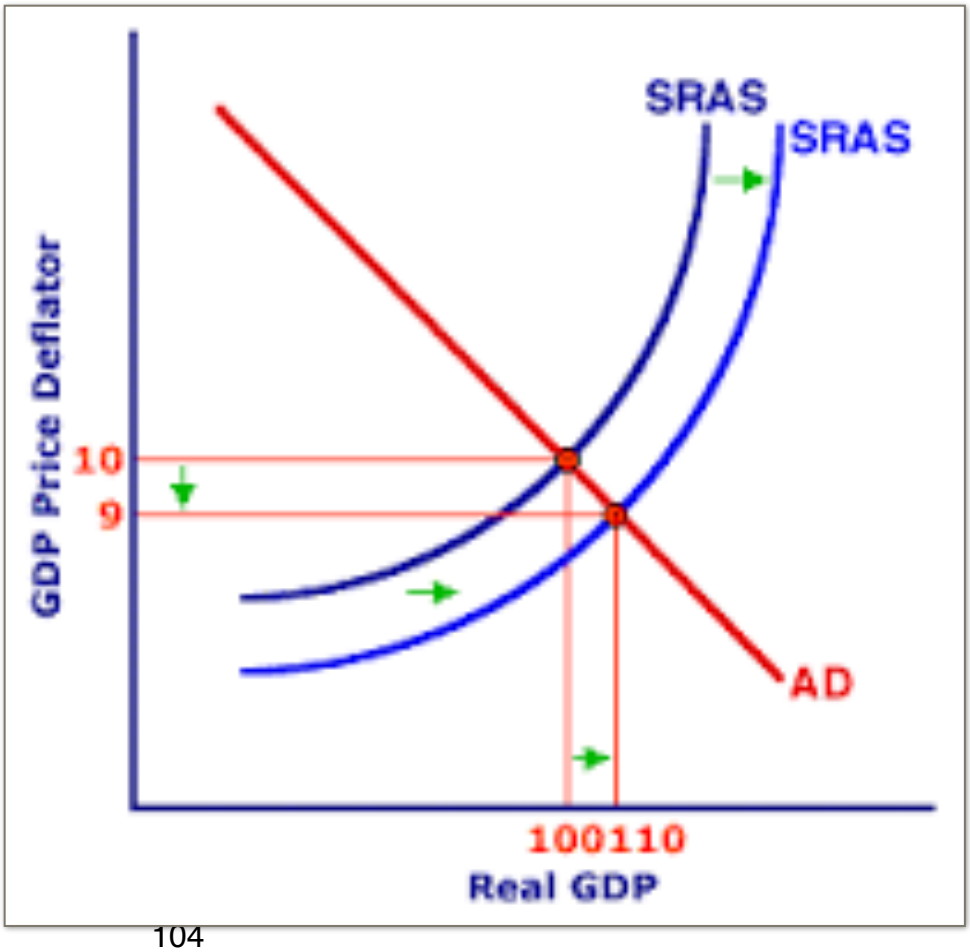
- Two main reason: an **increase in aggregate expenditure** that pushes the economy above potential GDP, or **an increase in short run aggregate supply.**



-Both will lead to employment increasing, pushing the unemployment rate below the natural rate.

-An increase in AD may be caused by a **mining boom which increases investment** spending and net exports, raising national income.

-An expansion caused by shifts of the AD curve to the right are associated with **higher rates of demand inflation.**



-An expansion that is caused by the SRAS shifting **to the right** will cause inflation to fall. Examples would include the application of new technologies which boost labour productivity.

-When actual GDP is above potential GDP, the economy is experiencing an expansion.

-When actual GDP is below potential GDP, the economy is experiencing a contraction.

-Self correcting property of the economy is quite strong- actual GDP stays close to potential GDP over the long

- run.

Chapter 11: Economic policy objectives

- Aggregate demand and aggregate supply interact to determine the level of economic activity which is subject to fluctuations over time- the business cycle.
- The macroeconomic policies- fiscal and monetary policies are counter cyclical, i.e they are used to stabilise the economy by smoothing out fluctuations in the business cycle.
- Fiscal and monetary policies are both demand side policies.

- Current Economic Objectives

1. To maintain an acceptable rate of sustainable economic growth : 3-4% per annum
2. To maintain a low rate of inflation (targeted by the RBA): 2-3% p.a
3. To keep unemployment as low as is naturally possible (without putting pressure on inflation)- Around 4.5%
4. To redistribute income
5. To allocate resources more efficiently

- Some economic objectives are compatible, in the sense that the policies applied to achieve one objective also helps to achieve other objectives at the same time.
- Other objectives are in **conflict** because they cannot be pursued simultaneously.

	What it is	Objective	Compatible with	Conflicts with
Full employment	Full employment is when everyone in the workforce who is willing and able to work can find employment. Zero unemployment is not achievable as we will always have some frictional unemployment (voluntary) and some structural (short-term) employment in the economy. Australia's inflation is considered to be non-accelerating inflation rate of unemployment.	Objective: 4.5% Current: 6%	• **Economic growth** Full employment means economic growth is high, which means there is more output which will lead to more jobs. • **More equitable distribution of income** A full employment tax revenue is high which means the government has more capacity to redistribute income also because the proportion of population that lives on welfare payments will fall. • **Efficient resource allocation**	• **Price stability** At full employment demand pull inflation emerges, refers to Philips curve. • **More equitable distribution of income** Skilled people can do better which can widen the gap between rich and poor.

	What it is	Objective	Compatible with	Conflicts with
Sustainable economic growth	Is defined as the increasing capacity of the economy to satisfy wants of society. Economic growth is measured by real GDP (Gross Domestic Product adjusted for inflation). Economic growth is not sustainable it leads to high inflation.	Objective: 3-4% Current: 2.3%	• **Full employment** Economic growth creates demand for more goods and services, particularly in expanding sectors of the economy. As a result, the resources used to produce these goods and services are also in greater demand (the demand for resources, including labour, is a derived demand) • **Efficient resource allocation** Higher tax revenue to the government would provide it with the ability to redistribute more income.	• **Price stability** The pursuit of economic growth places pressure on resources if the economy has little excess capacity- this may be inflationary in the short run because competition of resources pushes up their price. • **More equitable distribution of income** When economic growth is high people with assets and skills will do better than the under skilled and poorer. While economic growth increases the size of the economic pie, not everyone may equally benefit from the growth in income. People employed in the expanding sectors and owners of appreciating assets such as property and shares may gain more than the disadvantaged groups in society. • **Structural unemployment** Economic growth can be associated with rapid structural change. Demand for outdated skills will fall leading to an increase in structural unemployment.

	What it is	Objective	Compatible with	Conflicts with
Low inflation (Price stability)	Price stability refers to low inflation, where general prices are sustained with a target range set by the Reserve Bank of Australia. The effects of high inflation can be very damaging to the economy. High rates of economic growth, can lead to an overheated economy with associated inflationary pressures if it is at or approaching full employment so the RBA has to be pre-emptive with its policy actions.	Objective: 2-3% Current: 1.5%	• **When you have price stability it is good for:** - **Full employment** - **Economic growth** Long term good sustainable economic growth only occurs with stable prices. Low inflation reduces uncertainty and encourages investment in productive activities. - **More equitable distribution of income** Inflation erodes a person's power of income, stable prices complement fair distribution of income. - **Efficient resource allocation**	• **Full employment** Short term reducing aggregate expenditure to control inflation will suppress economic growth which means less output and less jobs. Policies to reduce inflation do so by reducing the level of economic activity. Lower consumption and investment means less demand for labour. On the other hand, trying to reduce unemployment by expanding economic activity puts pressure on available resources and prices. This suggests a trade off between high employment and stable prices. (Philips curve) • **Economic growth** In short term conflicting it will reduce economy growth (Aggregate expenditure).

	What it is	Objective	Compatible with	Conflicts with
More equitable distribution of income	Income redistribution is the desire to redistribute income more equally amongst the members of society. As Australia is a modified market economy the government will intervene to make up for the failures of the free market. The government has a wide range of instruments at its disposal e.g. progressive income tax, capital gains tax and many welfare payments.		• **Economic growth** • **Full employment**	• **Price stability**

	What it is	Objective	Compatible with	Conflicts with
Efficient resource allocation	Efficient resource allocation is the attempt to allocate the economic resources more efficiently in order to maximise the economic welfare of society. These are: 1. Technical or Productive efficiency: Relationship between inputs and outputs. 2. Allocative efficiency: Resources allocated to the most valued uses, least opportunity cost. 3. Dynamic efficiency: The ability of economy to adapt over time		• **Full employment** Efficient resource allocation leads to long term economic growth which will create more job opportunities. • **Economic growth** Microeconomic reform promotes efficiency and improved productivity which are the driving force for increasing aggregate supply. • **More equitable distribution of income** Greater output from same number of resources leading to higher sustainable growth. • **Price stability** Higher productivity leads to greater capacity in the economy which means there are reduced bottlenecks resulting in reduced demand pull inflation.	• **Price stability**

Chapter 12: Fiscal Policy

- **Definition of fiscal policy:** Fiscal policy is the use of government revenue and expenditure to achieve the economic objectives.
- By varying the amount of government spending and revenue, the government can change the level of economic activity, which is turn will influence economic growth, price stability and unemployment.
- **Definition of the Federal Budget:** Budget is the annual statement from the government of its income and expenditure plans for the next financial year and is an estimate or forecast statement which is normally announced in **May each year.**
- The commonwealth budget balance is the difference between total revenue and spending.

Budget= Revenue - Spending

- The sources of government revenue is **direct tax which is income tax and company tax, indirect tax such as customs and the GST and other revenues** such as from public trading enterprises.
- The major **items of government expenditure** are **social welfare, health, education, defence a**nd public administration.
- **Budget outcomes gives an indication of the overall impact of fiscal policy on the state of the economy.**
- There are **three possible budget outcomes** that can result. Firstly, if a positive balance occurs that is when the **total government revenue exceeds expenditure, it is known as a fiscal surplus (budget surplus).**
- Secondly, a negative balance occurs **when total government expenditure exceeds total revenue, it is known as a fiscal deficit** (budget deficit).
- Thirdly, if a **balance occurs that is if the total government expenditure is equal to total revenue, it is known as a fiscal balance (balanced budget).**
- If the Budget outcome **acts to increase the level of economic activity it is called an expansionary budget** and **if it reduces the level of economic activity it is a contractionary budget.** This means at first glance **a deficit budget will be regarded as expansionary and a surplus budget would be regarded as contractionary** because we could conclude that the government is withdrawing from net spending.
- However, the outcome of the budget really depends **not on its absolute value but on its value relative to the actual outcome last year.**

Fiscal policy stances

- An expansionary budget will occur **if the government is planning to reduce taxation revenue and/or increase government expenditure, creating either a smaller surplus, or a larger deficit than it had previously**. This expansion leads to a **multiplied increase in consumption and investment and stimulates aggregate demand which will increase the level of economic activity.**

- An contractionary budget will occur if the **government is planning to increase taxation revenue and/or decrease expenditure, creating either a smaller deficit or a bigger surplus than in the previous year.**
- The contraction leads to a **multiplied decrease in consumption and investment, decreasing demand which will decrease economic activity.**
- A neutral fiscal policy will occu**r when the government plans to maintain the gap between revenue and spending at around the same level as the previous year, there will be no effect on the overall level of economic activity.**
- Balanced budget stance would **actually destabilise the economy because government expenditure is tied to revenue. In a trough, when revenue falls, a balanced budget would result in a fall in government expenditure-** just the opposite of what the economy needed to boost levels of spending and output.

Statistics: The decline of iron ore prices in 2014 has had an impact on income tax revenues.

- The budget has a three fold purpose:

1. Allocation: The budget decides how **revenue will be raised and allocated to areas of need.** Budget allocations don't change much from year to year, because they are often determined by on-going funding needs for the capital and current needs of that sector. The allocation process is partly driven by political process.
2. Redistribution: The budget redistributed income from the wealthy to the less-wealthy. The wealthy pay higher rates of income tax than the poor, and the poor receive more government support.
3. Stabilisation:The government can use the budget to influence the level of macroeconomic activity.

- Fiscal policy has both **cyclical (non-discretionary)** and **structural (discretionary)** components. Cyclical or non-discretionary component of the budget refers to how government revenue and expenditure is affected by the current state of the economy and the business cycle.
- When an economy is is a recession, the budget deficit will increase due to increased welfare spending and decreased revenue from income and company tax.
- On the other hand, during a period of strong economic growth the deficit will contract or the budget will shift into a surplus due to increased income and company taxes and reduced expenditure on welfare spending.
- These revenue and expenditure items will **change without the government making any new decisions related to them and these items are known as automatic stabilisers.** Automatic stabilisers are those changes in the level of government revenue and expenditure that **occurs as a result of changes in level of economic activity.**
- Automatic stabilisers **are built in the budget to play a counter-cyclical role.** For example, when the economy is in a trough phase of the cycle tax **revenues falls and welfare payments rise,** so the budget balance moves towards deficit. As a result,

- income taxes and welfare payments act like an economic shock absorber. They **reduce the aggregate levels of demand in boom and increase it in trough.**
- Discretionary or structural components of the fiscal policy **are the deliberate discretionary changes that the government makes to revenue and spending** in order to achieve **its economic objectives e.g changing the rate of existing taxes.**

Statistics: The Treasurer announced this year's budget outcome to be a deficit of $35.1. billion while in the year 2014/15 there was a budget deficit of $41.1 billion. This shows that the budget deficit has been decreasing in size which means the budget is contractionary and will reduce the level of economic activity.

Fiscal policy during a trough

- In a period of low economic activity, it would be appropriate to run an **expansionary budget (a deficit) in order to stimulate spending in the economy.**
- Examples of way to stimulate spending include:

1. **Reducing income tax to increase household purchasing power**
2. **Cutting corporate tax to stimulate business spending**
3. **Increasing government spending on infrastructure, such as transport and communications projects.**

- The Keynesian model uses the term deflationary gap to describe the output gap that exists between the current level of income and that which could be achieved at full employment.
- To close the gap, government uses the fiscal policy.
- Due to the presence of the multiplier, the final effect is larger than the initial stimulus- a small change in the size of the expenditure produces a large increase in the level of aggregate incomes.
- The AD/AS model can also be used to show the effect of expansionary fiscal policy on the level of output.
- Expansionary fiscal policy should have minimal impact on inflation if the economy is in a trough. When economic output is below potential, increased aggregate demand will tend to soak up excess capacity and unemployed resources before putting upward pressure on the price level.

Fiscal policy during a boom

- In a period of higher economic activity, it would be appropriate to run a budget surplus to reduce levels of spending in the economy
  - Examples of ways to achieve this contractionary impact include:

1. Increasing income tax rates and company taxes
2. Reducing or postponing government spending on major projects
3. Increasing excise taxes such as those applied on sales of cars and alcohol

- There are many components of government revenue and expenditure, so to 'reduce spending' means that a decision has to be made as to what component of expenditure

- will be reduced. It could be current or capital expenditure, and mights be taken away from defence, education and health.
- It is very difficult to make large cuts in government expenditure, because most of the expenditure of any department is spent on wages and salaries.
- Reduction tend to be in small amounts over a period of time- rather than slashing.

Budgets and government finance

When their is a surplus the government can do two things:

1. Save it for the future, depositing it with the RBA
2. Pay off some of the public sector debt, buy the outstanding bonds back, paying off foreign debt which can lead to: decrease in interest rates and "crowding in".
3. Repay debt to overseas, which can lead to: decrease foreign debt and depreciation of Australian dollar.

- There are three ways a government can finance a budget deficit:

1. A bond is a financial instrument which raises funds for its issuer, in return for a rate of interest payable to the buyer. Imagine you use surplus cash to buy a $1000 government bond, on which the rate of interest is 6% p.a. You are effectively lending money to the government in return for annual interest payment of $60. They are very safe because the risk of default is low. This results in **no increase in money supply.**
2. Financing it from the RBA: When the government borrows from the RBA, it is **injecting new money into the economy.** This has the **desired expansionary effect on the economy**, but the **increase in money supply is likely to have an inflationary** impact on the economy if the **growth in mon**ey supply exceeds the growth in real output.
3. Borrow from overseas: The government could borrow from overseas to fund its deficit. Doing so would **not increase the money supply under Australia's system of floating exchange rates,** but the exchange rate **will appreciate due to inflow of money capi**tal. Exchange rate appreciation makes **exports less competitive, and imports more competitive against domestic goods.** If the government **has to pay high interest rates (servicing costs) for the borrowed money from overseas will mean that the money paid on those interest rates could have been used for current expenditure.**

- **Financing a deficit by borrowing from the public, crowding out effect can occur which describes how an increase in the budget deficit may reduce private spending by forcing up interest rates because even government is competing for the loanable funds, also using up funds from our domestic savings pool.** The private sector is **"crowded out"** of the domestic market by government borrowing, since **lenders will prefer to lend money to the the government-** the **private sector will have less access to domestic savings** and would be **forced to borrow from overseas. Higher interest rates will tend to appreciate the Australian dollar.**

Weaknesses of fiscal policy

- Time lags:
- **Long recognition lag occurs because the economic indicators that provide data about economic performance often lags the real trends- policy makers uncertain about the actual state of economy and do not know an event until after it happens.**

Implementation lag- time taken to decide and implement fiscal policy- fiscal policy takes a long time **to formulate and must be approved by parliament**- the Budget is an annual document.

Impact lag- Time taken for policy to effect once implements- fiscal policy has a relatively short impact lag.

Inside lags: the analysis of data and decision as to appropriate action within the government or outside lags: the time taken for a policy to take effect. With fiscal policy inside lag is longer and outside lag is shorter.

- Inflexibility: **Limited opportunities for large variation in government expenditure and tax-** government is **committed to spending programs and frequent variations to the tax system would make it more complex.** The budget cannot make **large changes to the patterns of allocation and distribution established in past years.**

- Political problems: **3 year electoral cycle,** government are **reluctant to take difficult political decisions in election years-** it may actually offer **tax cuts and spending increases to buy votes.**

- Crowding out: Financing a deficit by borrowing from the **public drives up interest rates, contracts private investment and forces firms to borrow from overseas.**

- Unforeseen circumstances: **Actual outcome may differ from planned outcome: Forecasts might be incorrect**

Exogenous factors such as tsunami, wars, GFC

Strengths of fiscal policy

- Selective: can **be used to target particular industries, sectors or income groups**
- Direct: Has short impact lag, more immediate results
- Automatic stabilisers: Are built into the budget- spring into action in response to cyclical changes without the government having to take any actions.

- Effective in a recession: Government spending can give an immediate boost to aggregate expenditure e.g. Rudd’s stimulus package.