

<b>Pattern of trade</b>	<ul style="list-style-type: none"> <li>- Australia is a medium, open economy</li> <li>- 13<sup>th</sup> largest economy in the world</li> <li>- trade accounts for approx. 45% of GDP</li> </ul>
Trade intensity ratio	<ul style="list-style-type: none"> <li>- measures the degree in which a nation is involved in trade</li> <li>- Australia's trade intensity ratio is relatively low compared to other countries</li> </ul> $\frac{x + m}{GDP}$
<u>Composition of trade</u>	<ul style="list-style-type: none"> <li>- Australia is a primary exporter and a secondary importer</li> </ul>
<b>Exports</b>	<ul style="list-style-type: none"> <li>- Primary commodities dominate Australia's exports</li> <li>- Primary commodities include mining commodities and rural commodities</li> <li>- Due to abundance in natural resources</li> <li>- Mining commodities dominate Australia's exports (approx. 50% of exports)</li> <li>- Traditionally, rural commodities dominated Australia's exports</li> <li>- Since the 1960s/70s mining emerged as Australia's major export industry</li> </ul> <p><b>1970's</b> rural – 40% of exports mining – 25% of exports</p> <p><b>2018</b> rural- 12% of exports mining- over 50% of exports</p>
<i>Australia's changing exports</i>	<ul style="list-style-type: none"> <li>- Changes in Australia's major exports are associated with a rapid increase in mineral and energy exports, and the decline in rural exports</li> <li>- Focus on Australia's trade has shifted away from Europe to western pacific and east Asian regions</li> <li>- Australia has been a leading producer of wool and wheat</li> <li>- Significant producer of iron ore, coal, natural gas, gold, mineral sands and uranium</li> <li>- past few decades, increase in the relative importance of mineral and energy exports</li> <li>- decrease in importance of rural exports</li> <li>- rural exports have decreased rapidly (40-13% since 1970s)</li> <li>- mining resources has become more dominant (30- 50% since 1990s of total exports)</li> </ul>
<i>What has driven the change?</i>	<ul style="list-style-type: none"> <li>- Rapid growth of china and Asian economies</li> <li>- Resulted in a massive boom from 2001-2012</li> <li>- Boosted demand for iron ore, coal, natural gas</li> <li>- Even with the end of the mining boom, resources are likely to remain the dominant category</li> <li>- Rapid growth in Newly Industrialized Economies</li> </ul>

	e.g. China, South Korea, India
Major changes in composition of Australia's exports	<ul style="list-style-type: none"> <li>- Dramatic decline in rural exports</li> <li>- Significant increase in resource exports</li> <li>- Relative decline in manufacturing exports</li> <li>- Increase in importance of services exports</li> </ul>
Composition of exports	<p>Predominantly, Australia is a primary exporter</p> <p>CHANGES</p> <ul style="list-style-type: none"> <li>- <b>Shift away from rural to mining commodities</b></li> <li>- Rapid growth in newly industrialized economies</li> <li>- increased competition for rural commodities</li> <li>- <b>decrease manufacturing exports</b> (labour more expensive in Aus) (cheap labour overseas in highly populated countries) (manufacturing in Australia not competitive or efficient)</li> <li>- <b>increase in service exports from 15% to 23% in 2018</b> (education and tourism) (Over time trade in services should increase as incomes in east Asia rise)</li> <li>- <b>increase in the exporting of ETM's- elaborately transformed manufactured goods – rather than STMs)</b></li> <li>- Two thirds of Australia's manufactured exports are now 'elaborately transformed'</li> <li>- ETM'S consist of more highly processed manufactures E.G. machinery and transport equipment</li> <li>- STMs consist of relatively unprocessed goods E.G. steel, aluminium</li> </ul>
Composition of imports	<ul style="list-style-type: none"> <li>- Australia imports a significant amount of secondary goods including PMV, TCF (textiles, clothing, footwear), petroleum and tourism</li> <li>- Tourism has emerged as Australia's number one import</li> </ul>
<u>Direction of trade</u>	<p>ASEAN – Indo, Malaysia, Thailand, Philippines, Vietnam, Laos, Myanmar</p> <p>ASIA-PACIFIC rim- geographical proximity</p> <p>APEC- Asian pacific economic corporation</p> <ul style="list-style-type: none"> <li>- Australia's major trading partners are China, Japan and USA</li> <li>- 80% of Australia's trade is within the Asia pacific rim</li> <li>- traditionally, Australia's significant trading partner was the UK, largely due to historical ties.</li> <li>- However, over the past 50/60 years, there has been a significant shift away from Europe towards the Asia pacific region (N/E asia, S/E asia, North America, oceania)</li> </ul>

<p>Reasons for the shift</p>	<p><b>Geographical proximity with the Asia-pacific region</b></p> <ul style="list-style-type: none"> <li>- Results in lower transport costs, forming positive economic + political ties with Australia's closest neighbours</li> <li>- Significant distance of European nations made trade expensive and timely</li> </ul> <p><b>Complimentary economies</b></p> <ul style="list-style-type: none"> <li>- Australia's economy and the economies of east and south Asia are complimentary (efficient production of goods and services in aus are opposite to neighbouring economies)</li> <li>- Neighbouring Asian nations have large growing populations</li> </ul> <p><b>Allows access to diverse goods and services</b></p> <ul style="list-style-type: none"> <li>- Via imports</li> <li>- Produced from Asia</li> </ul> <p><b>Nations in APEC region rapidly developing</b></p> <ul style="list-style-type: none"> <li>- High demand for Australia's commodities</li> </ul> <p><b>Establishment of EU</b></p> <ul style="list-style-type: none"> <li>- Prevented Australia's access to European markets, forcing Australia to seek other trading partners</li> </ul>
<p>Shift in past 10 years</p>	<ul style="list-style-type: none"> <li>- China, in the past 10 years, emerged as Australia's most important trading partner</li> <li>- Over 1 quarter of Australia's exports are sold to china</li> <li>- The prominence of china in terms of rapid economic growth as china industrialised into a more developed nation</li> <li>- Economic development of china increased demand for Australia's commodities, particularly iron ore and coal</li> <li>- Japan, while still an important trading partner, fell in proportion of Australian exports sold</li> <li>- Other NIE's also increased their demand for Australian commodities to service their rapid economic development, including India and South Korea</li> <li>- Growth in service exports (particularly in china) in the past few years opened up export markets in Columbia, sri lanka, Pakistan and Saudi Arabia</li> <li>-</li> </ul>
<p>Factors affecting CAD</p>	<ul style="list-style-type: none"> <li>- Exchange rates</li> <li>- Relative inflation</li> <li>- Interest rate differential</li> <li>- World economic growth</li> <li>- Domestic economic growth</li> <li>- Terms of trade</li> <li>- World commodity prices</li> <li>- Domestic savings</li> <li>- External shocks</li> </ul>
<p>Exchange rates</p>	<p>(low)</p> <ul style="list-style-type: none"> <li>- Decrease in AUD</li> <li>- Increase in demand for exports</li> <li>- Increase in international competitiveness</li> </ul>

	<ul style="list-style-type: none"> <li>- Increase in BOGS, CAD improves</li> </ul>
<b>Relative inflation</b>	<p><b>(low)</b></p> <ul style="list-style-type: none"> <li>- Increase services exports and goods exports due to our prices being lower due to a low inflation rate</li> <li>- Increase in international competitiveness</li> </ul>
<b>Interest rate differential</b>	<p><b>(high)</b></p> <ul style="list-style-type: none"> <li>- Increase in foreign investment due to higher rate of return</li> <li>- Increase in primary income debit</li> <li>- Decrease in income</li> <li>- Increase in CAD</li> <li>- Decrease in import spending due to higher cost of credits</li> <li>- Bogs increases, CAD improves</li> </ul>
<b>World economic growth</b>	<p><b>(high)</b></p> <ul style="list-style-type: none"> <li>- Would increase exports due to higher levels of income internationally, also growth puts pressure on world price to increase meaning we will import less</li> <li>- Bogs increases</li> <li>- CAD improves</li> </ul>
<b>Domestic economic growth</b>	<p><b>(high)</b></p> <ul style="list-style-type: none"> <li>- Increase import spending due to higher levels of disposable income</li> <li>- High growth puts pressure on prices to rise due to high demand-pull inflation</li> <li>- Increase in import spending decreases BOGS</li> <li>- CAD will worsen</li> <li>- Firms will spend more on capital equipment</li> <li>- Increase in investment</li> </ul>
<b>Terms of trade</b>	<p><b>(favourable)</b></p> <ul style="list-style-type: none"> <li>- A favourable TOT will improve Australias CAD</li> <li>- A rise in export prices will increase export revenue which will increase goods credit transactions in the current account</li> <li>- A relative fall in import prices will reduce import payments which will decrease goods debit transactions in the current account</li> <li>- As goods credit transactions rise relative to goods debit transactions, net goods rises causing an increase in BOGSS which will improve the CAD – assuming no change in quantity</li> <li>- Demand for Australia’s commodity are relatively stable as they are price inelastic, therefore buyers are less responsive to a price change</li> <li>- Loss of international competition, sell less/Law of demand</li> </ul>
<b>World commodity price</b>	<p><b>(rising)</b></p> <ul style="list-style-type: none"> <li>- Commodities are price inelastic</li> <li>- Would decrease imports due to cost push inflation</li> <li>- Causes overseas to import less, too</li> <li>- Demand is constant</li> </ul>

	<ul style="list-style-type: none"> <li>- Increase in goods cr</li> <li>- Increase in export revenue</li> <li>- Commodities are price inelastic, perfect comp, homogenous, CAD improves, Increase in BOGS</li> </ul>
<b>Domestic savings</b>	<p>(low)</p> <ul style="list-style-type: none"> <li>- Increase in investment savings gap</li> <li>- Increase in foreign investment</li> <li>- Increase in primary y dr</li> <li>- decrease in net income</li> <li>- Cad worsens</li> </ul>
<b>External shocks</b>	<p>(drought)</p> <ul style="list-style-type: none"> <li>- Decrease in exports</li> <li>- Decrease in bogs</li> <li>- CAD worsens</li> </ul>
<b>Cyclical</b>	<ul style="list-style-type: none"> <li>- Responds to changes in economic cycles</li> <li>- More temporary and subject to change</li> <li>- Help explain the fluctuations in the goods and services balance</li> <li>- Temporary factors which mainly affect the trade balance</li> <li>- Domestic business cycle – exchange rate – terms of trade]</li> </ul>
<b>Structural</b>	<ul style="list-style-type: none"> <li>- Not affected by change in economic cycles</li> </ul>
<b>Australia's trend in CAD</b>	<p><b>Cyclical</b></p> <ul style="list-style-type: none"> <li>- Affected by cycles (BOGS)</li> <li>- An upturn in economic activity, CAD typically worsens as spending on imports is high (C+I) and there is high inflation</li> <li>- Australia's trade balance is largely affected by domestic growth, world growth, exchange rates and WCP</li> <li>- Demand for Australia's commodities are very price inelastic therefore is subject to large price fluctuations causing net goods to vary frequently between a surplus and a deficit.</li> <li>- net services are persistently in deficit (since 2004-5)</li> <li>- despite growth in Australia's export services, Australia's dependence on foreign freight and shipping, high transport costs due to geographical proximity and increasingly high overseas tourism.</li> </ul> <p><b>Structural</b></p> <ul style="list-style-type: none"> <li>- unaffected by changes in net y economic cycles</li> <li>- Australia's net income balance in persistently in deficit</li> <li>- The CAD reflects the high levels of foreign investment in Australia which results in a FAS</li> <li>- The cost of FI is the income Australia pays foreign investors which leads to the primary income deficit</li> <li>- Australia's reliance on FI is a result of the investment/savings gap.</li> </ul>
<b>Australia's CAD</b>	<p><b>2008- 2012</b>  <b>Improving CAD</b>  (Trade surplus)</p>

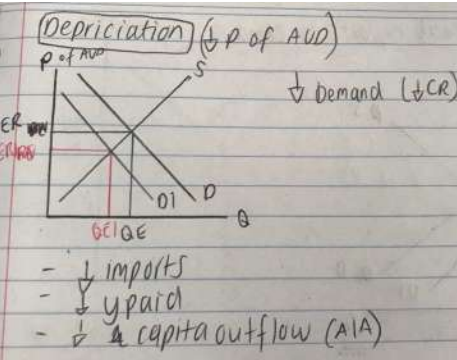
	<ul style="list-style-type: none"> <li>- Mining boom</li> <li>- Chinas rapid growth</li> <li>- Increase in World commodity prices</li> </ul> <p><b>2012- 2016</b>  <b>Improved CAD</b>  (trade surplus)</p> <ul style="list-style-type: none"> <li>- End of mining boom (2013)</li> <li>- Decrease in WCP</li> <li>- High dollar in 2012 – decrease in international competition</li> </ul> <p><b>2016-18</b>  <b>Improved CAD</b>  (trade surplus)</p> <ul style="list-style-type: none"> <li>- Largely due to an increase in WCP</li> <li>- Increase in demand from china</li> </ul> <p>Weaker domestic growth</p> <ul style="list-style-type: none"> <li>- Reduced import spending D for FI</li> <li>- Raise in USA interest rates</li> <li>- Decrease in Aus interest rate differential which reduced net income deficit</li> </ul> <p>HOWEVER, late 2018, net y deficit worsened while BOGS improved</p>
Implications of CAD	<p><b>BOGS</b>  (trade deficit)</p> <ul style="list-style-type: none"> <li>- Exports less than imports</li> <li>- Increase in exchange rates</li> <li>- High domestic growth</li> <li>- Decrease in world growth</li> </ul> <p><b>Net income</b></p> <ul style="list-style-type: none"> <li>- Savings less than investment</li> <li>- Domestic savings is insufficient to meet demand for investment funds</li> </ul> <p>(Savings relatively low – in relation to high investment)</p> <ul style="list-style-type: none"> <li>- CAD + high foreign investment.</li> <li>- Investment is a major source of economic growth (demand and supply source of growth)</li> </ul>
Terms of Trade	<ul style="list-style-type: none"> <li>- A measure of the amount of imports which can be obtained from a given amount of exports</li> <li>- The TOT index is calculated to measure the value of exports against imports</li> <li>- Terms of trade index measures the movement of export prices relative to import prices</li> </ul>
Favourable TOT	<ul style="list-style-type: none"> <li>■ Export prices have RISEN relative to import prices</li> <li>- X rising, M falling</li> <li>- X rise faster than m prices</li> <li>- X falling, but not as low as m prices</li> <li>- X stays the same, m prices fall</li> <li>- X rise, m stays the same</li> </ul>
Unfavourable TOT	<ul style="list-style-type: none"> <li>■ Export prices have FALLEN relative to import prices</li> </ul>

	<ul style="list-style-type: none"> <li>- X falling, m rising</li> <li>- X decrease faster than m</li> <li>- X rise at a slower pace than m</li> <li>- X fall, m stays the same</li> <li>- X stays the same, m increases</li> </ul>
TOT	$TOT = \frac{XPI}{MPI} \times 100$
XPI	<ul style="list-style-type: none"> <li>- Index which measures the movement of export prices</li> </ul> $XPI = \frac{\$ VALUE X (GIVEN)}{\$ VALUE X (BASE)(y1)} \times 100$
MPI	<ul style="list-style-type: none"> <li>- Index which measures the movement of import prices</li> </ul> $MPI = \frac{\$ VALUE M (GIVEN)}{\$ VALUE M (BASE)(y1)} \times 100$
Trend in Australia's TOT	<ul style="list-style-type: none"> <li>- Changes in world commodity prices significantly impact Australia's TOT, as Australia's exports are predominantly commodities.</li> <li>e.g. rising WCP will cause a favourable movement in TOT.</li> <li>- changes to Australia's TOT in recent years is a result of fluctuating export prices, rather than import prices, which has remained relatively stable</li> </ul> <p>2003-2008 = Fav TOT = MINING BOOM  2008 = unfav TOT = GFC  2009-2012 = Fav TOT = mining boom continued  2013-2016 = Unfav = end of mining boom, decrease domestic commodities, decrease world commodity prices  2017 = Fav tot = spike in WCP  2018= Unfav tot = decrease in demand for commodities in world market  2019 = fav TOT – shortage in supply for commodities, not expected to change</p>
Relationship between CAD and TOT	<ul style="list-style-type: none"> <li>■ Relationship between CAD and TOT</li> <li>- TOT is a factor affecting CAD (cause)</li> <li>- CAD is an effect of TOT</li> <li>- Changes in Australia's terms of trade will impact the current account deficit</li> </ul>
Effects of rising TOT	<p><b>Favourable TOT</b> – export prices have risen relative to import prices</p> <ul style="list-style-type: none"> <li>- BOGS would increase, CAD will improve</li> <li>- Exchange rates would go up as our exports are worth more in relation to imports and we export currency to overseas consumers</li> </ul>

	<ul style="list-style-type: none"> <li>- Producers receive higher profits (export revenue)</li> <li>- Domestic businesses, with higher profits, are able to invest more.</li> <li>- Domestic producers of import replacement goods are less competitive</li> <li>- An increase in the TOT due to higher commodity prices will lead to an expansion in economic activity</li> <li>- When commodity prices fall, TOT will decline, resulting in a shock to the economy</li> <li>- Economic activity will contract, reduces growth rate of real GDP.</li> </ul>
Effect of TOT on EPO's	<p>Economic Policy Objectives (EPOs)</p> <ul style="list-style-type: none"> <li>- Full employment</li> <li>- Sustainable growth</li> <li>- Price stability</li> </ul> <p>Effect of a rising TOT on achieving the 3 economic policy objectives</p>
Rising TOT	<ul style="list-style-type: none"> <li>- Means more imports can be obtained/purchased with a given amount of exports</li> <li>- Purchasing power of exports has increased (increase in real income)</li> </ul> <p><b>Demand pull inflation</b></p> <ul style="list-style-type: none"> <li>- (increase in aggregate demand)</li> <li>- Increasing AD is the same as increasing AE</li> <li>- A rising TOT increases exports as export revenue rises relative to import payments</li> <li>- Therefore, an increase in net exports will increase spending in the economy as it is a component of AE</li> </ul> <p><u>Growth</u></p> <ul style="list-style-type: none"> <li>- Increase in economic growth</li> <li>- Decrease in cyclical UE as increase in demand for labour as economy expands and production increases to OE1</li> <li>- Increase in demand pull inflation to PE1 due to increasing spending</li> </ul> <p><b>Cost push inflation</b></p> <ul style="list-style-type: none"> <li>- Rising tot will cause cost push inflation to fall due to falling costs of production</li> <li>- Due to falling price of imported capital equipment</li> </ul>
Exchange rates	<ul style="list-style-type: none"> <li>- The price of one countries currency in terms of another countries currency</li> </ul> <p>e.g.  US = USD  China = Renminbi  Japan = Yen  European = Euro  UK = Great British pound</p>



<p><i>Appreciation</i></p>	<ul style="list-style-type: none"> <li>- An increase in the price of one country's currency in terms of another country's currency</li> </ul>
<p><i>Depreciation</i></p>	<ul style="list-style-type: none"> <li>- A decrease in the price of one country's currency in terms of another country's currency</li> </ul>
<p><b>Trade Weighted Index (TWI)</b></p>	<ul style="list-style-type: none"> <li>- An index which measures the movement of the Australian dollar against a basket of currencies</li> <li>- Weighted according to their importance of trade with Australia</li> </ul>
<p><b>FOREX market (foreign exchange market)</b></p>	<ul style="list-style-type: none"> <li>- The forex market brings together the buyers and sellers of currency's</li> <li>- The price of a currency is determined by the market forces of demand and supply at equilibrium</li> <li>- Any change in the market conditions (shifts in demand and supply) will cause automatic adjustment of price and quantity where there is no tendency to change</li> </ul>
<p><i>DEMAND FOR AUD</i></p>	<ul style="list-style-type: none"> <li>- Buyers of the currency</li> <li>- Demand of the AUD is determined by the credit transactions of the BOP</li> </ul> <p>(demand is determined by the amount of money entering Australia from overseas)</p>
<p><i>SUPPLY FOR AUD</i></p>	<ul style="list-style-type: none"> <li>- Sellers of the currency</li> <li>- Supply for the AUD is determined by the debit transactions of the BOP</li> </ul> <p>(supply is determined by the amount of money leaving Australia to overseas)</p>
<p><b>Appreciation of AUD (INCREASE in price of AUD)</b></p>	<div style="display: flex; justify-content: space-around;"> <div data-bbox="507 1182 826 1608"> <p><i>Appreciation (↑ AUD)</i></p> <p>↑ D (↑ CR)</p> <ul style="list-style-type: none"> <li>- ↑ exports</li> <li>- ↑ y received</li> <li>- ↑ capital inflow (FI)</li> </ul> </div> <div data-bbox="970 1182 1369 1608"> <p><i>Supply (↓ debit)</i></p> <ul style="list-style-type: none"> <li>- ↓ imports</li> <li>- ↓ y paid</li> <li>- ↓ capital outflow (AIA)</li> </ul> </div> </div>
<p><b>Depreciation in AUD (DECREASE in price of AUD)</b></p>	<div style="display: flex; justify-content: space-around;"> <div data-bbox="483 1637 946 1995"> <p><i>Depreciation (↓ p of AUD)</i></p> <p>↓ Demand (↓ CR)</p> <ul style="list-style-type: none"> <li>- ↓ imports</li> <li>- ↓ y paid</li> <li>- ↓ capital outflow (AIA)</li> </ul> </div> <div data-bbox="970 1637 1393 1995"> <p><i>Supply (↑ CR)</i></p> <ul style="list-style-type: none"> <li>- ↑ imports exports</li> <li>- ↑ y paid y received</li> <li>- ↑ capital inflow (FI)</li> </ul> </div> </div>

<p>Decrease in coal exports to china</p>	 <ul style="list-style-type: none"> <li>- the diagram shows a decrease in demand for the AUD, from D to D1</li> <li>- This is due to a decrease in coal exports to China, which reduces the credit transactions into Australia, therefore, there are less buyers of the AUD</li> <li>- The decrease in demand creates a surplus of AUD in the forex market, putting pressure on the exchange rate to depreciate from D to D1, and quantity to fall to QE1</li> </ul>
<p>RESPONSE SHOULD INCLUDE</p>	<ul style="list-style-type: none"> <li>- What</li> <li>- Why</li> <li>- Shortage/surplus</li> <li>- P change</li> <li>- Change in quantity</li> </ul>
<p><b>Factors affecting Exchange rate</b></p>	<ul style="list-style-type: none"> <li>- Domestic growth</li> <li>- Domestic savings</li> <li>- World growth</li> <li>- World commodity prices</li> <li>- Interest rate differential</li> <li>- Relative inflation</li> <li>- Terms of Trade (TOT)</li> </ul>
<p><b>Commodity prices (high)</b></p>	<p><b>Exports</b></p> <ul style="list-style-type: none"> <li>- Aus is commonly referred to as a commodity's currency</li> <li>- Affects export revenue</li> <li>- Increase in D due to increased export revenue (commodities are price inelastic)</li> <li>- appreciation</li> </ul>
<p><b>Interest rate differential (low)</b></p>	<p>(m, I, y)</p> <p><b>Investment</b></p> <ul style="list-style-type: none"> <li>- has a significant impact on foreign investment</li> <li>- RBA decreases interest rates (cash rate)</li> <li>- Decrease in FI, due to decrease in rate of return on investment</li> <li>- Less interest earned on loans to Australia (for foreign investors)</li> <li>- Decrease in Demand for AUD, depreciation</li> </ul> <p><b>Income</b></p> <p>In the long term...</p>

	<ul style="list-style-type: none"> <li>- Decrease in FI</li> <li>- Decrease in primary income payments</li> <li>- Decrease in supply</li> <li>- Appreciation</li> </ul> <p><b>Import spending</b></p> <ul style="list-style-type: none"> <li>- Decrease in interest rates causes an expansionary effect as the cost of credit falls</li> <li>- Increase in cash flow of HH and firms as current credit payments decrease</li> <li>- Increase in disposable income</li> <li>- Increase in import spending</li> <li>- Increase in supply</li> <li>- depreciation</li> </ul>
<b>Relative inflation (decrease)</b>	<p><b>Exports</b></p> <ul style="list-style-type: none"> <li>- more countries will import our goods as prices are cheaper</li> <li>- increase international competitiveness</li> <li>- increase in demand for AUD</li> <li>- appreciation</li> </ul> <p><b>Imports</b></p> <ul style="list-style-type: none"> <li>- increase in domestic imports replacement goods</li> <li>- prices cheaper domestically than overseas</li> <li>- appreciation</li> </ul>
<b>Domestic growth (decrease)</b>	<p><b>Imports</b></p> <ul style="list-style-type: none"> <li>- low growth = decrease in import spending due to less disposable income</li> <li>- decrease in m spending by firms on capital equipment</li> <li>- decrease in supply</li> <li>- appreciation</li> </ul>
<b>Terms of trade (increase)</b>	<p><b>Export revenue</b></p> <ul style="list-style-type: none"> <li>- export prices are rising relative to import prices</li> <li>- increase in revenue relative to import payments</li> <li>- increase in D</li> <li>- appreciation</li> </ul> <p><b>Import payments</b></p> <ul style="list-style-type: none"> <li>- import payments less than export revenue</li> <li>- decrease in supply</li> <li>- appreciation</li> </ul>
<b>Domestic savings (falling)</b>	<p><b>Investment</b></p> <ul style="list-style-type: none"> <li>- widens investment/savings gap</li> <li>- increase in demand for FI</li> <li>- increase in demand</li> <li>- appreciation</li> </ul>
<b>World growth (increase)</b>	<p><b>Exports</b></p> <ul style="list-style-type: none"> <li>- affects demand for exports</li> <li>- an increase in growth of trading partners will...</li> <li>- increase demand for AUS commodities</li> <li>- increase demand for AUD</li> </ul>

	<ul style="list-style-type: none"> <li>- appreciation</li> </ul>
<b>KEY FACTORS AFFECTING AUD</b>	<ul style="list-style-type: none"> <li>- Commodity prices</li> <li>- Interest rate differential</li> </ul>
<b>Commodity prices</b>	<ul style="list-style-type: none"> <li>- Aus dollar referred to as 'commodity currency'</li> <li>- 65% of aus exports are made up of primary commodities</li> <li>- changes in the price of these commodities have a significant effect on export revenue (Australia's national income)</li> <li>- exports of goods and services contributed to over 20% of GDP</li> <li>- STRONG CORRELATION BETWEEN Australian commodity prices and AUD</li> <li>- RBA compiles an index of commodity prices weighted according to the importance of the commodity in Australia's trade</li> <li>- A general increase in commodity prices will result in an appreciation of AUD (ceteris paribus)</li> </ul>
<b>Interest rate differential with USA</b>	<ul style="list-style-type: none"> <li>- Can be measured by the difference in official cash rates between the two countries</li> <li>- IRD affects foreign investors and the flow of financial capital</li> <li>- International investors seek out the highest returns for their funds</li> <li>- If interest rates in the US rise relative to Australia, the AUD will depreciate</li> <li>- Less foreign investment flow = decrease in demand for AUD</li> <li>- Aus investors shift funds overseas = increase in supply</li> </ul>
<b>Types of exchange rate systems</b>	<ul style="list-style-type: none"> <li>- Floating ER</li> <li>- Fixed ER</li> <li>- Managed ER</li> </ul>
<b>Floating ER</b>	<ul style="list-style-type: none"> <li>- The AUD was first floated in 1983</li> <li>- Prior to 1983, Australia had a peg crawl system where the exchange rate was fixed according to movements of another currency</li> <li>- A floating system allows the forex market to determine the price of AUD at equilibrium</li> <li>- Any changes to market conditions will result in the automatic adjustment to a new equilibrium price where the AUD can freely float (appreciate/depreciate) to the new price.</li> </ul>
<b>Fixed ER</b>	<ul style="list-style-type: none"> <li>- The government body (RBA) will intervene in the FOREX market to keep the price of the currency at a pre-determined fixed rate</li> <li>- The method of intervention in the FOREX market is buying and selling the currency</li> </ul> <p>For example; presume there is an increase in demand for AUD</p>

	<ul style="list-style-type: none"> <li>- The increase in demand for AUD will create a shortage of AUD in the market putting pressure on the AUD to appreciate</li> </ul> <p><u>Increase in supply – shortage</u></p> <ul style="list-style-type: none"> <li>- Government will intervene as a seller</li> <li>- Supply will increase from S to S1</li> <li>- RBA will enter the market as a seller to remove the shortage and maintain the exchange rate at the fixed rate</li> </ul> <p><u>Decrease in supply creating a surplus</u></p> <ul style="list-style-type: none"> <li>- Government will intervene as a buyer</li> <li>- Demonstrates a surplus in the market</li> <li>- Demand will increase from D to D1, demonstrating the government buying the surplus, in order to equilibrate the AUD.</li> </ul>
<b>Managed ER</b>	<ul style="list-style-type: none"> <li>- The exchange rate is largely determined by the FOREX market (floating)</li> <li>- However, the RBA will intervene in the market to prevent large fluctuation in the exchange rate (stop the AUD from appreciating/depreciating too significantly)</li> <li>- This is referred to as a dirty float</li> <li>- Australia’s exchange rate system is known as ‘lightly managed’</li> </ul>
<b>Methods of intervention</b>	<ol style="list-style-type: none"> <li>1. <b>Direct intervention</b></li> <li>2. <b>Indirect intervention</b></li> </ol>
<b>Direct intervention</b>	<ul style="list-style-type: none"> <li>- Entering the market as a buyer or seller</li> </ul> <p>If the AUD appreciates too <b>high</b>...</p> <ul style="list-style-type: none"> <li>- the RBA will sell the AUD</li> <li>- increasing supply, putting pressure on AUD to depreciate</li> </ul> <p>If the AUD depreciates too <b>low</b>...</p> <ul style="list-style-type: none"> <li>- RBA will buy the AUD</li> <li>- Increase in demand, puts pressure on AUD to appreciate</li> </ul>
<b>Indirect intervention</b>	<ul style="list-style-type: none"> <li>- Implementing monetary policy</li> <li>- Changing the cash rate and therefore, interest rates in the economy</li> <li>- Interest rates affect foreign investment and import spending</li> </ul> <p>If the AUD appreciates too <b>high</b>...</p> <ul style="list-style-type: none"> <li>- the RBA will decrease interest rates</li> <li>- decrease in FI – decrease in demand, depreciation, increase import spending, increase supply, depreciation</li> </ul> <p>If the AUD depreciates too <b>low</b>...</p> <ul style="list-style-type: none"> <li>- the RBA will increase interest rates</li> <li>- Increase FI, increase D, appreciation, decrease import spending, decrease supply, appreciation.</li> </ul>

<b>Floating ER and the balance of payments (BOP)</b>	<ul style="list-style-type: none"> <li>- Under a floating exchange rate, the BOP will always equal 0</li> <li>- A floating exchange rate determines the value of a currency at equilibrium where demand and supply intersects.</li> </ul> <p>(supply = DR) (debit = CR)</p> <ul style="list-style-type: none"> <li>- At equilibrium price ER, the value of all credit transactions are equal to the value of all debit transactions, therefore BOP will equal 0.</li> </ul>
<b>Fixed V floating systems</b>	
<b>Advantages of Floating</b>	<ul style="list-style-type: none"> <li>■ Reduces the need for foreign currency reserves</li> <li>■ Increases the effectiveness of monetary policy</li> <li>■ Prevents imported inflation exports</li> <li>■ Insulation for an economy after an external shock</li> <li>- e.g. drought</li> <li>- decrease agricultural commodity, decrease in export, decrease in demand, depreciation, increase in international competition, increase demand for exports</li> <li>■ reduce swings in CAD (partial automatic correction)</li> <li>- e.g. CAD worsens, debits rising relative to credits, depreciation, increase international comp, demand for export, decrease d for imports, increase in BOGS, CAD improves</li> <li>■ true evaluation of the economy</li> <li>■ more flexible as is allowed to react to economic conditions</li> </ul>
<b>Arguments for fixed</b>	<ul style="list-style-type: none"> <li>■ increased stability</li> <li>■ less uncertainty</li> <li>■ reduced cost of currency hedging for business. Regarding currency fluctuations.</li> </ul>
<b>Effects of a depreciation</b>	<ul style="list-style-type: none"> <li>- positive and negative</li> </ul>
<b>Positive effects of depreciation</b>	<ul style="list-style-type: none"> <li>■ increase international competition</li> <li>■ decrease imports</li> <li>■ increase exports</li> <li>■ increase BOGS</li> <li>■ increase domestic import replacement goods</li> <li>■ increase employment in export industry and growth</li> <li>■ goods cheaper as inflation is low</li> <li>■ increase export revenue</li> <li>■ cheaper to invest within Australia</li> </ul>
<b>Negative effects of depreciation</b>	<ul style="list-style-type: none"> <li>■ more expensive to travel/buy overseas currency</li> <li>■ increase cost of imports of consumers</li> <li>- cost push inflation</li> <li>■ may be some demand pull inflationary pressure as export industry increases</li> </ul>

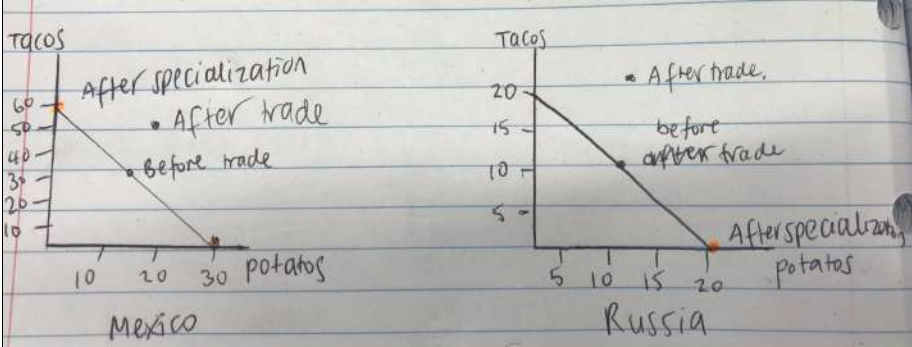
	<ul style="list-style-type: none"> <li>■ increase in imports which cannot be replaced by domestic goods e.g. PMV, consumers forced to buy expensive imports</li> <li>■ primary income payments more expensive</li> </ul>
<b>Appreciation and Dutch disease</b>	<ul style="list-style-type: none"> <li>- occurs from a commodity export boom which results in an appreciation of the currency</li> <li>- during the mining boom, commodity prices peaked, causing the AUD to appreciate to its highest level</li> <li>- the appreciation reduced international competitiveness for Australian exports</li> <li>- however, despite the high dollar, china's demand for commodities remained strong, preventing the dollar from depreciating.</li> <li>- Non-mining sector (e.g. retail, manufacturing) in Australia suffered as the appreciation increased</li> <li>- The price of AUS non-mining exports reduced export revenue</li> <li>- This created a two-speed economy where the mining sector was expanding as the expense of the non-mining sector</li> <li>- This is known as the Dutch disease</li> </ul>
<b>Foreign investment</b>	<ul style="list-style-type: none"> <li>- the stock of financial assets in Australia owned by overseas residents</li> <li>- AKA foreign liabilities, capital inflow</li> </ul>
<b>Australian investment abroad</b>	<ul style="list-style-type: none"> <li>- The stock of financial assets overseas owned by Australian residents</li> </ul>
<b>4 types of investment</b>	<p><u>Portfolio</u></p> <ul style="list-style-type: none"> <li>- Less than 10% ownership of an asset</li> </ul> <p><u>Direct</u></p> <ul style="list-style-type: none"> <li>- 10% or more ownership of an asset</li> </ul> <p><u>Government borrowing and lending</u></p> <ul style="list-style-type: none"> <li>- government borrowing and lending money for economic benefit</li> </ul> <p><u>Reserve assets</u></p> <ul style="list-style-type: none"> <li>- buying and selling of foreign currency</li> </ul>
<b>Balance on the financial account</b>	<ul style="list-style-type: none"> <li>- difference between the monetary value of foreign investment and the monetary value of Australian investment abroad</li> </ul> <p>AKA Net foreign liabilities, net capital inflow, net international investment position (NIIP)</p>
<b>2 main forms of investment</b>	<ol style="list-style-type: none"> <li>1. equity securities</li> <li>2. debt securities</li> </ol>
<b>Equity securities</b>	<ul style="list-style-type: none"> <li>- financial assets which result in the investor gaining a degree of ownership e.g. portfolio, direct</li> </ul>
<b>Debt securities</b>	<ul style="list-style-type: none"> <li>- financial assets in the form of borrowing and does not result in ownership of an asset e.g. portfolio invest</li> </ul>

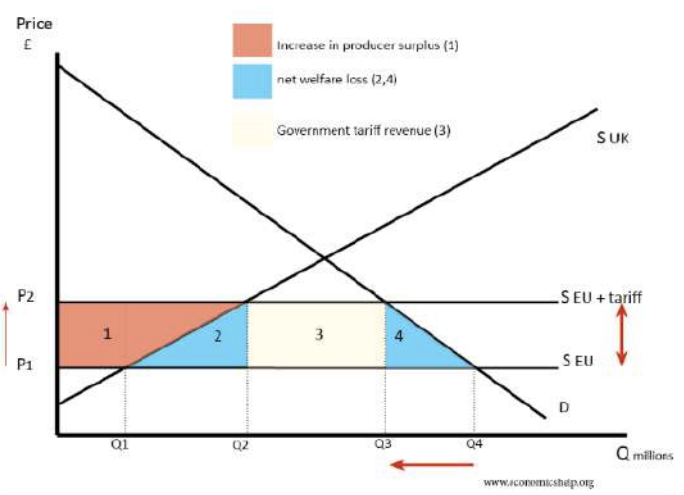
	<p><b>Gross</b></p> <ul style="list-style-type: none"> <li>- sum of (total)</li> </ul> <p><b>Net</b></p> <ul style="list-style-type: none"> <li>- balance</li> </ul>
<b>Equations</b>	<p>Gross foreign equity + gross foreign debt = <b>foreign liabilities</b> (FI)</p> <p>Gross Aus equity abroad + gross Aus lending = foreign assets (AIA)</p> <p>Net FOREIGN EQUITY + net FOREIGN DEBT = Net FOREIGN LIABILITIES</p>
<b>Foreign investment in Australia</b>	<ul style="list-style-type: none"> <li>- Australia is in the form of debt securities.</li> </ul> <p>Debt securities = 63%</p> <p>Equity securities = 37%</p> <ul style="list-style-type: none"> <li>- Portfolio investment does not result in foreign control of Australian firms</li> <li>- Foreign investment is influenced by profit expectations, interest rate differentials and political stability</li> <li>- Australia represents a secure and safe haven for financial capital.</li> <li>- Higher interest rates attract portfolio investment chasing high returns.</li> </ul>
<b>Trend in net foreign liabilities</b> (balance in fin a/c)	<ul style="list-style-type: none"> <li>- Net foreign liabilities</li> <li>- Australia is a recipient of foreign investment</li> <li>- Both foreign liabilities and foreign assets have increased significantly in the last 35 years</li> <li>- Net foreign debt is positive which means Australia borrows more than it lends</li> <li>- Net foreign equity is negative so Australia buys more assets than we sell</li> <li>- Overall, net foreign liabilities are positive as the amount of net foreign debt exceeds the negative net foreign equity balance.</li> <li>- Australia favours borrowing over selling our assets (portfolio exceeds direct investment)</li> <li>- All of net foreign liabilities is in the form of borrowing</li> </ul>
<b>Costs and benefits of foreign investment</b>	
<b>BENEFITS</b>	<ul style="list-style-type: none"> <li>- can be derived from the acronym GIFTE</li> </ul> <p><u>Increase in Government revenue</u></p> <ul style="list-style-type: none"> <li>- FI <b>increases</b> rate of investment and therefore economic growth</li> <li>- <b>Increases</b> tax receipts from income, from higher employment and expenditure (GST)</li> </ul> <p><u>Higher rate of Investment</u></p> <ul style="list-style-type: none"> <li>- Australia has an investment- savings gap where Australia's small population does not produce enough savings to meet investment needs</li> </ul>

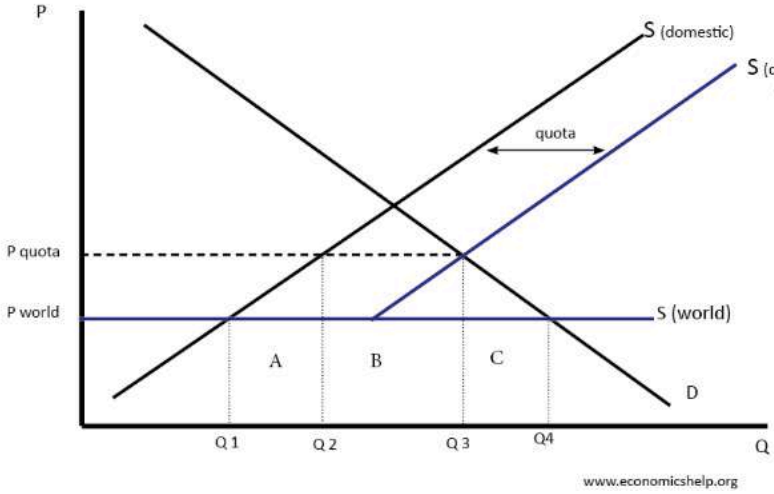


	<ul style="list-style-type: none"> <li>- Australia relies on foreign investment to achieve a higher rate of investment</li> <li>- A higher rate of investment <b>increases</b> aggregate demand hence, a higher rate of economic growth.</li> </ul> <p><u>Finances capital</u></p> <ul style="list-style-type: none"> <li>- Foreign investment provides finance for industries to purchase more capital stock</li> <li>- A higher level of capital stock, will <b>increase</b> aggregate supply, <b>increasing</b> economic growth and lowering price levels</li> </ul> <p><u>Encourages the transfer of Technology</u></p> <ul style="list-style-type: none"> <li>- Foreign direct investment encourages the transfer of new ideas and technologies</li> <li>- Higher quality goods and services</li> <li>- <b>Increases</b> aggregate supply and international competitiveness</li> <li>- An <b>increase</b> in aggregate supply will <b>increase</b> economic growth.</li> </ul> <p><u>Finances Economies of scale</u></p> <ul style="list-style-type: none"> <li>- Provides necessary finance for economies of scale</li> <li>- Increases efficiency and international competitiveness</li> <li>- Capital deepening</li> </ul>
<b>COSTS</b>	<p><u>Loss of economic sovereignty</u></p> <ul style="list-style-type: none"> <li>- Increases in foreign equity results in more foreign control/ less domestic control of assets</li> <li>- Foreign ownership could challenge domestic political/economic agendas</li> <li>- Increases income flows overseas rather than domestically.</li> </ul> <p><i>E.G. debate over Chinese ownership of the Darwin port as it is used by the Australian navy and could pose a national security risk.</i></p> <p><u>Increased vulnerability to external shocks</u></p> <ul style="list-style-type: none"> <li>- Foreign debt securities make up 63% of foreign investment</li> <li>- Debt securities is highly volatile and could see external shocks (e.g. GFC)</li> <li>- Emphasized in Australia by sharp and rapid movements in foreign investment</li> </ul> <p><u>Risk of increased income payments to foreign investors</u></p> <ul style="list-style-type: none"> <li>- If interest rates rise, so does return to pay back on, particularly debt securities</li> <li>- Debt trap on future generations</li> <li>- Increase primary income debit</li> <li>- Decrease net income</li> <li>- CAD worsens</li> </ul>

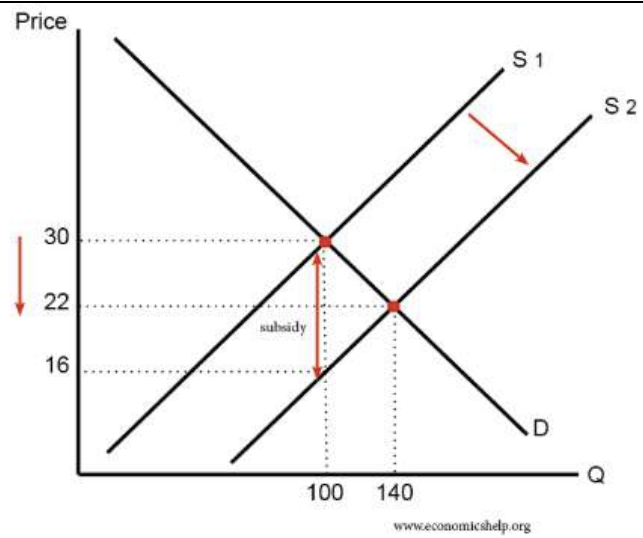
	<p><u>Increase in structural unemployment</u></p> <ul style="list-style-type: none"> <li>- Companies are restructured to reduce costs</li> <li>- Sectors which receive significant investment expand at a faster rate than the other sectors</li> <li>- Shifts employment (e.g. retail to mining)</li> </ul>
<p>Foreign debt</p>	<ul style="list-style-type: none"> <li>- Borrowing overseas by Australian resident's (loan from overseas)</li> <li>- Foreign debt can be both private (firms) or public</li> <li>- In Australia...</li> </ul> <p>74% = private 24% = public</p> <ul style="list-style-type: none"> <li>- Private debt is preferable as the public debt is a burden on taxpayers</li> <li>- Private debt derives economic benefits</li> <li>- Most private debt (70%) is paid within 5 years</li> </ul>
<p><b>Is foreign debt a problem?</b></p>	<ul style="list-style-type: none"> <li>- While certain costs can be identified with foreign debt, it must not be forgotten that there are also benefits</li> <li>- If debt results in a higher rate of economic growth and a higher level of investment then the economy will gain</li> </ul> <p><u>Benefits</u></p> <ul style="list-style-type: none"> <li>- Australia's national balance sheet shows that while Australia's foreign liabilities have increased over time, so has Australia's assets</li> <li>- Australia's assets have increased at a faster rate than liabilities</li> </ul> <p><u>Costs</u></p> <ul style="list-style-type: none"> <li>- Aus credit rating may be downgraded, meaning that future borrowing will be subject to an increase in interest rates</li> <li>- Higher interest rates lower standard of living/ decrease in disposable income</li> <li>- If TOT decreases, export revenue decreases, increases burden of debt</li> <li>- If AUD decreases, increase size of foreign currency denominated debt, further increasing interest payments.</li> </ul>
<p>Why nations trade</p>	<ul style="list-style-type: none"> <li>■ Economic efficiency</li> <li>- Trade between nations allows countries to specialize in industries where their resources are best suited – <b>allocative efficiency</b></li> <li>- Nations are endowed with different resources</li> <li>- Each country should specialize in the industry where they are best suited, and produce a surplus</li> <li>- This surplus is then traded with countries specializing in other goods</li> <li>- This allows countries to gain access/consume a level of output which they cannot produce themselves</li> </ul>

	<ul style="list-style-type: none"> <li>- Countries can consume outside the PPC</li> <li>- Countries specialize in goods where they have either an <b>absolute advantage</b> or a <b>comparative advantage</b></li> </ul>
Absolute advantage	<ul style="list-style-type: none"> <li>- Can determine the good a country should specialize in compared to another country</li> <li>- Absolute advantage is when one country can produce more units of a good than another country</li> </ul>
Comparative advantage	<ul style="list-style-type: none"> <li>- Where one country can produce a good at a lower opportunity cost than another country</li> <li>- Countries will specialize in goods with a comparative advantage when one country has the absolute advantage in both goods.</li> </ul>
Partial specialization	<ul style="list-style-type: none"> <li>- In order to increase total production of both goods, the country who has the absolute advantage in both goods, will allocate some resources to producing the good it doesn't have the comparative advantage in producing</li> </ul>
Comparative advantage steps	<ol style="list-style-type: none"> <li>1. PPC</li> <li>2. Absolute advantage</li> <li>3. Opportunity cost</li> <li>4. Comparative advantage</li> <li>5. Before trade (50% resources allocated)</li> <li>6. After specialization</li> <li>7. After partial specialization (70, 30)</li> <li>8. After trade</li> <li>9. Gains of trade</li> <li>10. TOT</li> </ol>
Gains of trade on PPC	
Assumptions of the theory of comparative advantage	<ul style="list-style-type: none"> <li>- Only 2 countries</li> <li>- Each country only produces two goods</li> <li>- Total free trade (no gov intervention)</li> <li>- No transport costs</li> <li>- All resources easily transferrable</li> <li>- All resources fully employed</li> </ul>
Limitations to comparative advantage	<ul style="list-style-type: none"> <li>- There are more countries</li> <li>- Countries produce more than 2 goods</li> <li>- Some countries are not included in free trade agreement</li> </ul>

Sources of comparative advantage	<ul style="list-style-type: none"> <li>- Endowment and quality of resources</li> <li>- technology</li> </ul>
<b>TRADE PROTECTION</b>	<ul style="list-style-type: none"> <li>- measures by the government to give domestic producers an artificial advantage over foreign producers</li> </ul>
Aims of protection	<ul style="list-style-type: none"> <li>- <b>decrease</b> price of exports = <b>subsidies</b></li> <li>- <b>increase</b> price of imports = <b>tariffs</b></li> <li>- <b>decrease</b> quantity of imports = <b>quotas/embargos/import licencing/voluntary export restraint</b></li> </ul>
<b>TARIFFS</b>	<ul style="list-style-type: none"> <li>- tax on imported goods which result in an increase in world price</li> </ul> <p>S(d) represents domestic supply World price (<math>P_w</math>) is determined by the foreign supply curve (<math>S_f</math>)</p>  <ul style="list-style-type: none"> <li>- When the market is open to free trade, the price is at <math>P(w)</math></li> <li>- At <math>P(w)</math>, domestic consumers are willing to buy <math>Q_1</math></li> <li>- Domestic producers are willing to sell <math>Q_2</math></li> <li>- This creates a shortage in the market, which is made up by imports</li> <li>- The government will implement a tariff on imports in order to give domestic producers an artificial advantage</li> <li>- The tariff placed on imports shifts the foreign supply curve and raises the price to <math>T</math></li> <li>- At price <math>T</math>, domestic consumers are willing to buy goods at <math>Q_4</math>, domestic producers are willing to sell <math>Q_3</math></li> <li>- This creates a shortage in the market which is made up of imports</li> <li>- The area 3 represents government revenue</li> </ul>
<b>Effects of a tariff</b>	<ul style="list-style-type: none"> <li>• Consumer surplus falls</li> <li>• Consumer real cost falls</li> <li>• Some consumer surplus is lost to DWL, some to producers and some to government revenue</li> </ul>

	<ul style="list-style-type: none"> <li>• Affects domestic producers which have to use goods from protected industries</li> </ul>
<p><b>SUBSIDES</b></p>	<p>AIM: decrease the price of domestic goods to increase international competitiveness</p> <ul style="list-style-type: none"> <li>- Subsidies are payments/grants provided by the government to domestic producers in order to give an artificial advantage over foreign producers</li> <li>- Subsidies can be provided to... <ul style="list-style-type: none"> <li>■ Australian producers of exports</li> <li>■ Australian producers of import replacement goods</li> </ul> </li> </ul>
<p><b>SUBSIDES – domestic producers of import replacement goods</b></p>	 <p>The graph illustrates the effect of a subsidy on domestic supply. The vertical axis represents Price (P) and the horizontal axis represents Quantity (Q). A downward-sloping demand curve (D) and a horizontal world supply curve (S(world)) are shown. The world price is P<sub>world</sub>. Domestic supply is shown as S(domestic) and S(domestic) + quota. A quota is indicated by a horizontal arrow between S(domestic) and S(domestic) + quota at price P<sub>quota</sub>. Areas A, B, and C are labeled between the curves.</p> <ul style="list-style-type: none"> <li>- S(d) represents domestic supply</li> <li>- P<sub>w</sub> world price is determined at foreign supply (S<sub>f</sub>)</li> <li>- At P<sub>w</sub>, domestic consumers willing to buy Q<sub>4</sub>, domestic producers willing to sell at Q<sub>1</sub></li> <li>- This creates a shortage, which is made up by imports</li> <li>- The government's decision to provide a subsidy to domestic producers will increase the domestic supply curve from S(d) to S(s), as production costs fall</li> <li>- The price remains at P(w), therefore domestic consumers continue to demand Q<sub>4</sub></li> </ul> <p><small>www.economicshelp.org</small></p>

**SUBSIDIES – Domestic producers of exports**



- At  $P_w$ , consumers willing to buy at  $Q_2$
- domestic producers willing to sell at  $Q_1$
- this creates a surplus in the market, which is made up by exports
- the subsidy to domestic producers will increase the domestic supply curve from  $S(d)$  to  $(s)$  as production costs fall
- the price remains at  $P_w$  therefore domestic consumers continue to demand  $Q_1$
- However, domestic producers are now willing to sell  $Q_3$
- The surplus  $(Q_1-Q_3)$  is made up of exports

**Arguments FOR protection**

**CANTDIE**  
**C = Cheap labour**  
**A = Anti-dumping**  
**N=National defence**  
**T = Trade balance**  
**D = Diversification**  
**I = Infant industry**  
**E= Employment**

***Cheap labour***

- Australian industries need to be protected from industries where wages are low
- Australian workers receive a higher wage because productivity is higher
- Countries have an abundance of labour relative to other resources with comparative advantage
- Australians need an artificial advantage because we cannot compete with overseas cheap labour

***Anti-dumping***

“if a company exports a product at a price lower than the price it usually charges on its own home market, it is said to be ‘dumping’ a product”  
Points for

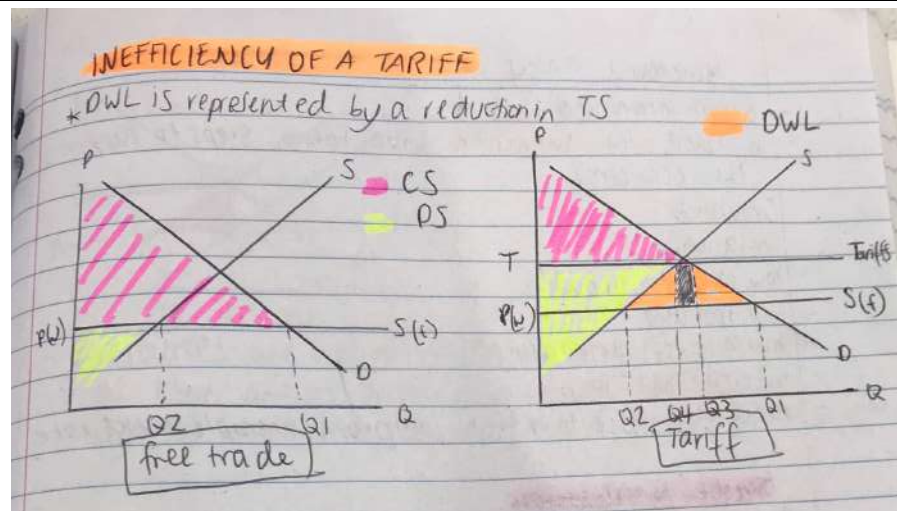
- Foreign firm is engaging in unfair competition in order to drive out domestic producers

	<ul style="list-style-type: none"> <li>- Overseas firm may be large enough to sustain short run losses by selling at low prices, and increase its price in the long run</li> <li>- May also occur when firms have large surpluses</li> <li>- They cannot sell in their own market or their product has been banned</li> <li>- Firm will try and offload product in overseas market for whatever price they can get</li> <li>- If dumping does cause harm, temporary protection may deter this sort of activity</li> </ul> <p><u>Counterargument</u></p> <ul style="list-style-type: none"> <li>- Hard to determine if dumping is actually taking place</li> <li>- Countries could just have productive efficiencies</li> </ul>
<b>National defence</b>	<ul style="list-style-type: none"> <li>- Import barriers necessary to protect industries that are vital to the economy</li> <li>- Argument was popular in the era of global conflict</li> </ul> <p><u>Counterargument</u></p> <ul style="list-style-type: none"> <li>- Trade fosters international cooperation, while protectionist policies reduce it</li> </ul>
<b>Trade balance</b>	<ul style="list-style-type: none"> <li>- Trade deficit should be eliminated/reduced by restricting imports through protective measures</li> </ul> <p><u>Counterargument</u></p> <ul style="list-style-type: none"> <li>- Assumes there is something wrong with a trade deficit</li> <li>- Implies that a trade surplus is favourable/vice versa</li> <li>- Protectionist policies designed to decrease imports</li> <li>- Will cause exports to decrease, too</li> <li>- Protection raises the cost of other domestic industries which reduces their competitiveness and therefore their exports</li> <li>- Other countries may retaliate and impose restrictions on their imports</li> <li>- Both imports and exports can bring gains to the economy</li> </ul>
<b>Diversification</b>	<ul style="list-style-type: none"> <li>- If a country fully applied comparative advantage, it may specialize in a narrow range of products</li> <li>- If all resources were applied in one industry, changes in world demand prices could have significant effects on the economy</li> <li>- A country may benefit from diversifying their industrial base</li> <li>- Protection may then be justified to establish a range of diversified industries</li> <li>- Over time, industry may increase efficiency and become competitive so that in the long run, level of protection can be reduced</li> </ul> <p><u>Counterargument</u></p> <ul style="list-style-type: none"> <li>- countries have a comparative advantage in multiple industries</li> <li>- economies are dynamic and change constantly</li> </ul>

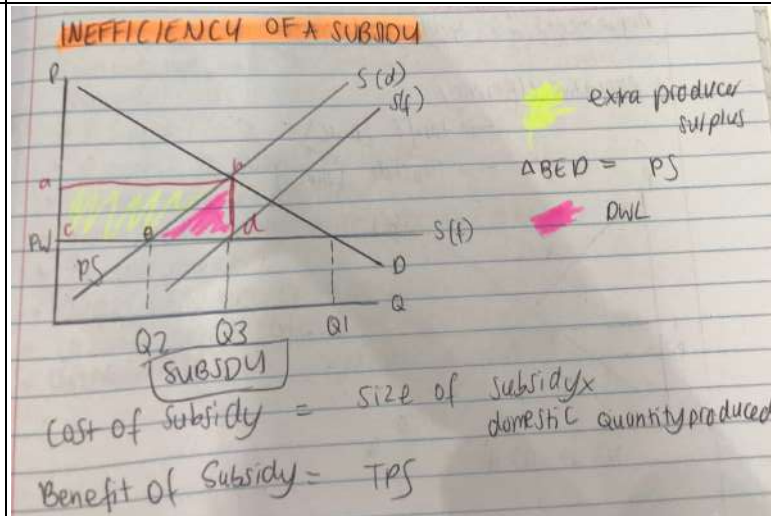
	<ul style="list-style-type: none"> <li>- government shouldn't predict which industries will expand/contract</li> </ul>
<b>Infant industries</b>	<ul style="list-style-type: none"> <li>- new industries need protection until they can take advantage of economies of scale</li> <li>- argued that they will become internationally competitive over time and develop comparative advantage</li> <li>- may be justified in short term, but should be frequently reviewed and progressively reduced over time</li> </ul> <p><u>Counterargument</u></p> <ul style="list-style-type: none"> <li>- protection tends to become long term rather than short term</li> <li>- becomes accustomed to operating with little comp</li> <li>- incentive to innovate/increase efficiency is removed</li> </ul>
<b>Employment</b>	<ul style="list-style-type: none"> <li>- protection will shift consumer spending from foreign goods, to domestic, creating jobs</li> <li>- employment may rise in protected industry</li> </ul> <p><u>Counterargument</u></p> <ul style="list-style-type: none"> <li>- other domestic industries will suffer</li> <li>- increase in unemployment in industries which use protected goods, as production costs are higher</li> <li>- consumer real cost falls for other industries</li> </ul>
<b>TRADE LIBERALISATION</b> (free trade)	<ul style="list-style-type: none"> <li>- refers to removal/reduction of protected trade barriers such as tariffs, subsidies and quotas for a freer flow of goods and services between nations</li> <li>- based on the principle of comparative advantage, where countries specialize in goods where they have the lower opportunity cost than other countries</li> <li>- this will increase worlds production of goods and services, enabling countries to access output beyond productive capacities</li> <li>- producing goods with a low opportunity cost allows economies to allocate resources to their optimal level</li> <li>- this can be illustrated in the market by an increase in total surplus</li> <li>- forms of protection, such as tariffs and subsidies cause a reduction in total surplus, creating a DWL</li> </ul>



**Inefficiency of a tariff**



**Inefficiency of a subsidy**



**Advantages of free trade**

- Increased production
- Productive efficiencies
- Benefits to consumers
- Foreign exchange gains
- Employment
- Economic growth

**Increased production**

- Enables countries to specialise in goods they have comparative advantage in
- Take advantage of efficiencies
- Increases size of firm's market, resulting in lower average costs and increased productivity leading to production

**Productive efficiencies**

- Improves efficiency of resource allocation
- Leads to higher productivity and increasing total domestic output of goods and services
- Increased competition promotes innovative production methods, use of new technology, marketing and distribution methods

<b>Benefits to consumers</b>	<ul style="list-style-type: none"> <li>- Consumers obtain a greater range of goods and services</li> <li>- The increase in competition ensures goods are supplied at lowest prices</li> </ul>
<b>Foreign exchange gains</b>	<ul style="list-style-type: none"> <li>- When overseas buys Australia's goods, we receive hard currency</li> <li>- This money is then used to pay for imports which are produced more cheaply overseas.</li> </ul>
<b>Employment</b>	<ul style="list-style-type: none"> <li>- Trade liberalisation creates losers and winners as resources move to more productive areas of the economy</li> <li>- Increase in employment in export industries</li> <li>- Decrease employment in import competing industries, due to the competitive environment</li> </ul>
<b>Economic growth</b>	<ul style="list-style-type: none"> <li>- Countries involved in free trade experience rising living standards, increased real income, higher rates of growth</li> <li>- This is created by more competitive industries, increase productivity, efficiency, production levels</li> </ul>
<b>Free Trade agreement types</b>	<p>Types</p> <ol style="list-style-type: none"> <li>1. BI-lateral (CHAFTA, AUSFTA)</li> <li>2. Multi-lateral (more than 2 nations e.g. AANZFTA)</li> <li>3. Regional (same geographical union e.g. EU, NAFTA, ASEAN)</li> </ol>
<b>Free trade agreement</b>	<p><b><i>"Agreements between nations as a means of closer economic integration, through the elimination of tariffs and trade barriers which inhibit the international flow of goods, services and investment"</i></b></p>
<b>Trade blocs</b>	<ul style="list-style-type: none"> <li>➤ Regional FTA's act as 'trade blocs'</li> <li>➤ A trade bloc is a group of countries that agree to reduce the trade barriers between themselves, but impose barriers on countries outside the bloc</li> <li>➤ Encourages trade within the region</li> <li>➤ Opens up trade for members, makes it more difficult for outside members to trade</li> <li>➤ Limits growth of prospect countries</li> <li>➤ Goes against concept of free trade</li> </ul>
<b>Trade creation vs Trade diversion</b>	<p><b>Trade creation</b></p> <ul style="list-style-type: none"> <li>- Helps to increase volume of trade</li> <li>- Trade blocs don't create trade</li> </ul> <p><b>Trade diversion</b></p> <ul style="list-style-type: none"> <li>- When trade is diverted from a low-cost producer outside the trade agreement, to a higher cost within the group</li> <li>- Diverting goods which are efficient, to less efficient</li> </ul>
<b>Advantages of free trade</b>	<ul style="list-style-type: none"> <li>• create trade by increased access to overseas markets for Australian exports</li> <li>• increases international import competition</li> <li>• efficient domestic industries will expand</li> <li>• domestic carriers will enjoy lower prices, greater choice of products and better quality</li> </ul>

	<ul style="list-style-type: none"> <li>• long term benefits (international investment, economic development)</li> </ul>
<b>Disadvantages of free trade</b>	<ul style="list-style-type: none"> <li>• can divert trade from cheaper markets which are available</li> <li>• economic benefits are often overstated</li> <li>• selective with political interests ensuring continuing local industry protection</li> <li>• can be inequitable</li> <li>• more complicated business environment for traders and investors</li> </ul>
<b>Globalisation</b>	<ul style="list-style-type: none"> <li>➤ opening up of international borders to the flows of trade, investment, immigration, information and technology</li> <li>➤ freer movement of people, goods, capital and ideas due to increased economic integration</li> <li>➤ in turn, is propelled by increased trade and investment</li> </ul>
<b>Indicators of increased globalisation</b>	<ul style="list-style-type: none"> <li>➤ increasing capital inflows</li> <li>➤ global exports increased</li> <li>➤ rising value of trade</li> <li>➤ growth in internet usage</li> <li>➤ increased migration</li> <li>➤ growing tourism</li> <li>➤ growing importance of trade in the world economy</li> </ul>
<b>Causes of globalisation</b>	<ol style="list-style-type: none"> <li>1. TRADE LIBERALISATION</li> <li>2. INFLUENCE OF WORLD TRADE ORGANISATIONS</li> <li>3. TECHNOLOGICAL ADVANCES</li> <li>4. FOREIGN DIRECT INVESTMENT AND THE GROWTH OF MNC'S</li> </ol>
<b>Trade liberalisation</b>	<ul style="list-style-type: none"> <li>- Involves the reduction/removal of trade barriers such as tariffs and subsidies</li> <li>- Allowed increase of flow of goods and services between countries</li> <li>- Since 1990, world tariff rates have dropped from 29% to 9%</li> <li>- Clear link between increased trade and increased growth</li> <li>- WTO, IMF, RTA</li> </ul>
<i>World Trade Organisation (WTO)</i>	<ul style="list-style-type: none"> <li>• Established 1<sup>st</sup> Jan 1995</li> <li>• Deals with rules of trade at a global or near global level</li> <li>• Aims to promote trade liberalisation</li> </ul> <p><u>Functions</u></p> <ul style="list-style-type: none"> <li>• To administer to WTO agreements</li> <li>• Provide a forum for trade negotiations</li> <li>• Handle trade disputes</li> <li>• Monitor national trade policies</li> <li>• Give technical assistance</li> <li>• Training for developing countries</li> <li>• Cooperate with international organisations</li> </ul>
<i>INTERNATIONAL MONETARY FUND (IMF)</i>	<ul style="list-style-type: none"> <li>• 188 countries</li> <li>• works to foster global monetary co-operation</li> <li>• secure financial stability</li> </ul>

	<ul style="list-style-type: none"> <li>• facilitate international trade</li> <li>• promote high employment + sustainable growth</li> <li>• reduce poverty around the world</li> </ul> <p><u>Provides</u></p> <ul style="list-style-type: none"> <li>- loans to help countries overcome economic difficulty</li> <li>- technical assistance and training</li> </ul>
<b>REGIONAL TRADE AGREEMENTS (RTA)</b>	<ul style="list-style-type: none"> <li>• actions by governments to liberalise/facilitate trade on a regional basis</li> <li>• sometimes through free trade agreements or custom unions</li> </ul> <p><b>E.G. ASEAN, NAFTA, EU</b></p>
<b><u>Technology</u></b>	<ul style="list-style-type: none"> <li>➤ Transport</li> <li>➤ Communication</li> </ul>
<b>TRANSPORT</b>	<ul style="list-style-type: none"> <li>• Technological development in transport has affected road, rail, sea and air travel</li> <li>• Helps boost trade and tourist travel</li> <li>• Changes way we do business</li> <li>• Super tankers have increased the scale of trade between countries</li> <li>• Container ships can carry larger quantities of goods</li> </ul>
<b>COMMUNICATION</b>	<ul style="list-style-type: none"> <li>• Advances in IT and internet have enabled growth in trade of services</li> <li>• Labour now being outsourced to countries where there is a vast supply of cheap labour</li> <li>• Dramatic developments in telecommunication technology</li> <li>• Internet allows people in countries around the world to instantly contact each other</li> </ul>
<b><u>Foreign direct investment</u></b>	<ul style="list-style-type: none"> <li>• Refers to investment which leads to 10% or more ownership of a foreign asset</li> <li>• FDI establishes long lasting links between economies</li> <li>• Increasing FDI has led to significant growth in the role of multinational corporations</li> <li>• Allows for the transfer of technology and management skills</li> <li>• Since 1980, FDI has increased from 6% of world GDP to 30% in 2010</li> </ul>
<b><u>Growth of Multinational Corporations</u></b>	<ul style="list-style-type: none"> <li>• Very large firms with headquarters in one country and subsidiaries in one or more countries</li> <li>• In 40 years, MNC has increased from 7000 to 100,000</li> <li>• MNC's account for ¼ of global GDP</li> <li>• Provides a significant increase in potential earnings as operations spread across borders</li> <li>• Globalisation and technological revolution have created new expansion opportunities for corporations</li> </ul> <p><u>MNC's and the global economy</u></p> <ul style="list-style-type: none"> <li>- 70% of world trade controlled by 500 MNC</li> <li>- top 200 have a combined sales equivalent to 28% of world GDP</li> </ul>

	<ul style="list-style-type: none"> <li>- small group of MNC's control 80% of world economy</li> <li>- US corporations dominate top 200 with 82 slots</li> </ul>
Arguments for globalization	<ul style="list-style-type: none"> <li>➤ Access to a wider variety of goods and services</li> <li>➤ Lower prices</li> <li>➤ More and better paying jobs</li> <li>➤ Increases comp and efficiency</li> <li>➤ Increases economic growth</li> <li>➤ Increases living standards</li> <li>➤ Enabled developing countries to access foreign investment</li> <li>➤ Increases multiculturalism</li> </ul>
Arguments against globalization	<ul style="list-style-type: none"> <li>➤ Higher unemployment amongst unskilled workers</li> <li>➤ Entrenches use of child labour</li> <li>➤ Lowers wages</li> <li>➤ Destroys local cultures</li> <li>➤ Worsens poverty</li> <li>➤ Unfair to developing countries</li> <li>➤ Volatile capital flows have destabilised developing economies</li> <li>➤ Increases environmental damage</li> </ul>
GLOBAL MARKETS (GLOBAL INTERDEPENDENCE)	<ul style="list-style-type: none"> <li>• The process of globalisation has increased significantly over the past few decades</li> <li>• Countries are becoming increasingly integrated</li> <li>• The four main link ages between economies are' <ul style="list-style-type: none"> <li>➤ TRADE</li> <li>➤ TOURISM</li> <li>➤ IMMIGRATION</li> <li>➤ INVESTMENT</li> </ul> </li> <li>• Australia relies heavily on foreign investment in order to fill the investment savings gap</li> <li>• Immigration has been essential to the economy in regard to importing labour skills to address Australia's relatively small population</li> <li>• International tourism has grown in importance due to improvement in transport and communications</li> <li>• Tourism is Australia's 5<sup>th</sup> ranked export</li> <li>• 10-20% of investment comes from overseas</li> </ul>
Global trade	<ul style="list-style-type: none"> <li>• there is a positive relationship between trade and growth</li> <li>• exports contribute to 23% of GDP and 24% of Australian workers are directly involved in trade related activities</li> <li>• world exports as a % of GDP has increased from 21% in 1995 to 30% in 2017</li> <li>• composition of trade is divided up into 3 main categories – <b>agriculture, mining and manufacturing</b></li> <li>• manufactured goods dominates at 70%</li> </ul>

<b>International competitiveness</b>	<ul style="list-style-type: none"> <li>• International competitiveness has a significant effect</li> <li>• Changes in international competitiveness will affect the BOGS in the current account in the BOP</li> <li>• Import replacement goods also affect the volume of imports purchased</li> </ul>
<b>Measurement of international competitiveness</b>	<ul style="list-style-type: none"> <li>➤ Real unit labour cost (RULC)</li> <li>➤ Relative value of AUD</li> <li>- Australia will become less internationally competitive in export markets if its prices rise more quickly than competition</li> <li>- Australia will become less internationally competitive if the value of AUD appreciates relative to currency of competitors (favourable TOT)</li> </ul>
<b>Recent trends in competitiveness</b>	<ul style="list-style-type: none"> <li>- An increase in RULC, TWI and CPI will lead to a reduction in competitiveness relative to Australia's major trading partners</li> <li>- Fall in these measures will lead to improvement of international competitiveness</li> </ul>

#### UNIT 4: MACROECONOMICS

#### Macroeconomic indicators

##### ➤ LEADING

Change before a direction becomes evident in the rest of the economy  
Therefore, predicts trends in economic activity  
e.g. investment, consumer sentiment

##### ➤ CO-INCIDENT

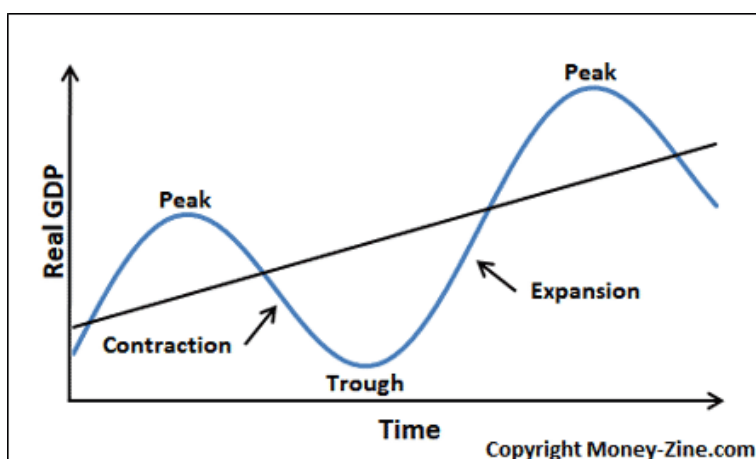
Move at the level of economic activity  
e.g. manufacturing output, production of building materials, retail sales, in

##### ➤ LAGGING

Not expected to show any change until after the economy has been confirmed  
These indicators appear to react to developments which occurred in the past  
e.g. unemployment levels, savings

#### Business cycle

- An economic model used to illustrate the pattern of economic activity



	<ul style="list-style-type: none"> <li>- the business cycle illustrates 2 key trends of economic activity over time</li> </ul> <p><b>1. Cyclical pattern of economic activity</b></p> <ul style="list-style-type: none"> <li>• UPSWING</li> <li>• DOWNTURN</li> <li>• BOOM</li> <li>• TROUGH</li> </ul> <p><b>2. Long term growth</b></p> <ul style="list-style-type: none"> <li>• over time</li> </ul>
<b>Characteristics of each phase</b>	<ul style="list-style-type: none"> <li>❖ Aggregate income, output and expenditure</li> <li>- Growth</li> <li>- Unemployment (type)</li> <li>- Inflation</li> <li>- Interest rates</li> <li>- CAD</li> </ul>
<i>BOOM</i>	<ul style="list-style-type: none"> <li>- Level of economic activity/rate of growth is higher than normal</li> <li>➤ high consumer sentiment</li> <li>➤ high consumption expenditure</li> <li>➤ high business profits</li> <li>➤ high productivity</li> <li>➤ low cyclical unemployment</li> <li>➤ high inflation</li> <li>➤ high level of borrowing</li> </ul>
<i>DOWNSWING</i>	<ul style="list-style-type: none"> <li>➤ falling AE</li> <li>➤ decreasing interest rates</li> <li>➤ decreasing prices</li> <li>➤ increasing cyclical unemployment</li> <li>➤ decreasing borrowing</li> </ul>
<i>TROUGH</i>	<ul style="list-style-type: none"> <li>- level of aggregate expenditure is below the economy's potential</li> <li>➤ high cyclical unemployment</li> <li>➤ decrease business profit</li> <li>➤ low consumer and business sentiment</li> <li>➤ higher savings rates</li> <li>➤ decreased discretionary income</li> </ul>
<i>UPSWING</i>	<p><b>Early</b></p> <ul style="list-style-type: none"> <li>➤ businesses innovate to create competition</li> <li>➤ unemployment rising</li> <li>➤ prices are not increasing</li> <li>➤ room to grow</li> </ul> <p><b>Late upswing</b></p> <ul style="list-style-type: none"> <li>➤ CAD worsens</li> </ul>

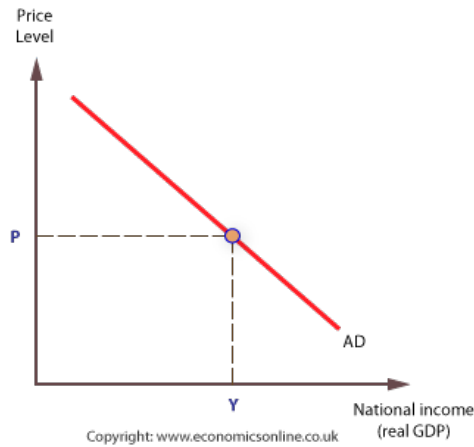
- Frictional and structural unemployment
- Increasing interest rate
- Increasing prices
- Decreasing cyclical unemployment

**ADAS model**

- Macroeconomic model used to illustrate the relationship between a supply (AO) against price

**Aggregate Demand (AE)**

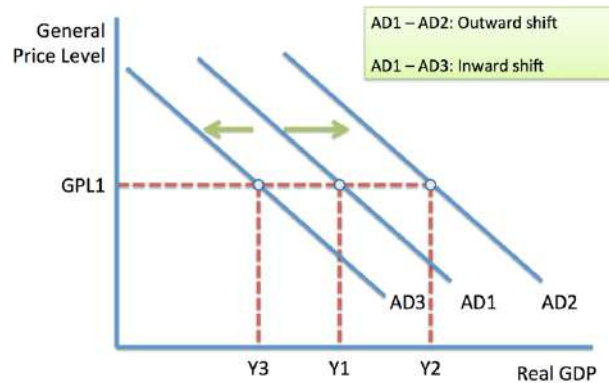
- Refers to total planned spending by all sectors at a price level
- Same as  $AE = C + I + G + (x-m)$



**Reasons AD is negatively sloped**

1. Income effect
  - Real income falls as prices increase
2. Open economy effect
  - Rising prices cause domestic consumers to seek cheaper alternative

**Shifts in the Aggregate Demand Curve (AD)**



**Shifts in AD**

**Factors affecting AD**

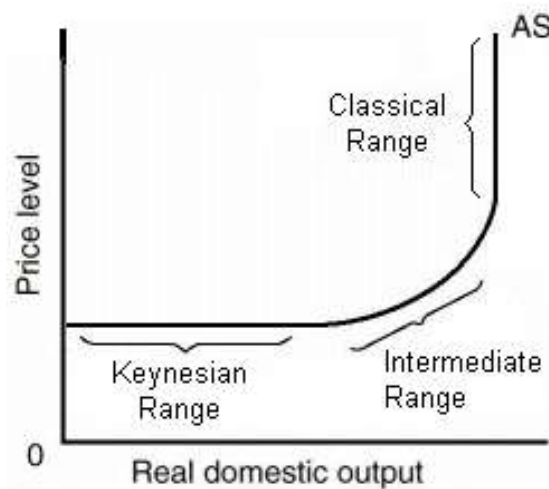
- Inflationary expectations



- Exchange rates
- Interest rates
- World growth
- Level of economic activity
- Tax rates
- Level of disposable income
- Population
- Consumer sentiment

**Aggregate supply (AS)**

- Refers to total planned output at each price level
- Unlike the micro version of the supply curve, the production of goods does not increase indefinitely as resources are limited
- The AS curve can only increase at each price level to an extent



- This gives the AS curve its curved shape

**Ranges of the AS curve**

**KEYNESIAN RANGE**

- an increase in output puts little pressure on prices in the economy
- this is due to the economy operating at a level of output well below full employment
- therefore, excess capacity exists which allows for increasing output

**INTERMEDIATE RANGE**

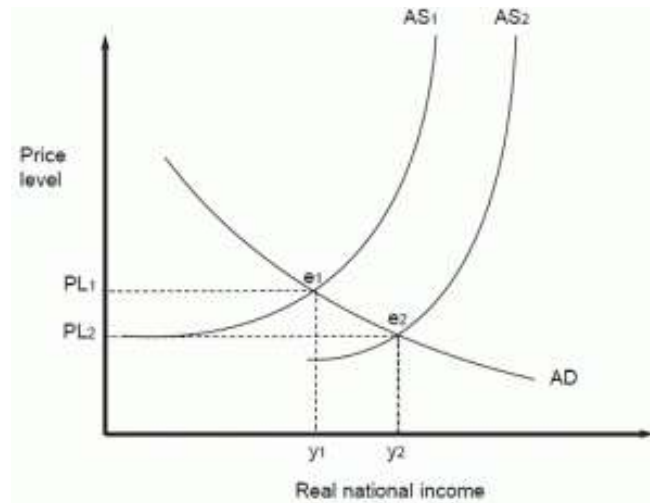
- an increase in output places some pressure on prices in the economy
- this is due to the economy operating at a level of stable employment
- this means there will be some inflationary pressure

**CLASSICAL RANGE**

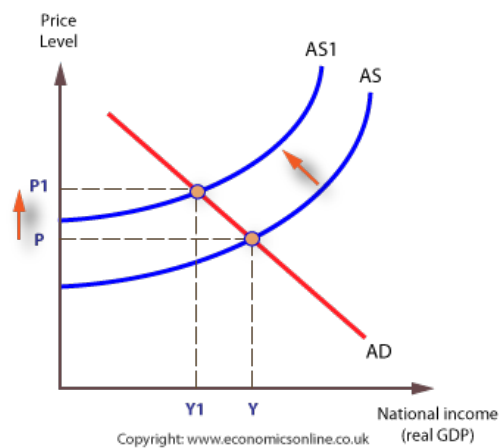
- an increase in output puts a large pressure on prices to rise
- economy is nearing full employment, and resources are becoming scarce
- therefore, a shortage exists which means a change in output will put a large pressure on prices

## Shifts in AS

### INCREASE (deflation)



### DECREASE (inflation)

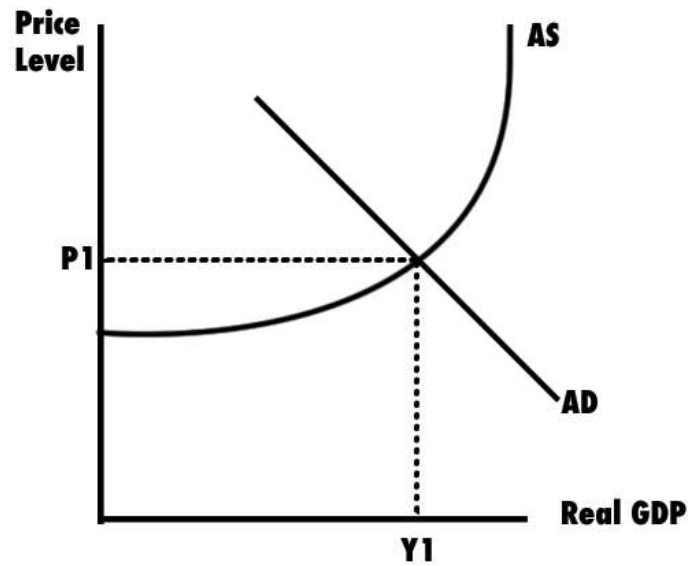


## Factors affecting AS

- technological advancements
- efficiency/productivity
- population growth
- supply shock
- globalization
- education
- investment
- Price of resources (wages, p of oil)
- Price of imported capital

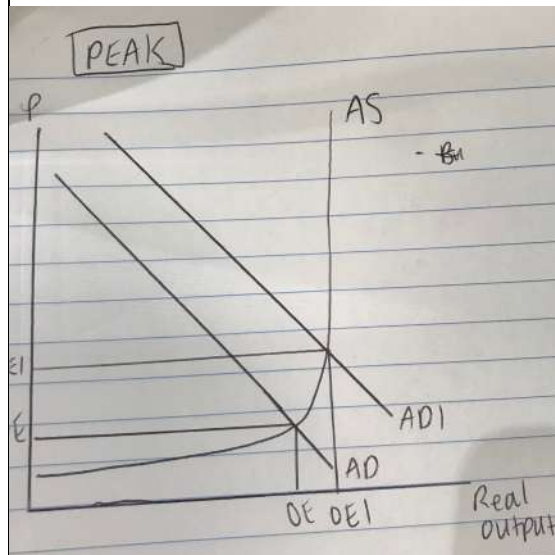
ADAS model

Keynesian AD/AS Model



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- the ADAS model can be used to illustrate the concept of macroecon
  - If AD exceeds AS at a certain price level, it creates a STOCK RL and the economy expands to the equilibrium level of output
  - If AS exceeds AD at a certain price level, it creates a STOCK BL and the economy to contract to equilibrium level of output



**PEAK**

- The economy entering the peak phase of the business cycle is illustr
- AD now intersects the AS curve in the classical range, where the eco
- Growth in the economy increased from OE to OE1
- However, placing significant pressure on prices to rise to PE1 as the

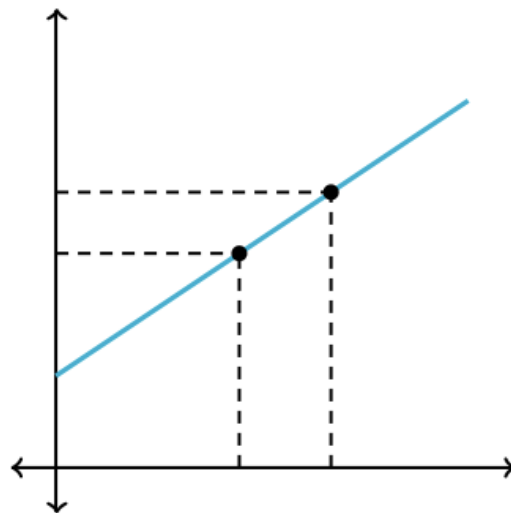
- This creates high demand-pull inflation as there is “too much money
- As the economy nears full employment, unemployment will fall as labor demand increases and unemployment will equal zero

### Short run aggregate supply

- The short run aggregate supply curve represents the level of output
- It is positively sloped because output can be increased as price rises
- The SRAS curve will shift if there is a temporary change in the level of costs
- In other words, it does not alter the productive capacity of the economy

#### FACTORS AFFECTING SRAS

- Costs of production
- Negative supply shocks
- Price of imports



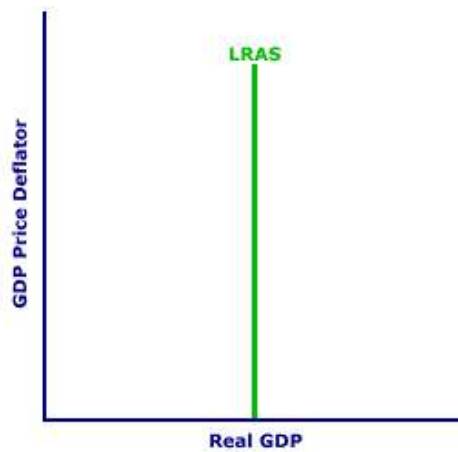
### Long run aggregate supply

- the LRAS represents the economy at full employment
- the curve is vertical as it represents the maximum level of output

#### FACTORS AFFECTING LRAS

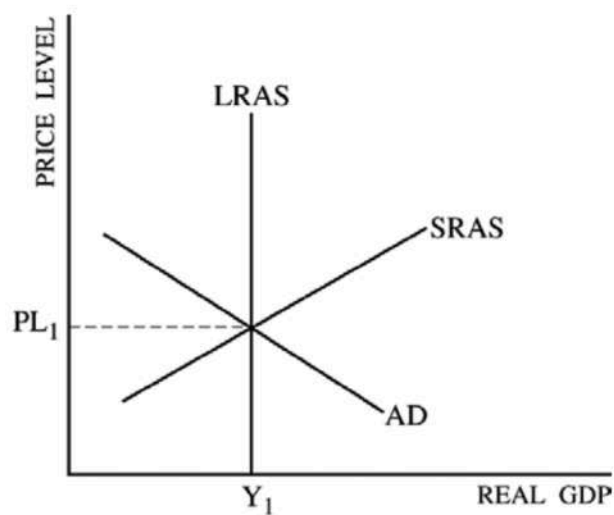
- increased efficiency
- technology

- increase in availability of resources



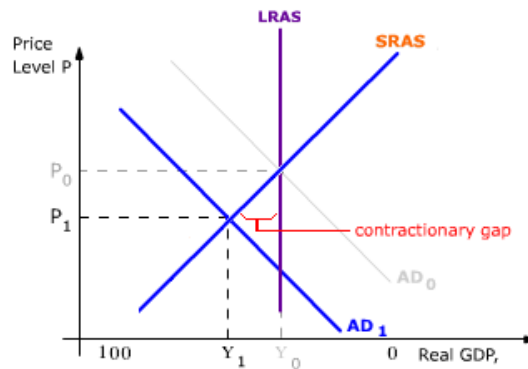
### Whole model

It is a DEMAND MODEL as it represents the business cycle. ONLY DEMAND



- SR equilibrium is where AD intersects SRAS which identifies the economic equilibrium
- the LRAS indicates the ideal level of output where the economy is operating in the long run
- when all 3 curves operate at the same point, the economy is operating at full employment
- the LRAS determines full employment level and they are at the same level of output

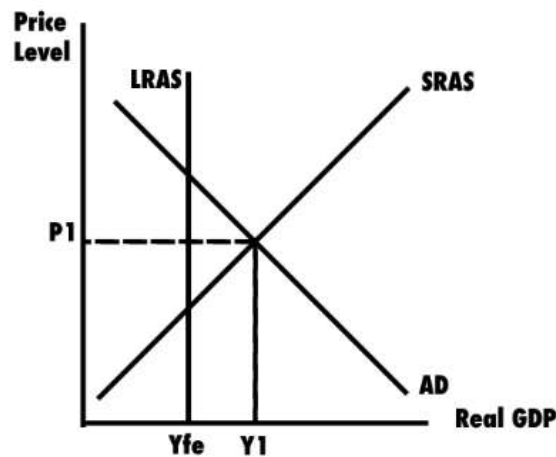
ECONOMY BELOW FULL EMPLOYMENT



- the diagram illustrates the economy is operating at a level of output
- this creates a contractionary gap where growth is below trend and c economy

ECONOMY EXCEEDS FULL EMPLOYMENT

Classical AD/AS Model (Expansionary)



- the diagram illustrates the economy is operating at a level beyond fi
- this creates an expansionary gap where growth is above trend and c economy

**PEAK**

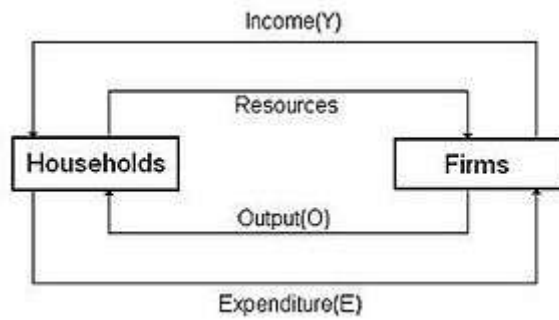
- high demand-pull inflation (shift in AD1 causing price to increase to PE1)
- growth beyond a sustainable level as the increase in output causes i
- resources are scarce as economy is at full capacity (operating beyond full employment level of output at OE1)
  - cyclical UE is 0

**TROUGH**

- deflation (shift in AD to AD1 causing prices to deflate)
- growth beneath a sustainable level as the decrease in output dec surplus of resources as economy is operating below full capacity, at

- cyclical unemployment is present

## AE MODEL

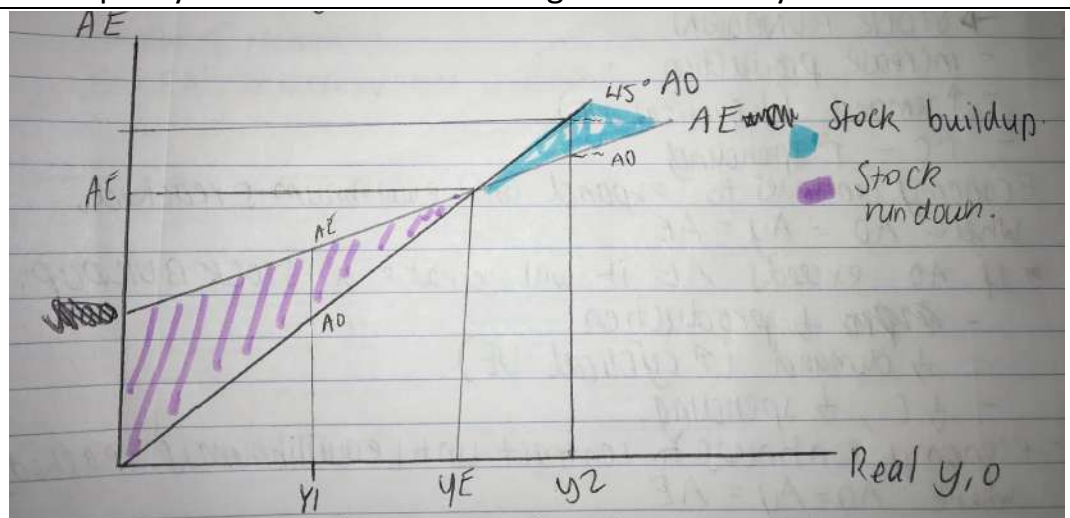


- If AE exceeds AO, it will create a STOCK BUILDUP
  - Increase production
  - Increase demand (decrease cyclical UE)
  - Increase consumption expenditure
  - Economy continues to expand until equilibrium is reached, when
- If AO exceeds AE, it will create a STOCK BUILDUP
  - Decrease production
  - Decrease demand (increase cyclical UE)
  - Decrease consumption expenditure
  - Economy will continue to contract until equilibrium is reached, when

## Keynesian economics

- Based on the theory of John Maynard Keynes
- Focuses on the 3 aggregates of income, output and expenditure
- Keynes argues that  $AE = (C + I + G + (x - m))$  can determine the level of ec policy makers to macro manage the economy

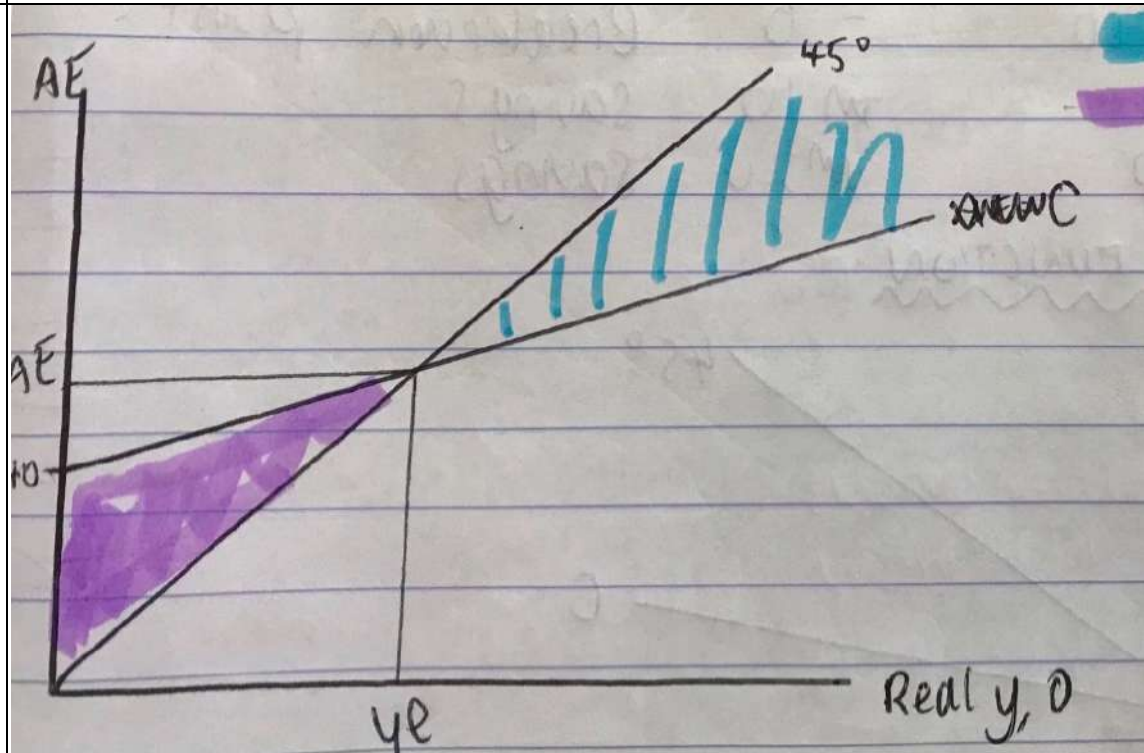
## Keynesian cross model



- assume levels of AO and AY are always equal

- the scale on both axis MUST be equal
- the 45-degree line represents AO (AE model is a demand model only)
- AE line is positively sloped as spending increases as income levels rise
- AE line starts above 0, as the economy will still require spending on
- The point where the AE line intersects the 45-degree line represents AE=AO=AY
- At Y1, the levels of AE exceed AO creating a STOCK RUNDOWN, which
- At Y2, the levels of AO exceed AE, creating a STOCK BUILDUP which

**CONSUMPTION FUNCTION**



- Consumption function illustrates the amount of household spending
- C function is positively sloped because if HH spend more, income rises
- The amount of consumption can be determined by the following equation

*"A" Autonomous consumption*

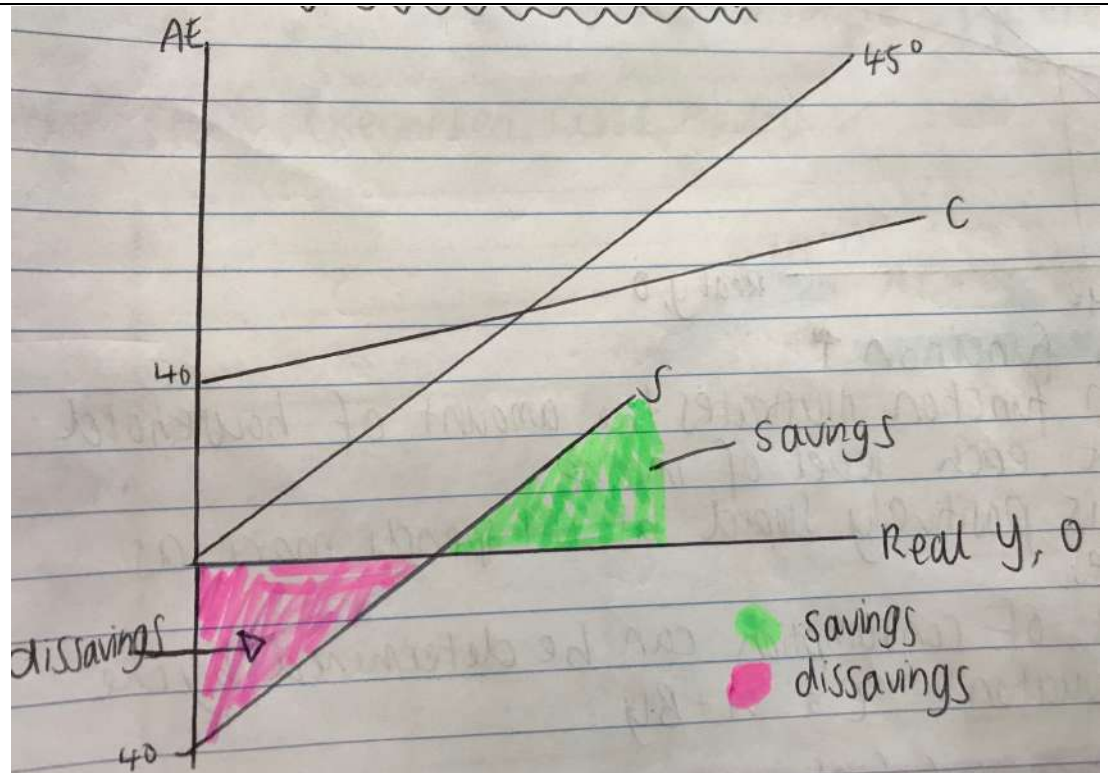
- Autonomous consumption is HH spending unaffected by changes in income
- Referred to as survival spending
- Determined by the amount of consumption when income = 0

*"B" Marginal Propensity to Consume (MPC)*

- The amount of every additional dollar which is consumed
- MPC =  $\frac{\Delta C}{\Delta Y}$**



**SAVINGS FUNCTION**



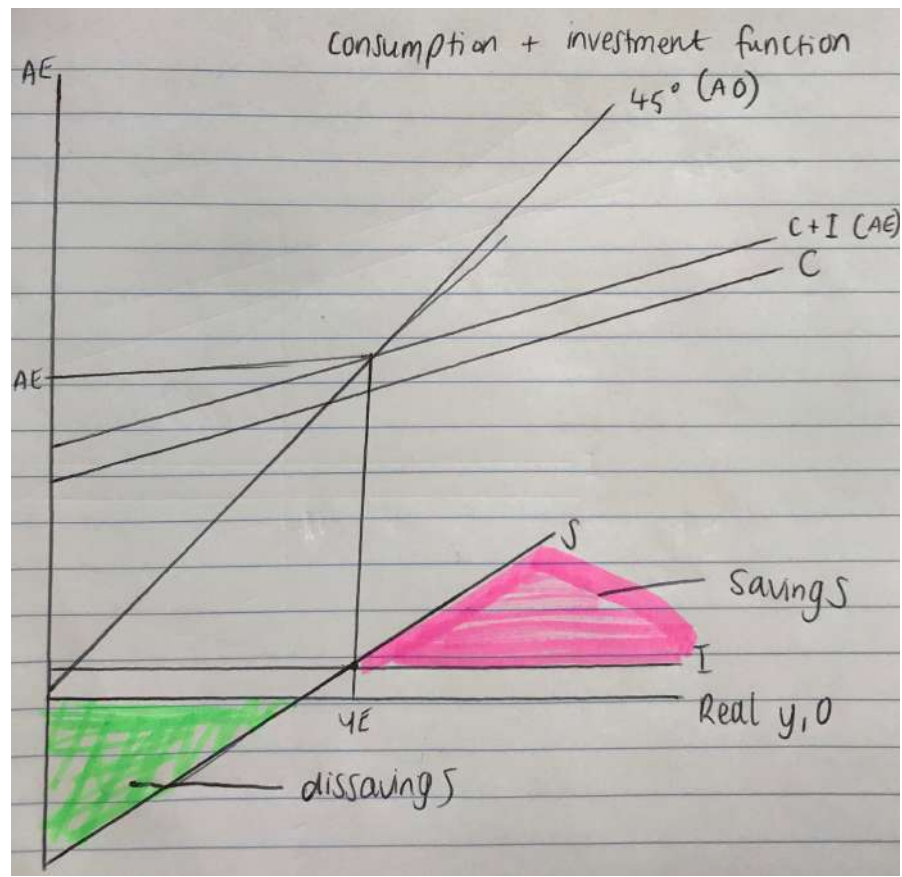
- savings function represents the level of savings at each level of income
- the amount of savings in the economy is determined by the following
- "a" represents autonomous savings (amount of savings when  $y = 0$ )
- "b" represents the Marginal Propensity to Save (MPS)
- MPS is the amount of every extra dollar that is savings  $MPS = \frac{\Delta S}{\Delta Y}$

**Consumption function  
Equilibrium**

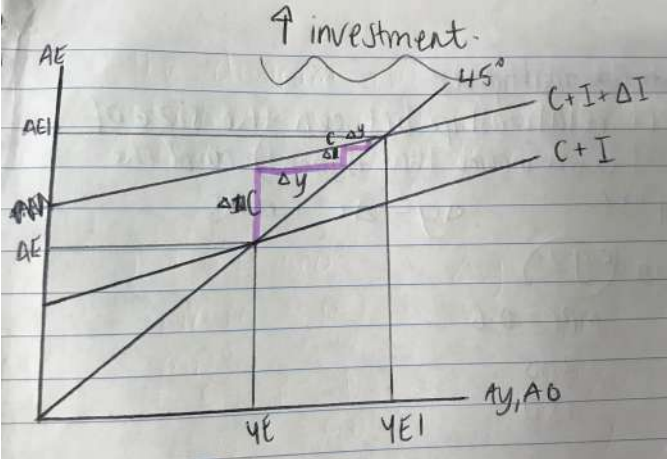
$$YE = \frac{A}{1-B}$$

**ADDING INVESTMENT TO THE AE MODEL**

- Assume investment is autonomous (unaffected by changes in income)



<u>y, 0</u>	<u>C</u>	<u>S</u>	<u>I</u>	<u>C+I</u>
0	70	-70	50	120
100	140	-40	50	190
200	210	-10	50	260
300	280	20	50	330
400	350	50	50	400
500	420	80	50	470
600	490	110	50	540
700	560	140	50	610
800	630	170	50	680

Average propensity to consume	<ul style="list-style-type: none"> <li>proportion of total income which is spent on consumption</li> </ul> $APC = \frac{C}{Y}$
Average propensity to save	<ul style="list-style-type: none"> <li>as the levels of income in the economy rises, the APC falls as spende income is earned</li> <li>as the levels of income in the economy falls, the APC rises</li> </ul> $APS = \frac{S}{Y}$
<b>THE MULTIPLIER</b>	<ul style="list-style-type: none"> <li>an autonomous change in a component of aggregate expenditure w income</li> <li>the multiplier effect is due to the portion of extra income that is spe income levels in the future</li> </ul>
<b>Positive multiplier</b>	➤ refers to an autonomous increase in a component to AE
<b>Negative multiplier</b>	➤ refers to an autonomous decrease in a component of AE
<b>Investment multiplier</b>	➤ refers to an autonomous change in investment
<b>Government multiplier</b>	➤ refers to an autonomous change in G
<b>SIMPLE multiplier</b>	- only includes one external sector (besides HH and FIRMS)
<b>COMPLEX multiplier</b>	<ul style="list-style-type: none"> <li>considers all external sectors when determining the multiplier effec</li> <li>Includes all 5 sectors of the economy when determining the multipli from an autonomous change in a component of AE</li> </ul>
<b>Multiplier process</b>	<p><b>Assumptions of sectors</b></p> <ol style="list-style-type: none"> <li>4 periodic changes</li> <li>equation <math>K =</math> size of multiplier</li> <li>final change in income</li> <li>AE model</li> </ol> <p><math>K = 1 \div (1 - MPC)</math> (In most cases, just MPS)  <math>1 \div (MPS)</math></p> <p>Amount of investment <math>\times</math> multiplier</p> 

	<ul style="list-style-type: none"> <li>- The diagram illustrates the multiplier process of how an autonomous greater change in aggregate income</li> <li>- The initial increase in investment of 1000 caused an increase in AE f</li> <li>- This cause y to increase from b to c</li> <li>- Which results in an increase of induced consumption from point c to</li> </ul>				
Size of MPC and multiplier	<ul style="list-style-type: none"> <li>➤ there is a direct relationship between the size of the MPC and the si</li> <li>➤ The higher the MPC, the greater the multiplier effect on the econom</li> <li>- As a higher MPC means a greater portion of extra income is spent, it</li> </ul>				
➤ Reference unemployment, growth and inflation from year 11 unit 2 notes	<ul style="list-style-type: none"> <li>- Demand and supply (+ efficiency) sources of growth</li> </ul>				
<b>ECONOMIC POLICY OBJECTIVES</b>	<ul style="list-style-type: none"> <li>➤ Full employment (4-5%)</li> <li>➤ Price stability (2-3%)</li> <li>➤ Sustainable growth (2.5-3.5%)</li> <li>➤ Equitable income distribution</li> <li>➤ Efficient resource allocation (including increase in productivity)</li> </ul>				
Compatible objectives	<ul style="list-style-type: none"> <li>• In the government's attempt to achieve 1 objective, the policies imp achievement of another objective</li> </ul>				
Conflicting objective	<ul style="list-style-type: none"> <li>• In the government's attempt to achieve 1 objective, the policies imp achieve another objective</li> </ul>				
Compatible and conflicting objectives	<table border="1"> <thead> <tr> <th>Compatible</th> <th>Conflicting</th> </tr> </thead> <tbody> <tr> <td> <ul style="list-style-type: none"> <li>• Sustainable growth and full employment</li> <li>• Sustainable growth and efficient resource allocation</li> <li>• Price stability and efficient resource allocation</li> <li>• Full employment and equitable income distribution</li> </ul> </td> <td> <ul style="list-style-type: none"> <li>• price sta</li> <li>• growth a</li> <li>• equitable resource</li> <li>• sustainal</li> <li>• efficient</li> </ul> </td> </tr> </tbody> </table>	Compatible	Conflicting	<ul style="list-style-type: none"> <li>• Sustainable growth and full employment</li> <li>• Sustainable growth and efficient resource allocation</li> <li>• Price stability and efficient resource allocation</li> <li>• Full employment and equitable income distribution</li> </ul>	<ul style="list-style-type: none"> <li>• price sta</li> <li>• growth a</li> <li>• equitable resource</li> <li>• sustainal</li> <li>• efficient</li> </ul>
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<b>Government policies</b>	<ol style="list-style-type: none"> <li>1. Fiscal policy</li> <li>2. Monetary policy</li> <li>3. Productivity reforms</li> </ol>				
Fiscal Policy	<ul style="list-style-type: none"> <li>• Changes in the level of taxation and government spending in order t</li> <li>• Fiscal policy can be used to macro manage the economy, affect alloc (allocative function) and redistribute income away from high to low</li> <li>• Fiscal policy has a multiplier effect</li> </ul>				
<b>Stabilizing function</b>	<b>Contractionary fiscal policy</b>				

- Use of taxation and government expenditure to reduce the level of ...
- This involves implementation of a BUDGET SURPLUS, where taxation > expenditure

**Expansionary fiscal policy**

- Involves implementation of a BUDGET DEFICIT, where government expenditure > taxation
- Use of government expenditure and tax to increase the levels of economic activity

**Discretionary and non-discretionary fiscal policy**

**Discretionary FP**

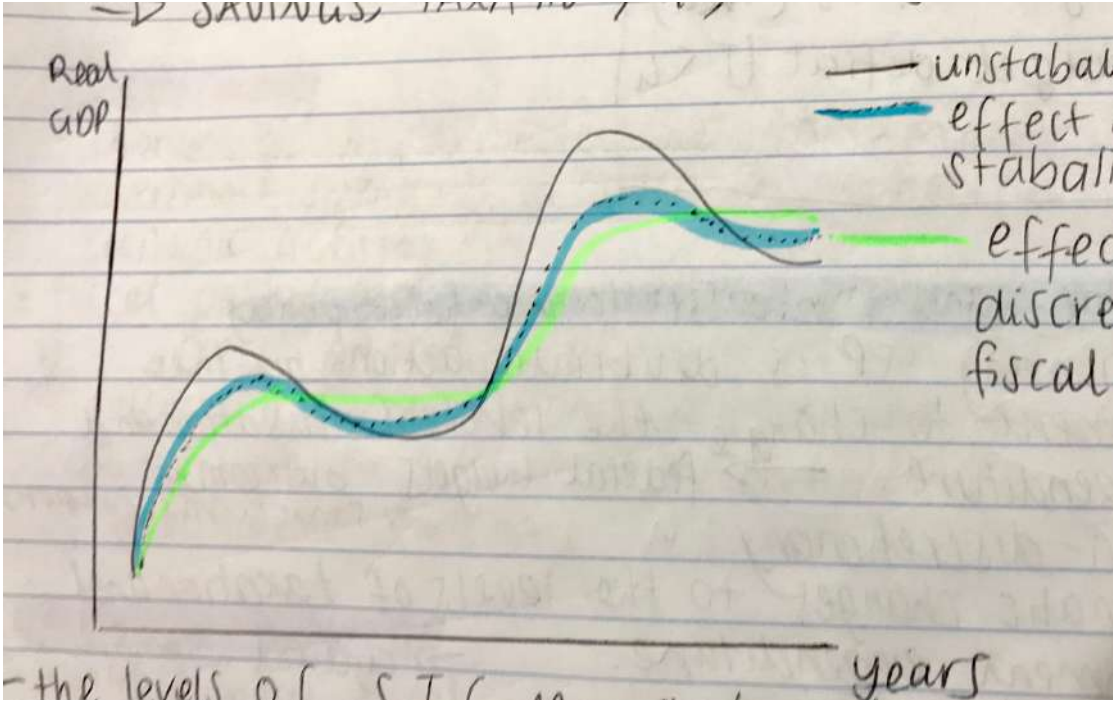
- DELIBERATE actions by the government to change levels of taxation and expenditure
- Structural component
- Federal budgets

**Non-discretionary FP**

- AUTOMATIC changes to the levels of taxation and expenditure
- Cyclical component
- Automatic stabilizers

**Automatic stabilizers**

- Automatic changes to economic behaviors which have a stabilizing effect on the economy
- There are 4 major types of stabilizers; **SAVINGS, TAXATION, GOV SPENDING, MONEY**



- the levels of S, T, G, M automatically change in response to economic activity during the business cycle

**3 types of budgets**

1. surplus
2. deficit
3. balanced

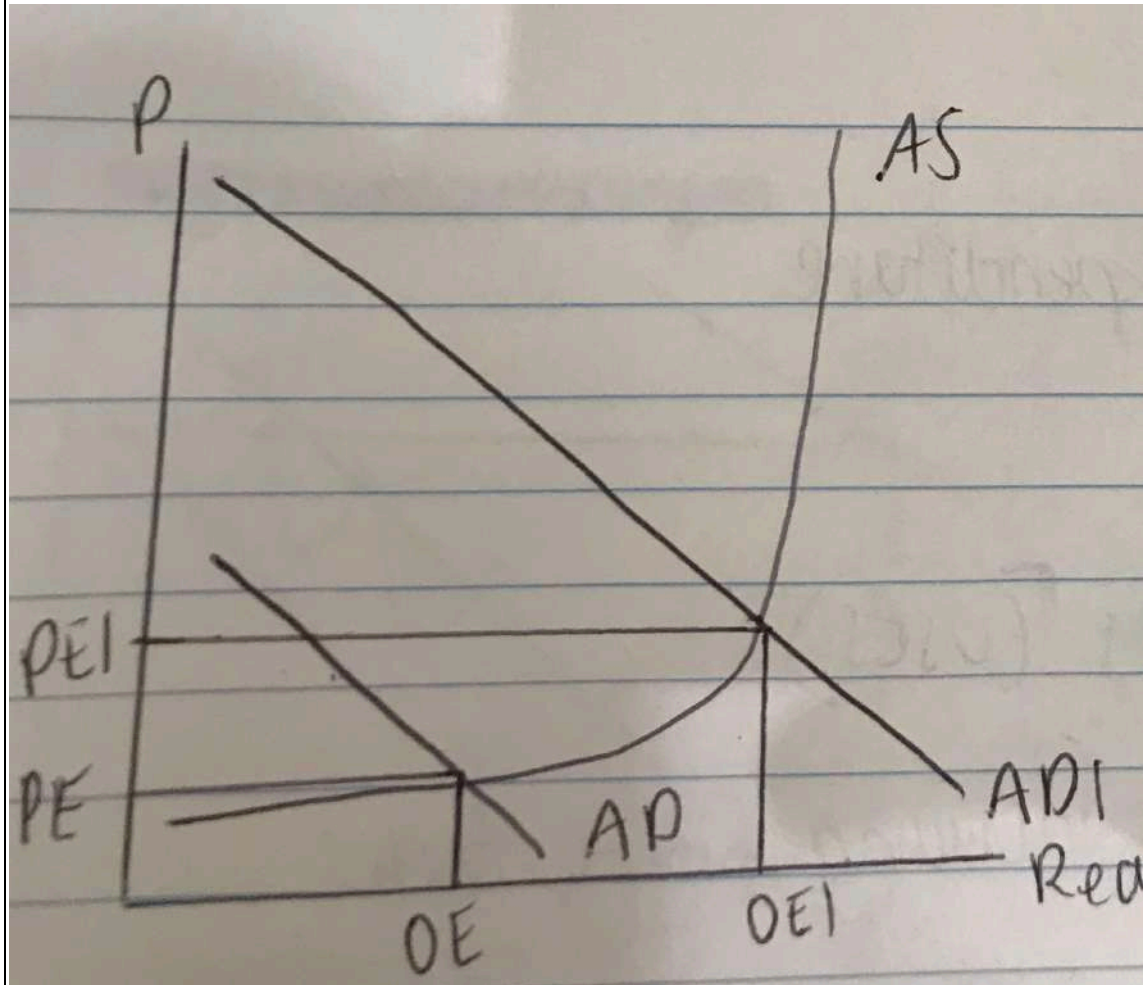
**Budget deficit**  
If the size of the budget deficit is less than the previous years, it is considered a **receding deficit**

**Budget surplus**

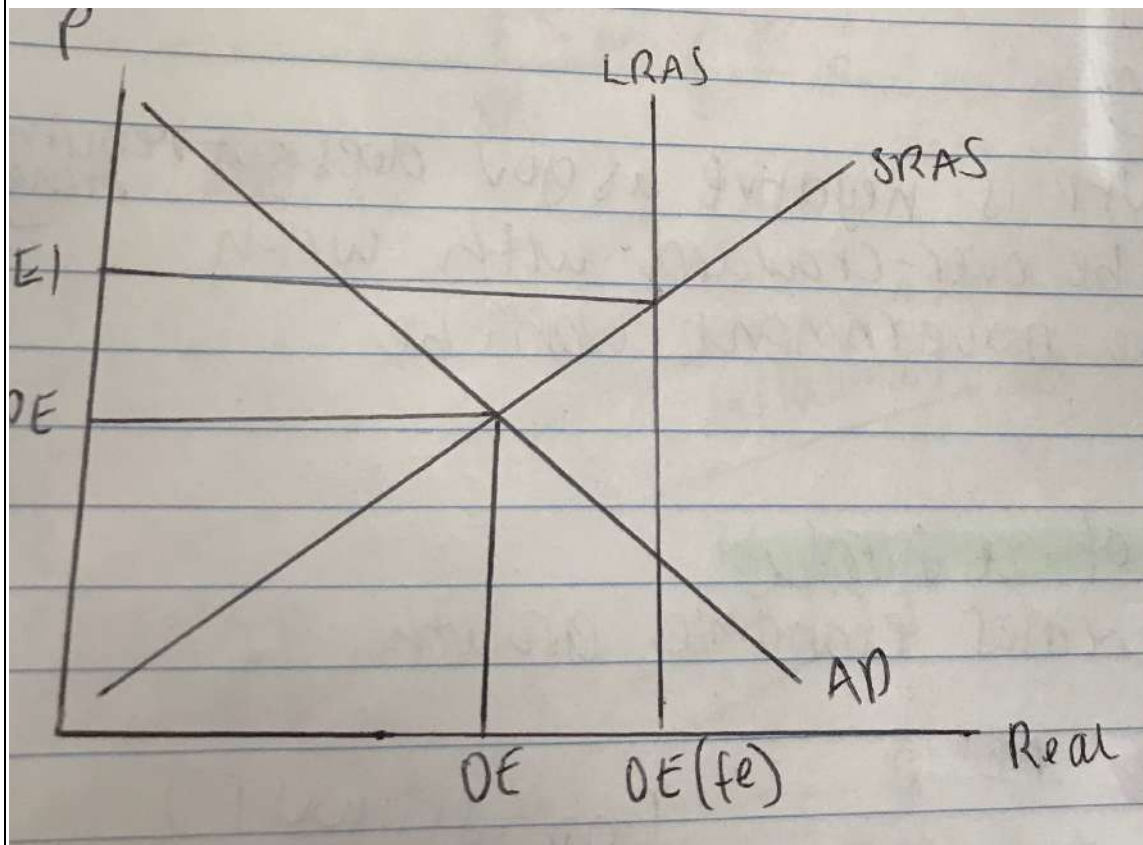


	If the size of the surplus is less than previous years, it is considered relative
<b>Net financial requirement</b>	<ul style="list-style-type: none"> <li>• NFR refers to the borrowing requirement of the government in order</li> <li>• It is the difference between the amount the government requires to lend</li> </ul>
<b>Budget Deficit</b>	➤ Exists when government expenditure exceeds government revenue
<i>Financing a deficit</i>	<ul style="list-style-type: none"> <li>➤ <b>Selling government bonds</b> - causes 'crowding out'</li> <li>➤ <b>Borrowing from the RBA</b> – Increase in money supply, borrowing from</li> <li>➤ <b>Selling government assets</b></li> <li>➤ <b>Use past assets</b></li> </ul>
<i>Crowding out</i>	<ul style="list-style-type: none"> <li>• Government will offer borrowers a higher interest rate</li> <li>• In order to attract loanable funds to the public sector and away from deficit, the government will increase the interest rates on bonds</li> </ul>
<i>Secondary effects of a deficit</i>	<ul style="list-style-type: none"> <li>- Retiring debt</li> <li>- Increase in exchange rate</li> </ul>
<i>Fiscal policy during a contraction</i>	<p><b>MODELS SHOWN BELOW</b></p> <p><b>AE MODEL</b></p>

### Keynesian ADAS



## ADAS MODEL



### Budget surplus

➤ Government revenue exceeds government expenditure

### Ways to use a surplus

- Retire government debt
- Fund future expenditures including future debts
- Return to taxpayers
- Government lending

### Crowding in

- NFR is negative as the government does not require funds
- Private sector will be over-crowded with investment as the government does not require funds
  - Has a paradox effect

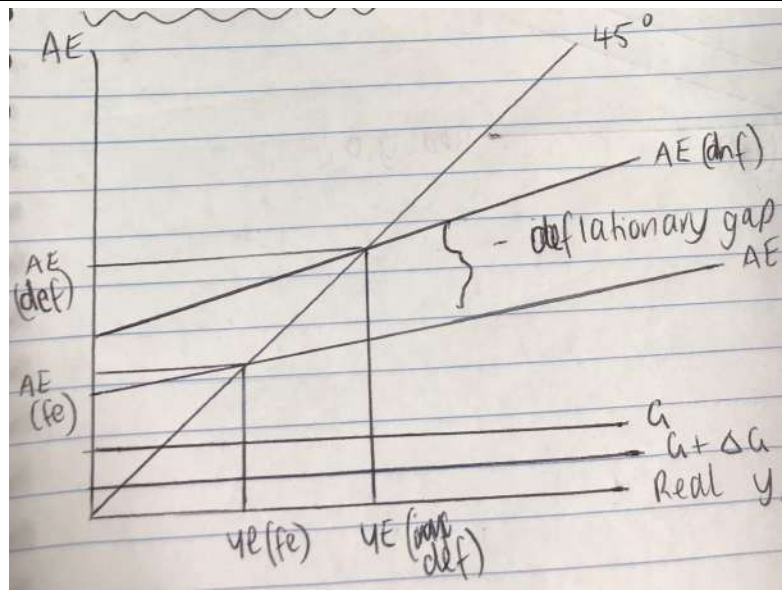
### Secondary effects of a surplus

- Lower spending decreases economic growth

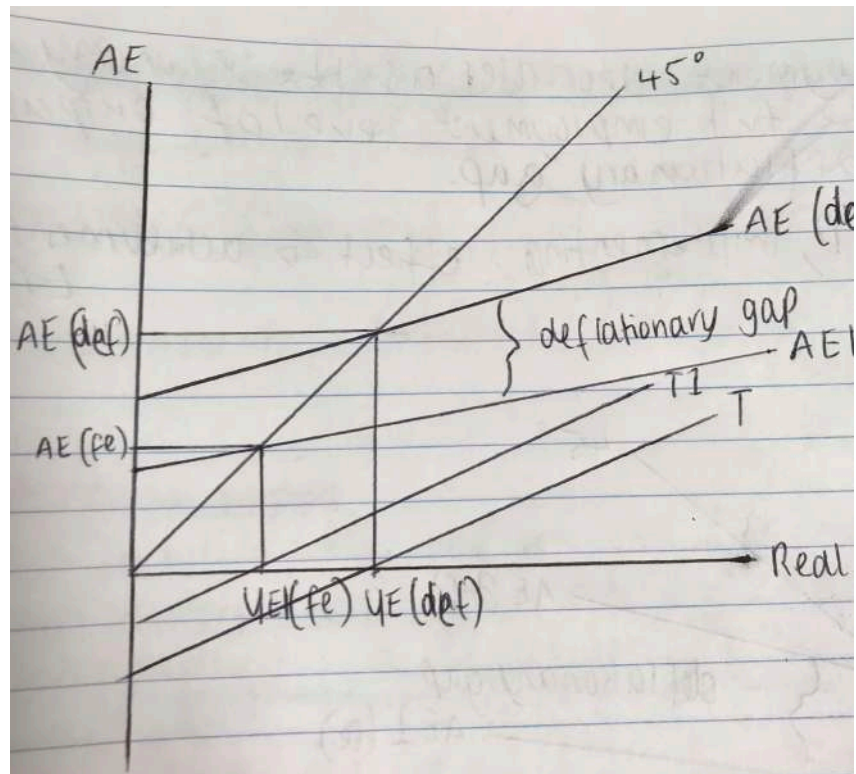


Fiscal policy during an expansion

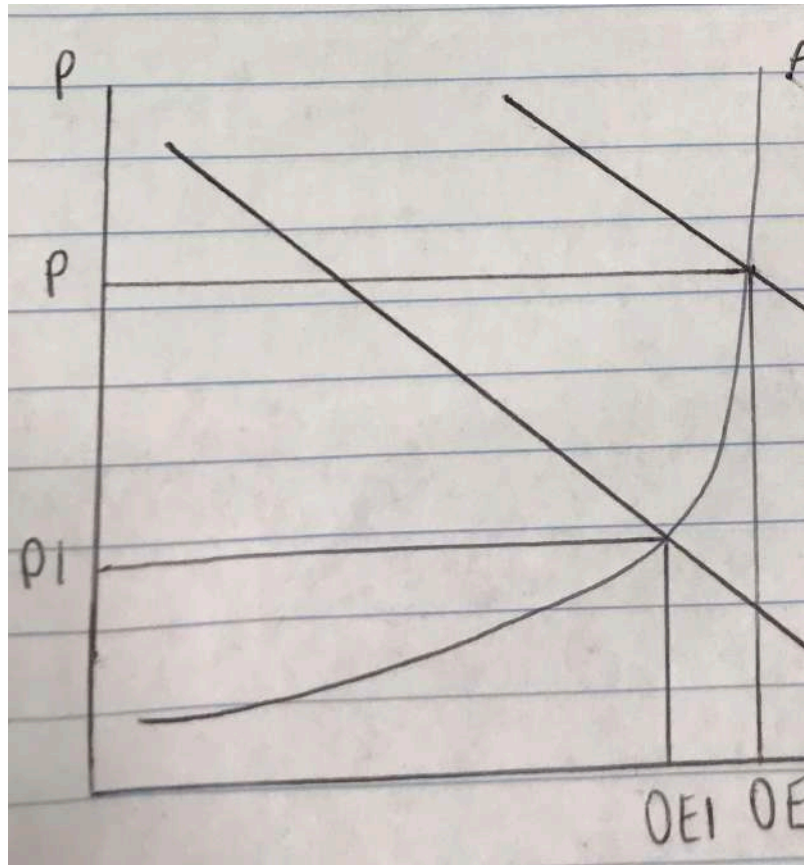
### AE MODEL 1



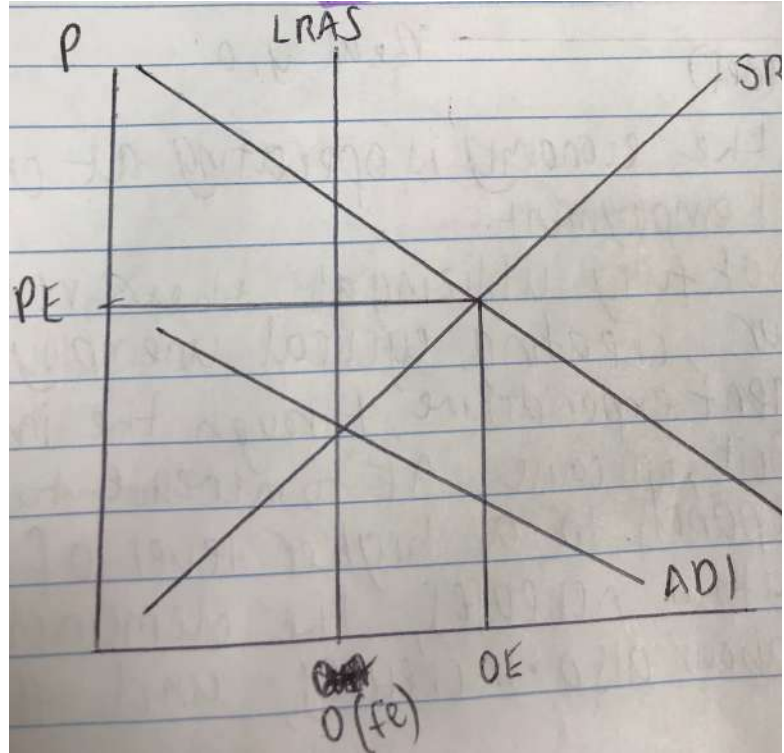
### AE MODEL 2



ADAS MODEL 1



**ADAS MODEL 2**



How can fiscal policy be used to achieve EPO's

1. Full employment
2. Price stability
3. Sustainable growth

Full employment

- To achieve the objective full employment, the government will adopt implementing a budget deficit
- Increasing the level of  $G$ , relative to  $T$  will cause the levels of  $AD$  to increase

(INSERT AE MODEL)

- At  $Y_E$  (def), the economy is operating at a level of income output below the LRAS
- The economy is not fully utilizing all their resources, including labor, capital, and technology
- Increasing government expenditure, through the implementation of expansionary fiscal policy, will cause the aggregate demand curve to shift rightward from  $AD_1$  to  $AD_2$
- The economy expands to a higher level of income and output as output and labor increases, too
- Therefore, cyclical unemployment decreases as the economy increases
- Removes the deflationary gap

Price stability

- Decrease in demand pull inflation
- Contractionary fiscal policy (surplus)

(insert AE model)

Prices go down

Growth

- Increase in  $AE$  – demand source

	<ul style="list-style-type: none"> <li>- Increase in GDP, sources of growth</li> <li>- Expansionary fiscal policy- budget deficit</li> </ul> <p>(insert LRAS, AE MODEL)</p>
<b>Planned vs actual budget outcome</b>	<ul style="list-style-type: none"> <li>• A budget is a plan of the expected revenue showing the revenue and time period</li> <li>• The planned budget outcome (determined before the financial year) outcome realized at the end of the financial year</li> </ul>
<b>Time lags</b>	<p><b>Decision</b></p> <ul style="list-style-type: none"> <li>- Time, it takes for a decision regarding economic policy is determined</li> </ul> <p><b>Implementation</b></p> <ul style="list-style-type: none"> <li>- Time, it takes to put the economic policy into effect</li> </ul> <p><b>Effect</b></p> <ul style="list-style-type: none"> <li>- Time, it takes for the economic policy to achieve its purpose/goal</li> </ul>
<b>Budget Outcomes – Why are they different?</b>	<ul style="list-style-type: none"> <li>➤ Unanticipated changes in economic activity</li> <li>➤ Unanticipated changes in world market conditions (WCP, oil)</li> <li>➤ Unanticipated exogenous factors (supply shock)</li> </ul>
<b>Effectiveness of fiscal policy</b>	<p><b>STRENGTHS</b></p> <ul style="list-style-type: none"> <li>➤ Effect lag is shorter than monetary policy</li> <li>➤ More control over the economy than monetary policy – controls spending</li> <li>➤ Selective – can target certain aspects of the economy</li> <li>➤ More effective in a trough than monetary policy</li> </ul> <p><b>WEAKNESSES</b></p> <ul style="list-style-type: none"> <li>➤ Decision time lag is longer than monetary policy</li> <li>➤ Implementation time lag is longer than monetary policy</li> <li>➤ Fairly inflexible as decisions are made annually, whereas monetary policy is more flexible</li> <li>➤ Political constraints</li> <li>➤ May not compliment state budget outcomes</li> </ul>
<b>Government's fiscal strategy</b>	<ol style="list-style-type: none"> <li>1. Medium term strategy</li> <li>2. Budget repair strategy</li> </ol>
<i>Medium term strategy</i>	<ul style="list-style-type: none"> <li>• Based on achieving budget surpluses</li> <li>• Using budget surpluses to boost productivity and workforce participation</li> <li>• Aims to strengthen Australian economy while keeping taxes low and health, welfare, defense, education</li> </ul>
<i>Budget repair strategy</i>	<ul style="list-style-type: none"> <li>• Using budget savings. \cuts to expenditure to offset any new spending</li> <li>• budget surpluses to pay off public debt and improve Australian government</li> </ul>
<b>MONTEARY POLICY</b>	<ul style="list-style-type: none"> <li>➤ Refers to those actions taken by the RBA to affect the monetary and credit</li> <li>➤ Affects the price of money and credit</li> <li>➤ Influences the borrowing/lending activities within the financial sector</li> <li>➤ Principle tool used in monetary policy is the setting of the cash rate</li> </ul>

Cash rate	<ul style="list-style-type: none"> <li>➤ Interest rate set by the RBA on overnight loans in the short-term market</li> <li>➤ Set on overnight loans (banks loaning from the RBA)</li> <li>➤ As a means of stabilizing the economy through monetary policy, the rate changes</li> </ul>
Interest rates	<ul style="list-style-type: none"> <li>• The cost(price) of borrowing (money)</li> </ul> <p><u>Nominal interest rate</u></p> <ul style="list-style-type: none"> <li>• Cost of borrowing which does not take into account inflation</li> </ul> <p><u>Real interest rates</u></p> <ul style="list-style-type: none"> <li>• Takes into account inflation when determining the cost of borrowing</li> </ul> <p>Real interest rate = <b>nominal I/R – inflation rate</b></p>
Market interest rates	<ul style="list-style-type: none"> <li>➤ Market interest rates, like any other price, is determined by the price</li> </ul> <p>DLF= demand for loanable funds. Determined by the borrowers of money</p> <p>SLF= supply for loanable funds. Determined by the lenders of money</p>
Determinants of interest rates	<ul style="list-style-type: none"> <li>• Level of economic activity</li> <li>• Size of public debt (budget deficit/surplus)</li> <li>• RBA stance of monetary policy</li> </ul>
Stance on monetary policy	<p><b>Expansionary monetary policy</b> (decrease in interest rates) EASING MP</p> <ul style="list-style-type: none"> <li>- Expansionary monetary policy is typically a cash rate of less than 3%</li> </ul> <p><b>Neutral monetary policy</b></p> <ul style="list-style-type: none"> <li>- Setting of the cash rate that will not strongly impact borrowing and</li> <li>- Neutral stance is typically a cash rate between 3-3.75%</li> </ul> <p><b>Contractionary monetary policy</b> (increase in interest rate) TIGHT MP</p> <ul style="list-style-type: none"> <li>- Contractionary MP is typically a cash rate higher than 3.75%</li> </ul>
Open market operations	<ul style="list-style-type: none"> <li>➤ Open market operations refer to the daily intervention of the RBA in fluctuations in the cash rate</li> </ul> <p><b>CASH RATE</b></p> <ul style="list-style-type: none"> <li>- Interest rates set by the RBA on overnight loans in the short-term market</li> <li>- RBA acts as a bank for banks</li> <li>- All banks in Australia have an account in the RBA called the ESA (exchange settlement funds)</li> </ul> <p><b>EXCHANGE SETTLEMENT FUNDS</b></p> <ul style="list-style-type: none"> <li>- Funds banks use in order to settle their transactions with one another</li> <li>- The ESA must be in surplus at all times</li> <li>- If there are no sufficient funds in the account, banks will need to borrow</li> <li>- This is known as an overnight loan (or short-term loan)</li> </ul>

	<ul style="list-style-type: none"> <li>- The RBA is the sole supplier of these loans</li> <li>- This means the RBA can control the supply curve in the short-term r cash rate</li> </ul>
Short term money market	<ul style="list-style-type: none"> <li>- D is determined by the borrowers ie: banks</li> <li>- S is determined by the RBA</li> <li>- It is perfectly inelastic as they are the only supplier</li> </ul>
Commonwealth government securities	<p><b>INCREASE CASH RATE/ SUPPLY</b></p> <ul style="list-style-type: none"> <li>- Sell commonwealth government securities</li> <li>- Decreases supply</li> <li>- Increases cash rate</li> </ul> <p><b>DECREASE IN CASH RATE</b></p> <ul style="list-style-type: none"> <li>- Buy government securities</li> <li>- Increases supply</li> <li>- Decreases cash rate</li> </ul>
Australia's MP	<p><b>STANCES</b></p> <ul style="list-style-type: none"> <li>- Expansionary (Below 3%)</li> <li>- Neutral (3-3.75%)</li> <li>- Contractionary (above 3.75)</li> </ul>
Australia's current MP stance	<ul style="list-style-type: none"> <li>- Expansionary MP with a stance of 0.75p%</li> <li>- Cash rate is at historically low levels</li> <li>- Cash rate fell by 25 basis points from 1-1.25% in June 2019</li> <li>- Cash rate fell by another 25 basis points from 1.25 to 1% in July 2019</li> <li>- Cash rate had remained at 1.5% since 2016</li> </ul>
Objectives of monetary policy	<ol style="list-style-type: none"> <li><b>1. Stability of Australia's currency</b> <ul style="list-style-type: none"> <li>- Inflation</li> </ul> </li> <li><b>2. Full employment</b> <ul style="list-style-type: none"> <li>- Maintenance of full employment/low unemployment</li> </ul> </li> <li><b>3. Economic prosperity and welfare of the people of Australia</b> <ul style="list-style-type: none"> <li>- Growth</li> </ul> </li> </ol> <p>Change in CR = Change in I/R = Change in AE  Decrease in CR= decrease in I/R = increase in AE</p>
Transmission mechanism	<ul style="list-style-type: none"> <li>- Refers to how changes in the cash rate influences the economic conditions which will affect the levels of AE, and therefore, aggregate output, employment, etc.</li> <li>- G is not part of the transmission mechanism</li> <li>➤ <b>The transmission mechanism of monetary policy examines how changes in SAVINGS, CASH FLOW, WEALTH/ASSETS, EXCHANGE RATES</b></li> </ul>



**Decrease in interest rates**

**Decrease in savings**

- Less incentive to earn interest, so people will deposit less

**Increase in cash flow (HH and firms)**

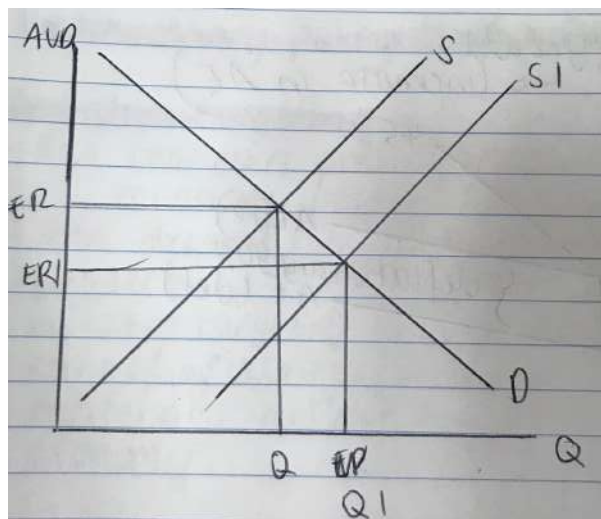
- Increase in disposable income
- Existing credit payments decrease

**Increase in value of wealth and assets**

- Value rises
- Shares more attractive than bonds, as rate of return on bonds falls
- wealth of shareholders increases, causing an increase in consumption

**Depreciation of AUD**

- Australian I/R/D falls



- supply of AUD increases, as consumption increases due to the low interest rate
- this causes an increase in import spending
- increase in supply causes AUD to depreciate
- decrease of AUD increases international competitiveness
- exports are more competitive, causing an increase in demand for AUD
- increase in net exports

**Decrease CR=Decrease I/R= Increase AE**

**Increase in I/R**

**Increase in savings**

- higher rate of return on deposits

**Decrease in cash flow**

- HH and firms paying more back on credit

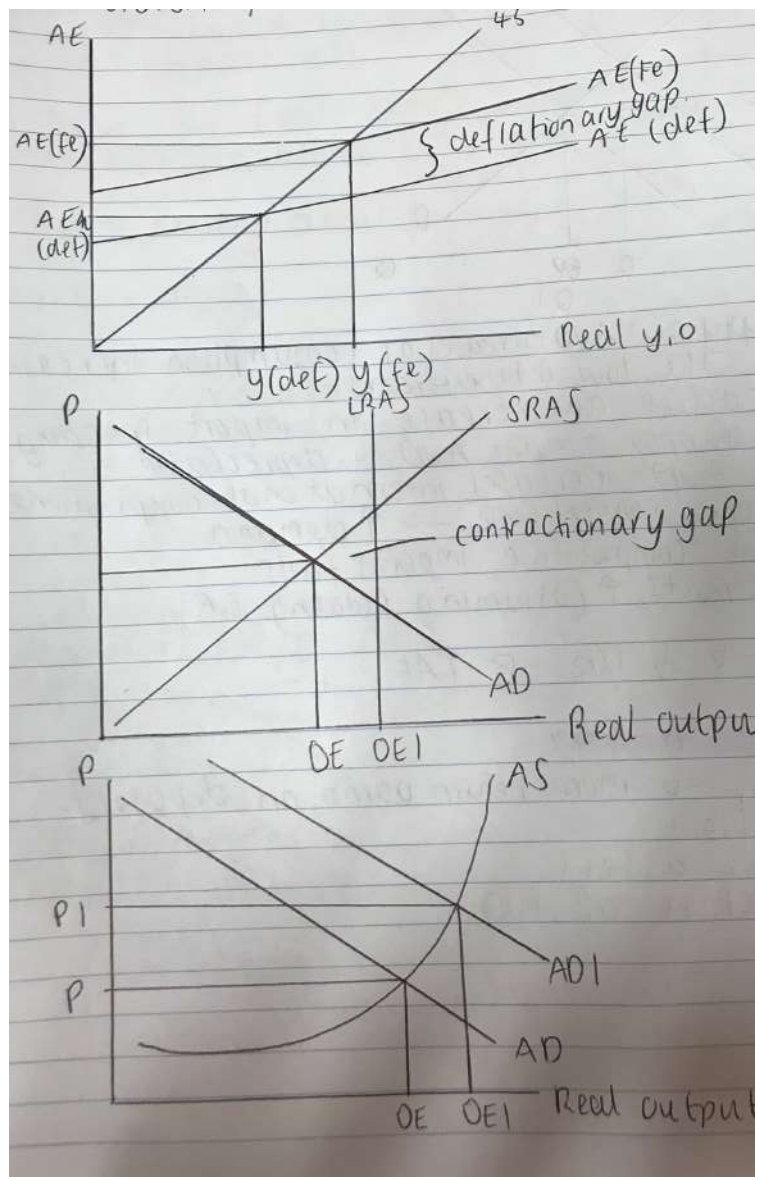
**Decrease in value of wealth and assets**

- Decrease in value as consumers purchasing power is low

- Less disposable income to spend on wealth and assets
- Appreciation of AUD**
- Decrease in demand for AUD
  - Decrease in international competitiveness due to lower interest rate

**Increase in CR = Increase in I/R = Decrease in AE**

Full employment and growth



Expansionary Monetary policy (increase in AE)

Inflation targeting

- RBA considers price stability the primary objective of monetary policy
- RBA dropped the policy of targeting inflation between 2-3% in 1993
- Inflation targeting must be a forward-looking objective rate of inflation to avoid distort economic decisions in the economy

Strengths and weaknesses of monetary policy

Strengths	Weaknesses
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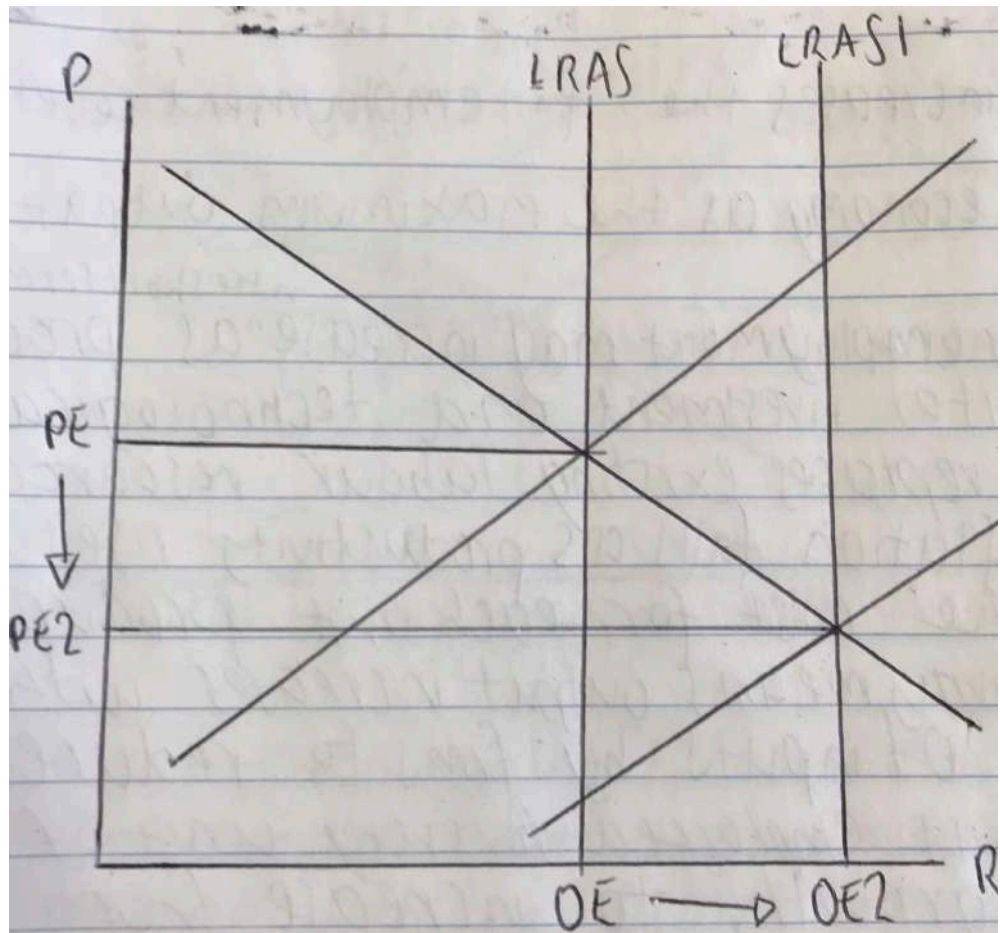


	<p><b><u>Monetary policy is flexible</u></b></p> <ul style="list-style-type: none"> <li>- Decisions are made daily through open-market operations</li> </ul> <p><b><u>Shorter inside lag than fiscal policy</u></b></p> <ul style="list-style-type: none"> <li>- Takes only a few hours to decide than FP</li> </ul> <p><b><u>Policy neutral compared to fiscal policy</u></b></p> <ul style="list-style-type: none"> <li>- The policy is always the same, only the number changes</li> </ul> <p><b><u>More effective in a peak than FP</u></b></p> <ul style="list-style-type: none"> <li>- Higher rates effectively dampen spending and investment</li> </ul> <p><b><u>Very effective under a floating exchange rate</u></b></p> <ul style="list-style-type: none"> <li>- Causes fluctuation of exchange rates which affect x and m spending</li> </ul>	<p><b><u>Blunt policy</u></b></p> <ul style="list-style-type: none"> <li>- Cannot target</li> </ul> <p><b><u>Relies on banks to</u></b></p> <ul style="list-style-type: none"> <li>- Banks are pr</li> </ul> <p><b><u>Outside lag is long</u></b></p> <ul style="list-style-type: none"> <li>- Takes time for changes</li> </ul> <p><b><u>Less effective in a</u></b></p> <ul style="list-style-type: none"> <li>- Consumer se</li> </ul> <p><b><u>Only effective with</u></b></p>
<b>Structural change</b>	<ul style="list-style-type: none"> <li>➤ Involves adjustment in the composition and location of production a time</li> <li>- What is produced, how it is produced, employment, spending pattern</li> <li>➤ Complex process involving changes between sectors and within sectors</li> <li>➤ Involves shift of resources from slower growth areas of the economy</li> <li>➤ It is a constant process of the economy adjusts to the changes in the</li> </ul>	
<b>What happened in the mining boom</b>	<p>Australia became a '2 speed' economy</p> <ul style="list-style-type: none"> <li>- Fast growth sectors and regions: mineral and energy industries and demand from china</li> <li>- Slow growth and regions: trade exposed to manufacturing and services</li> <li>• DUTCH DISEASE – appreciation on exchange rate</li> <li>• RESOURCES CURSE – hiding the need for productivity growth through</li> </ul>	
<b>The fall in planned investment in mining has been offered by...</b>	<ul style="list-style-type: none"> <li>- Growth in HH spending</li> <li>- Growth in residential construction</li> <li>- Mining growth</li> <li>- Service exports</li> </ul>	
<b>DOMESTIC market-related causes of structural change</b>	<ul style="list-style-type: none"> <li>• Changes of incomes and different levels of income elasticity of demand</li> <li>• Discovery and production of natural resources</li> <li>• Research and development</li> <li>• Demographic change</li> <li>• Demand side policy stance</li> <li>• Supply side economic reforms gave the economy flexibility to adjust</li> </ul>	
<b>INTERNATIONAL, market related causes of structural change</b>	<ul style="list-style-type: none"> <li>• Emergence of new global hotspots</li> <li>• Rise in incomes in east and south Asia</li> <li>• Extent and nature of foreign investment flows</li> <li>• Changes in exchange rates</li> </ul>	

	<ul style="list-style-type: none"> <li>• Changes in terms of trade</li> <li>• Openness to inflows of foreign investment</li> <li>• Openness to skilled migration</li> <li>• Monetary policy settings in other countries (I/R/D)</li> </ul>
CAUSES of structural change	<ul style="list-style-type: none"> <li>• Post WW2 baby boom causes rapid population</li> <li>- Aging population and a lower proportion of productive workers</li> <li>• Rapid economic growth in Australia's neighboring countries</li> <li>• Disruptive innovation creates a new market for economic value</li> <li>• Environmental and sustainability have had significant effects</li> <li>• Globalization</li> </ul>
Macroeconomic impact of structural change	<ul style="list-style-type: none"> <li>➤ Economic growth has been positive since 1991</li> <li>➤ Economy has adjusted to industrialization of china, mining-investment, high AUD and its depreciation</li> <li>➤ Allowed higher material living standards, higher levels of emp and a more efficient use of scarce resources</li> <li>➤ Economy has benefitted from important reforms such as float privatization, reduced level of protectionism</li> </ul>
Microeconomic impact of structural change	<ul style="list-style-type: none"> <li>➤ The impact on business and individuals depends on where they are or work</li> <li>➤ Within specific industries, experience can vary widely from sector to sector</li> <li>➤ Some HH experience a process of adjustment that is drawn out, with unemployment</li> <li>➤ Only workers who are geographically or occupationally immobile bear the brunt</li> <li>➤ Distribution of income becomes less even when growth is imbalanced</li> </ul>
Productivity	<ul style="list-style-type: none"> <li>• Relationship between output and inputs (inputs are resources used to produce good or service)</li> <li>• Productivity refers to the efficiency in which firms can convert products and services</li> <li>• Productivity is supply side economics to which an increase in production can be achieved with the same amount of inputs</li> <li>• Governments aim for measures to improve productivity as it will increase employment and economic growth</li> <li>• Aus government underwent productivity reform to remove any unnecessary flow of resources in the market</li> </ul>
Difference between labor productivity and multifactor productivity	<p><b>Labor productivity</b></p> <ul style="list-style-type: none"> <li>- Level of output per 1 hour of labor worked</li> </ul> $\frac{GDP}{NUMBER\ OF\ HOURS\ WORKED}$ <p><b>Multifactor productivity</b></p>

	<ul style="list-style-type: none"> <li>- Measures the efficiency of both labor and capital</li> <li>- The most reliable measure of productivity</li> <li>- Resulting productivity is always greater than its inputs due to the re-technology and other factors</li> </ul>
Relationship between productivity and economic growth	<ul style="list-style-type: none"> <li>• Productivity increases supply</li> <li>• This is because increasing productivity means a higher output can be supplied within the economy</li> </ul>
Areas of microeconomic reform	<ul style="list-style-type: none"> <li>• The government achieves productivity growth through microeconomic reform</li> <li>• MER can be market orientated where the reforms aim to make a free market</li> <li>• MER can also be interventionist where they aim to remove market failure</li> <li>• The areas of microeconomic reform can be categorized as <b>PILOT</b></li> </ul>
<i>PRODUCT MARKET REFORM</i>	<u>Privatization</u> <ul style="list-style-type: none"> <li>- Aims to make government business enterprises more efficient by selling them to the private sector</li> </ul> <u>Deregulation</u> <ul style="list-style-type: none"> <li>- Aims to make industries more efficient by removing red tape</li> </ul> <u>Competition laws</u> <ul style="list-style-type: none"> <li>- Enforced through the ACCC which aims to remove market failure of price fixing</li> </ul>
<i>INFRASTRUCTURE</i>	<ul style="list-style-type: none"> <li>- Provide building blocks for the private sector to invest further in production</li> </ul> <u>National broadband network</u> <ul style="list-style-type: none"> <li>- Encourages private sector to invest in new ICT equipment and processes</li> </ul> <u>Transport infrastructure</u> <ul style="list-style-type: none"> <li>- Aims to improve productivity by reducing commute and delivery times</li> <li>- By reducing waiting times, workers have more time to complete production</li> </ul> <u>Health and education</u> <ul style="list-style-type: none"> <li>- Ensures workers are healthy, fit and well skilled- increases productivity</li> </ul>
<i>LABOUR MARKET REFORM</i>	<u>Workplace bargaining</u> <ul style="list-style-type: none"> <li>- Labor wage increases linked to productivity growth rather than inflation</li> <li>- Provides an incentive for workers to be more productive than expected</li> </ul> <u>Work choices</u> <ul style="list-style-type: none"> <li>- Aimed to reduce the influence of union and allow employers to manage their workforce more flexibly</li> </ul>
<i>OVERSEAS MARKET REFORM</i>	<u>Unilateral action</u> <ul style="list-style-type: none"> <li>- Removal/reduction of tariffs to increase competition with imports</li> </ul> <u>Free trade agreements</u> <ul style="list-style-type: none"> <li>- Such as those with China, Singapore, Indonesia, Japan</li> </ul>
<i>TAXATION REFORM</i>	<ul style="list-style-type: none"> <li>- GST to replace 3 tier wholesale system</li> <li>- Decrease in small business tax rates</li> <li>- Self-assessment taxation allows ATO to spend more time assessing tax returns</li> </ul>

Impact of productivity growth



- The effect of productivity growth is shown in the above model, where we run aggregate supply from LRAS to LRAS1
- This causes an increase in Real GDP from OE to OE1, meeting the old price level
- Increases in economic growth will also increase the employment of labor
- In addition, we can conclude that the economic growth is sustainable as there is more output, competition for goods and services decreases
- Governments aim to promote productivity as it best meets all 3 main goals of economic growth: stability, growth, and international competitiveness of Australia's economy
- If there is more output of exports, we can lower export prices and increase demand
- Structural unemployment may increase, in the short term, as productivity growth replaces existing labor resources

Negative productivity

