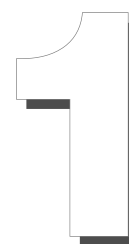


# Introduction to the Global Economy



## Multiple Choice

<b>1</b>	C	<b>6</b>	C	<b>11</b>	D*	<b>16</b>	D
<b>2</b>	A	<b>7</b>	D	<b>12</b>	A*	<b>17</b>	B
<b>3</b>	D*	<b>8</b>	B	<b>13</b>	B	<b>18</b>	B
<b>4</b>	A	<b>9</b>	C	<b>14</b>	B*	<b>19</b>	A
<b>5</b>	B	<b>10</b>	C	<b>15</b>	A*	<b>20</b>	D*

\*Indicates that an enhanced answer has been provided in the section below.

## Enhanced Answers

- 3** D Increased global migration is a consequence of unequal distribution of global income, as highly skilled workers are attracted to the opportunities that exist in the richer economies of the world. At the bottom end of the labour market, low-skilled labour is also in demand in developed countries, as it is often difficult to recruit local workers to fill these jobs (for example, cleaners, manual labour, abattoir workers etc.). So where there is an unequal distribution of global income, labour in less advanced economies will be attracted to the opportunities in more advanced economies, leading to increased global migration of labour.
- 11** D International division of labour is how the tasks in the production process are allocated to different people in different countries around the world.
- 12** A Foreign direct investment (FDI) refers to the movement of funds between economies for the purpose of establishing a new company or buying a substantial proportion of shares in an existing company (10 per cent or more). FDI is generally considered to be a long-term investment and the investor normally intends to play a role in the management of the business.
- 14** B All other options are potential disadvantages that can be associated with globalisation.
- 15** A The International Monetary Fund (IMF) is an international agency that consists of 189 members and oversees the stability of the global financial system. The major functions of the IMF are to ensure stability of exchange rates, exchange rate adjustment and convertibility.
- 20** D Exchange rates differ between countries and economies. Exchange rates often reflect an economy's level of international competitiveness and the market's confidence in that country's economy. This can mean that countries can have vastly different movements in their exchange rates at any given time. Thus, movements in the exchange rates are factors that can weaken the international business cycle.

## Short Answers

### Question 1

- (a)** Countries engage in trade firstly because they generally do not produce all of the items they need. For example, some countries do not have sufficient natural resource endowments and must trade with other countries to obtain fuel or minerals. Countries also trade to benefit from the gains from trade. Countries have different comparative advantages in the production of goods and services, and benefit from specialisation and trade.
- (b)** For countries to benefit from innovations in production and increase their productivity, they need to obtain new technologies, and in most instances these will come from overseas through trade. Technology is therefore a major driver of trade in an era where there is rapid technological development taking place. Technological advances have improved communications between countries, reduced the cost of trade.
- (c)** A more globalised labour market benefits national economies by allowing an economy to fill shortages in its labour market, such as shortages of skilled workers or shortages of unskilled labour. Second, countries that have low income levels and higher levels of underutilisation of labour can benefit from workers going overseas for work, and then sending remittances back home. Remittance from overseas workers are a major source of national income for many poorer economies. Third, there are benefits for workers to move to different countries for work. This means that workers are not limited to the job opportunities in their own country, and they may find a better fit, or a higher wage, in another country where their particular skills are needed.
- (d)** One cost of an international labour market is that businesses may seek to move production to lower cost economies, reducing employment opportunities in the country where the business was originally based. These economies may have lower labour standards (for example, lower minimum wages, weaker safety standards and less employment protections). As businesses move employment to economies with lower labour standards, this can put pressure on competitive economies to lower their labour standards as well, in order to compete. Finally, global labour markets may attract higher-skilled workers to high-income countries from developing countries, which then suffer a 'brain drain', constraining economic development opportunities.

### Question 2

- (a)** Firstly, increased financial flows allow money to move quickly between economies, so that countries can obtain funds to finance their domestic investment – which particularly benefits economies with a low level of national saving. Secondly, the increase in financial flows creates more investment opportunities for countries with a surplus of funds.
- (b)** International mergers and acquisitions typically move in line with global economic conditions. During periods of strong economic growth, investment also tends to be high, and vice versa. During the second half of the 2010s there was a recovery in the level of mergers and acquisitions after much lower levels from 2009 to 2014, largely driven by increased growth and investment from developed economies. The global recession caused by the COVID-19 pandemic in 2020 similarly resulted in a sharp fall in merger and acquisition activity.
- (c)** Financial flows refer to the short-term, speculative movement of funds between economies for loans, or the purchase of less than 10 per cent of shares in an existing company. In contrast, foreign direct investment (FDI) refers to the movement of funds between economies to establish new production activities or to purchase 10 per cent or more of shares in an existing company.
- (d)** The International Monetary Fund (IMF) is responsible for maintaining overall global financial and economic stability, which includes moderating the volatility in portfolio flows and foreign exchange markets. One method of fulfilling this role is for the IMF to assist countries that are experiencing currency or financial crises, so their economic instability does not affect or flow on to other economies. On this front, the IMF has been criticised for failing to prevent a series of crises, such as the 1997 Asian financial crisis, the collapse of the Argentine peso in 2002, and European sovereign debt crises in 2012. However, the IMF played an important role during the 2009 global financial crisis by injecting \$250 billion into the global economy, and has provided more than \$160 billion worth of loans and relief to struggling Eurozone economies

since 2012. In return, the IMF has required those Eurozone countries to follow strict austerity measures, such as reducing government spending, imposing higher taxes and privatising government assets. In general, the IMF supports policies that encourage foreign investment from transnational corporations. These structural adjustment policies encouraged by the IMF have played an important role during the process of globalisation.

### Question 3

- (a)** With reference to the graph, one recent trend in the international business cycle is that all countries experienced a sharp downturn in economic growth in 2009 due to the global financial crisis, and in 2020 due to the global COVID-19 pandemic. Secondly, advanced economies such as the United States and Europe were the main driver of global growth over the 1990s, but played a less important role in the 2000s and 2010s as China and developing economies played a greater role in global growth.
- (b)** A country's domestic interest rates are one of the most important factors that accounts for differences in domestic economic cycles compared to the international business cycle (IBC). Domestic interest rates affect the level of economic activity, with higher interest rates dampening economic activity and lower interest rates stimulating activity. Another factor that can weaken the role of international factors is government fiscal policy. A government's policies can influence their country's economic growth rate, separate to the influences of the international cycle. Finally, extreme weather events or regional conflicts can contribute to diverge from global growth trends.
- (c)** In the East Asian region, the strong and sustained economic growth throughout the past decade is largely due to the rapid industrialisation of economies such as China and Vietnam, as well as sustained growth in economies such as Korea and Singapore. Recent decades have seen the increased integration between Asian economies that has led to increased trade and stronger growth. The fall in economic activity due to the global financial crisis was less pronounced in the East Asian area compared to other regions around the world, and this reflects the higher average level of growth in the emerging economies within this region.
- (d)** Different regions may be at different stages of economic development. Newly industrialising economies such as those in East Asia experience higher rates of growth, while mature industrialised economies such as those in Europe have experienced much lower growth rates. Secondly, one or two large economies may shape a regional business cycle because of the way that their changing growth levels influence other economies in their region. Examples include China in the Asian region, or Brazil in Latin America. Thirdly, common economic policy settings in a region will result in growth rates becoming much more closely linked. This can be through a common monetary policy or common currency, such as in the 18 nations forming the Eurozone. Fourthly, economic crises can intensify regional business cycles as a loss of confidence in one economy can often spread quickly to neighbouring economies. This has been seen on many occasions, including during the Greek and Irish economic crises in 2010, and in the Asian financial crisis of 1997–1998.

## Skills Revision Answers

	Does it strengthen or weaken the international business cycle?	Impact on domestic/international economies
Trade flows	Strengthen	Increased economic growth in one country will lead to increased demand for goods and services from other countries, which will increase their rate of economic growth.
Exchange rates	Weaken	Exchange rates influence the level of trade competitiveness and economic growth.
Structural factors	Weaken	Different levels of innovation, population growth rates, age distribution regulation, and other structural factors influence a country's competitiveness and economic growth.
Foreign investment	Strengthen	Strong economic conditions will give business owners the funds and confidence to invest overseas, which may contribute to economic growth in other countries.
International organisations	Strengthen	Organisations such as the G20 or G7 influence global economic activity, and can unofficially be a forum for coordinating international macroeconomic policy.
Domestic interest rates	Weaken	Domestic interest rates will either dampen or stimulate domestic economic activity, separate from movements in the international business cycle.
Commodity prices	Strengthen	Higher commodity prices can impact inflation, investment, employment and growth across different countries.

# Trade in the Global Economy

# 2

## Multiple Choice

- |          |    |           |    |           |    |           |    |
|----------|----|-----------|----|-----------|----|-----------|----|
| <b>1</b> | D  | <b>6</b>  | D* | <b>11</b> | C* | <b>16</b> | B* |
| <b>2</b> | D* | <b>7</b>  | B* | <b>12</b> | B  | <b>17</b> | D  |
| <b>3</b> | B  | <b>8</b>  | B  | <b>13</b> | B  | <b>18</b> | B* |
| <b>4</b> | C  | <b>9</b>  | A* | <b>14</b> | D  | <b>19</b> | A* |
| <b>5</b> | B* | <b>10</b> | A* | <b>15</b> | C* | <b>20</b> | A  |

\*Indicates that an enhanced answer has been provided in the section below.

## Enhanced Answers

- 2** D Bilateral trade agreements, instead of increasing overall trade, can lead to the diversion of trade from other countries to the members of the agreement. These agreements can create new non-tariff barriers and preferential arrangements that result in economies increasing trade with economies that are not the most efficient producers of a good.
- 5** B Free trade world price for the good is \$12. After the tariff the price increases to \$24. Therefore, the tariff is \$12, being the difference between the new increased price of \$24 and the original world price of \$12.
- 6** D Before the tariff the free trade price was \$12. At this price, 1000 units were demanded (intersection of demand curve and price of \$12). Two hundred units were supplied domestically at this price (intersection of the supply curve and price of \$200). The difference between demand of 1000 units and domestic supply of 200 units must be made up of imported goods, which is equal to 800 units (1000 – 200).
- 7** B The tariff is \$12 on imported goods (see answer to question 5). At the higher price of \$24 local producers supply 400 units. However 800 units are demanded. The shortfall is made up of 400 units of imports (800 – 400 = 400). Each import has a \$12 tariff. So  $400 \times \$12 = \$4800$ .
- 9** A Free trade takes advantage of the comparative advantages different economies have. Countries will specialise in the area of their greatest comparative advantage and allocate more resources into this area, meaning the production of these goods becomes more efficient. The main advantage of free trade is the ability for economies to specialise, which best promotes the efficient allocation of scarce resources.
- 10** A Equilibrium price before subsidy is \$10. Equilibrium price after subsidy is \$7.  $\$10 - \$7 = \$3$ .
- 11** C The size of a subsidy is the vertical distance between the two supply curves. In this case the distance between S (\$13) and S1 (\$7).  $\$13 - \$7 = \$6$ . So, the subsidy is \$6 per unit. To calculate the total cost to the government, the cost per unit of the subsidy (\$6) must be multiplied by the quantity supplied (400). In this case  $\$6 \times 400 = \$2400$ .
- 15** C AANZFTA – The ASEAN-Australia-New Zealand Free Trade Agreement – is a multilateral trade agreement between Australia, New Zealand and the 10 South-East Asian nations that comprise ASEAN. Answer A is a bilateral trade agreement. Answer B is an economic forum. Answer D is a defence treaty.

- 16** B A tariff is a tax on imports. It discourages imports, thereby protecting domestic industries. Any imports into the country are taxed, thereby increasing government revenue.
- 18** B An increase in import quotas means an increase in imports into the country. Increased imports mean more competition for domestic producers.
- 19** A Trade bloc occurs when a number of countries join together in a formal preferential trading agreement, to the exclusion of other countries.

## Short Answers

### Question 1

- (a)** Australia has bilateral agreements with New Zealand (CERTA), Singapore, Thailand, the United States, Chile, Malaysia, South Korea, Japan and China. Australia is a member to the following multilateral agreements: the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CP-TPP or TPP-11) and the ASEAN-Australia-New Zealand Free Trade Area.
- (b)** The International Monetary Fund (IMF) is responsible for the stability of the international financial system. The IMF has a key role in financing emergency loans and rescue packages during financial crises, as well as assisting with longer-term strategies to stabilise economies. The IMF has contributed to globalisation by ensuring countries open their economies to liberalised trade, finance and capital.
- (c)** The World Trade Organisation's role is to advance free trade and resolve trade disputes between member nations. The WTO has been integral to the promotion of trade liberalisation in the global economy, opening up further liberalisation in different sectors of the global economy. Although the WTO has failed to meet its ambitions for a new global trade agreement (the Doha Round) over the past two decades, it has overseen an expansion of trade and the liberalisation of markets around the world. By also playing an active role in dispute resolution, the WTO helps encourage countries to comply with trade agreements. Although the WTO was established with powers to enforce trade sanctions against member nations, its capacity to play this role has been undermined in more recent years, in particular due to the United States' refusal to appoint officials to the WTO's disputes panel.
- (d)** A reduction in subsidy payments to the agricultural sectors of trading partners will, in the short term, decrease the international competitiveness of their output as producers are likely to increase prices to cover their higher production costs. This is likely to result in fewer imports of agricultural products into Australia, because those imports will be less competitive against domestic products. In addition, it may lead to increased exports of Australian agricultural products, which now become more competitive on global markets. This increase in Australian exports may also lead to a lower current account deficit, a higher rate of economic growth and a more efficient allocation of resources in the global economy.

## Question 2

- (a) Opportunity cost of producing 1 million litres of whisky in Japan = rice/whisky  
=  $50/75$   
= 0.67 thousand tonnes of rice
- (b) The opportunity cost of producing rice in Japan is 1.5 ( $75/50$ ). The opportunity cost of producing rice in Vietnam is 1.2 ( $30/25$ ). Therefore, Vietnam has a comparative advantage in the production of rice.
- (c) Comparative advantage refers to the situation where economies have a lower opportunity cost in producing one particular good or service, so they should export that product to maximise the living standard for their own economy and that of their trading partners. In contrast, absolute advantage is concerned with which economy can produce the largest possible volume of a particular good, given their available resources.
- (d) Firstly, protectionist policies can be imposed to protect infant industries from foreign competition. Protection may be useful in the short term to help infant industries achieve economies of scale and compete on a global level. Secondly, protection prevents foreign producers from dumping products on the domestic market, where foreign firms export goods to a country at a price lower than the selling price in their country of origin.
- (e) Two main advantages of free trade are that a greater variety of products becomes available in an economy, and at a lower price. This benefits local consumers as well as businesses that use imports as an input into production. The overall effect is higher living standards as a result of lower prices, increased production and a more efficient allocation of resources. However, in the short run, inefficient import-competing firms will be forced to reduce or cease production in the face of global competition, increasing structural unemployment. A second disadvantage is that newer industries may find it more difficult to gain economies of scale without protection, and therefore may never have a chance to establish themselves so that they can compete with the rest of the world.

## Question 3

- (a) Government revenue = size of the tariff  $(8 - 5) \times$  quantity of imports after the tariff  
=  $\$3 \times (300 - 150)$   
=  $\$3 \times 150$   
=  $\$450$
- (b) An import quota restricts the volume of a good that is allowed into a country during a specific time period. As a result, consumers pay a higher price and obtain fewer goods. Assuming that the import quota results in a reduction in import volumes, domestic producers will become more competitive and will supply a larger share of the domestic market. This in turn will increase employment in the protected industry. However, income will be redistributed from consumers to domestic producers, with the overall impact of a lower level of economic growth.
- (c) The government might impose a tariff on the importation of face masks in order to achieve the goal of self-sufficiency for an item that is regarded as essential in an emergency such as a global pandemic, when global supply chains might break down and producers in other countries may divert all their production to their domestic market. Second, the government might impose the tariff to protect domestic employment in the local manufacturing industry.
- (d) Protectionist policies generally have short-term benefits, such as higher domestic production and job creation, but long-term costs, such as inflation, lower levels of productivity, exports and higher unemployment. In the short term, protectionist policies can allow 'infant industries' to expand their scale and reduce their production costs so that they can compete with overseas producers. However, unless this protection is temporary, there is no incentive for the industry to reach a level of efficiency where it would be competitive without protection. In the long run, protectionist policies are likely to reduce living standards in an economy, as they tend to distort the allocation of resources away from efficient areas towards areas of less efficient production. This is likely to lead to higher levels of unemployment and lower growth rates.

## Skills Revision Answers

### The Market with Free Trade

Price without Free Trade: \$20

(this is the intersection of domestic demand and supply curves)

World Price: \$10

(this is the lower figure with the price being pushed down due to competition with overseas imports into the country)

Quantity Supplied without Free Trade: 300

(the intersection of the domestic demand and supply curves)

Quantity Supplied with Free Trade: 150

(supplied by domestic producers – intersection of the supply curve and the price of \$10)

Quantity Demanded with Free Trade: 450

(intersection of demand curve and price of \$10)

Quantity of Imports with Free Trade: 300

(450 demanded, 150 supplied domestically, therefore to satisfy the market 300 units need to be imported).

Domestic Supplier Revenue without Free Trade: \$6000

(Price  $\times$  Quantity =  $\$20 \times 300 = \$6000$ )

Domestic Supplier Revenue with Free Trade: \$1500

(Price  $\times$  Quantity =  $\$10 \times 150 = \$1500$ )

Extension: Why is this an import-competing market?

Domestic economy only supplies a small percentage of units demanded in the country. Majority of units are supplied by way of imports. This implies this industry is an import competing market.

### The Tariff Diagram

#### Left-hand side diagram

World price (free trade): \$10

Quantity supplied at world price: 100

(intersection of price of \$10 and the supply curve)

Quantity demanded at world price: 300

(intersection of price of \$10 and the demand curve)

Quantity of imports before the tariff: 200

(Quantity demanded at world price (300) minus units produced domestically at world price (100). Therefore  $300 - 100 = 200$ . 200 units need to be imported to meet market demand for the product).

Domestic supplier revenue before the tariff: \$1000

(Revenue = Price  $\times$  Quantity =  $\$10 \times 100 = \$1000$ )

#### After Tariff

Size of the tariff: \$5

(price moves from \$10 to \$15)

Price after the tariff: \$15

Quantity supplied after the tariff: 150

(intersection of the supply curve and the price of \$15)

Quantity demanded after the tariff: 250

(intersection of the demand curve and the price of \$15)

Quantity of imports after the tariff: 100

(250 units demanded, 150 units supplied domestically. Shortfall of 100 units is made up of imports).

Price received by domestic firms after the tariff: \$15

(see price after the tariff above)

Price received by foreign producers: \$10

(tariff of \$5 on imports. Tariff revenue of \$5 per unit goes to government, so foreign producers receive \$10 per unit sold).

Domestic supplier revenue after the tariff: \$2250

(Revenue = Price  $\times$  Quantity =  $\$15 \times 150 = \$2250$ )



**Impacts of Tariff**

Loss of consumer choice (fall in quantity demanded) = 50  
(Pre-tariff demand 300, post-tariff demand 250.  $300 - 250 = 50$ ).

Gain to domestic producer revenue: \$1250  
(Post-tariff revenue \$2250 – Pre-tariff revenue \$1000 = \$1250).

Government revenue: \$500  
(Tariff of \$5 per unit on imports and there are 100 units imported.  
Revenue = Price  $\times$  Quantity =  $\$5 \times 100 = \$500$ ).

Decrease in imports: 100  
(Imports pre-tariff 200 – imports post-tariff 100 = 100)

Extension: Loss of revenue to foreign producers: \$1000  
(Revenue = Price  $\times$  Quantity =  $\$10 \times 100$  (loss of imports) = \$1000)

**Right-hand side diagram**

World Price: \$5

Quantity supplied at world price: 1000  
(intersection of the price \$5 and the supply curve)

Quantity demanded at world price: 4000  
(intersection of the price \$5 and the demand curve)

Quantity of imports before the tariff: 3000  
(Quantity demanded at world price (4000) – quantity supplied domestically (1000).  
Shortfall is made up of imported units).

Domestic supplier revenue before the tariff: \$5000  
(Revenue = Price  $\times$  Quantity =  $\$5 \times 1000 = \$5000$ ).

**After the tariff**

Size of the tariff: \$3  
(New price \$8 minus original price of \$5 = \$3)

Price after the tariff: \$8

Quantity supplied after the tariff: 2000  
(intersection of the supply curve with the new price \$8)

Quantity demanded after the tariff: 3000  
(intersection of the demand curve with the new price \$8)

Quantity of imports after the tariff: 1000  
(3000 units demanded – 2000 units supplied domestically = 1000 units imported).

Price received by domestic firms after the tariff: \$8  
(see price after the tariff above)

Price received by foreign producers: \$5  
(Price of good is \$8, however \$3 of this price is the tariff which goes direct to the government,  
meaning foreign producers receive \$5 per unit).

Domestic supplier revenue after the tariff: \$16,000  
(Revenue = Price  $\times$  Quantity =  $\$8 \times 2000 = \$16,000$ ).

**Impacts of the tariff**

Loss of consumer choice (fall in quantity demanded): 1000  
(4000 pre-tariff demand – 3000 post-tariff demand = 1000)

Gain to domestic producer revenue: \$11,000  
(Post-tariff revenue \$16,000 (see above) minus pre-tariff revenue \$5000 (see above) = \$11,000)

Government revenue: \$3000  
(Revenue = Price  $\times$  Quantity =  $\$3 \times 1000$ )

Decrease in imports: 2000  
(Imports pre-tariff (3000) minus imports post-tariff (1000) = 2000)

Extension: Loss of revenue to foreign producers: \$10,000  
(Revenue = Price  $\times$  Quantity =  $\$5 \times 2000$  (loss of imports) = \$10,000)

## The Subsidy Diagram

### Top diagram

Equilibrium before the subsidy: \$12  
(intersection of demand curve and the original supply curve)

Equilibrium quantity before the subsidy: 300  
(Intersection of the demand curve and the original supply curve)

Equilibrium price after the subsidy: \$10  
(intersection of the demand curve and the new supply curve S1)

Size of the subsidy: \$4  
(Vertical distance between the two supply curves S and S1 ( $14 - 10 = 4$ )).

Equilibrium quantity after the subsidy: 400  
(intersection of the demand curve and the new supply curve S1)

Increase in quantity due to the subsidy: 100  
(Post-subsidy 400 – Pre subsidy 300 = 100 units).

Government expenditure on subsidy scheme in the market: \$1600  
(price of subsidy  $\times$  quantity =  $\$4 \times 400 = \$1600$ )

### Left-hand side diagram

World price: \$10

Quantity demanded at world price: 750

Quantity supplied before the subsidy: \$200

Quantity imports before the subsidy:  $750 - 200 = 550$

### After the subsidy

Size of the subsidy:  $\$16 - \$10 = \$6$

Quantity supplied after the subsidy: 400

Imports after the subsidy:  $750 - 400 = 350$

### Impacts of the subsidy

Government expenditure on the subsidy:  $\$6 \times 400 = \$2400$

Increase in domestic market share:  $400 - 200 = 200$

Decrease in imports:  $550 - 350 = 200$

### Right-hand side diagram

World price: \$5

Quantity demanded at world price: 80,000  
(intersection of demand curve and price of \$5)

Quantity supplied before the subsidy: 20,000  
(intersection of the original supply curve S and price of \$5).

Imports before the subsidy: 60,000  
(80,000 units demanded – 20,000 units produced domestically = 60,000 unit shortfall made up with imports).

### After the subsidy

Size of the subsidy: \$4  
(vertical distance between the two supply curves S and S1, which is  $\$9 - \$5 = \$4$ )

Quantity supplied after the subsidy: 50,000  
(intersection of new supply curve S1 and market price of \$5)

Imports after the subsidy: 30,000  
(80,000 units demanded – 50,000 units supplied domestically = shortfall of 30,000 units made up of imports).

**Impacts of the subsidy**

Government expenditure on the subsidy

(Expenditure = price of subsidy  $\times$  quantity =  $\$4 \times 50,000$  units supplied domestically as subsidy isn't paid to importers =  $\$200,000$ )

Increase in domestic market share: 30,000

(Post-subsidy 50,000 – pre-subsidy 20,000 = 30,000)

Decrease in imports: 30,000

(Pre-subsidy 60,000 imports – post-subsidy 30,000 = 30,000 decrease in imports)

**The Quota Diagram****Left-hand side diagram**

World price: \$10

Quantity supplied at world price: 1000

(intersection of supply curve and price of \$10)

Quantity demanded at world price: 5000

(intersection of demand curve and price of \$10)

Quantity of imports before the quota: 4000

(5000 demanded – 1000 produced domestically = 4000 shortfall made up by imports)

Domestic supplier revenue before the quota: \$10,000

(Revenue = Price  $\times$  Quantity =  $\$10 \times 1000 = 10,000$ )

Overseas producer revenue before the quota: \$40,000

(Revenue = Price  $\times$  Quantity =  $\$10 \times 4000 = \$40,000$ )

**After the quota**

Size of the quota: 2000 units

(2000 units imported as total demand is 4000 and 2000 units supplied domestically)

Price after quota: \$12

Increase in price due to the quota: \$2

Quantity supplied after the quota: 2000 units

(intersection of supply curve with price of \$12)

Quantity demanded after the quota: 4000 units

(intersection of supply curve with price of \$12)

Domestic supplier revenue after the quota: \$24,000

(Revenue = Price  $\times$  Quantity =  $\$12 \times 2000 = \$24,000$ )

Overseas supplier revenue after the quota: \$24,000

(Revenue = Price  $\times$  Quantity =  $\$12 \times 2000 = \$24,000$ )

**Impacts of the quota**

Loss of consumer choice (fall in quantity demanded): 1000

(Pre-quota 5000 – Post-quota 4000 = 1000 units)

Gain to domestic producer revenue: \$14,000

(Pre-quota \$10,000, Post-quota \$24,000, the difference being \$14,000)

Decrease in imports: 2000 units

(Pre-quota imports 4000 – Post-quota imports 2000 = 2000 units)

Loss of revenue to foreign producers: \$16,000

(Pre-quota revenue \$40,000 see above – Post-quota revenue \$24,000 see above = \$16,000)

**Right-hand side diagram**

World price: \$50

Quantity supplied at world price: 100  
(intersection of supply curve with price of \$50)

Quantity demanded at world price: 250  
(intersection of demand curve with price of \$50)

Quantity of imports before the quota: 150  
(Quantity demand 250 – 100 units produced domestically = 150 unit shortfall made up of imports).

Domestic supplier revenue before the quota: \$5000  
(Revenue = Price × Quantity = \$50 × 100 = \$5000)

Overseas producer revenue before the quota: \$7500  
(Revenue = Price × Quantity = \$50 × 150 = \$7500).

**After the quota**

Size of the quota: 50  
(50 units imported as demand is 200 and domestic supply is 150 after imposition of the quota).

Price after the quota: \$70

Increase in price due to the quota: \$20  
(\$70 post-quota – \$50 pre-quota = \$20 increase in price)

Quantity supplied after the quota: 150  
(intersection of the supply curve and the price of \$70).

Quantity demanded after the quota: 200  
(intersection of the demand curve and the price of \$70).

Domestic supplier revenue after the quota: \$10,500  
(Revenue = Price × Quantity = \$70 × 150 = \$10,500)

Overseas producer revenue after the quota: \$3500  
(Revenue = Price × Quantity = \$70 × 50 = \$3500)

**Impacts of the quota**

Loss of consumer choice (fall in quantity demanded): 50  
(Pre-quota 250 units – Post-quota 200 units = 50 units)

Gain to domestic producer revenue: \$5500  
(Pre-quota revenue \$5000 see above, Post-quota revenue \$10,500 see above, difference being \$5500).

Decrease in imports: 100 units  
(Pre-quota imports 150, Post-quota imports 50, difference in imports 100).

Loss of revenue to foreign producers: \$4000  
(Pre-quota revenue \$7500 see above, Post-quota revenue \$3500 see above, difference being \$4000)

# Globalisation and Economic Development

# 3

## Multiple Choice

<b>1</b>	D*	<b>6</b>	B*	<b>11</b>	B*	<b>16</b>	C*
<b>2</b>	A*	<b>7</b>	A	<b>12</b>	B*	<b>17</b>	D*
<b>3</b>	D	<b>8</b>	A*	<b>13</b>	A	<b>18</b>	C
<b>4</b>	D	<b>9</b>	C	<b>14</b>	B	<b>19</b>	C*
<b>5</b>	C	<b>10</b>	B	<b>15</b>	C	<b>20</b>	A*

\*Indicates that an enhanced answer has been provided in the section below.

## Enhanced Answers

- 1** D Economic development is a broad measure of welfare in a nation that includes indicators of health, education and environmental quality as well as material living standards.
- 2** A Improving education increases the skills of the population, leading to increases in productivity and increases in the aggregate supply curve for the economy, which will lead to economic growth and development.
- 6** B Europe and Central Asia has the highest HDI figure. The closer the HDI figure is to 1 the greater the level of development.
- 8** A Global wealth is distributed more unevenly than income. 1 per cent of the world's population owns almost half of global wealth. On the other hand, low-income economies account for 10 per cent of the global population but only 1 per cent of its income.
- 11** B Regional trading blocs such as the European Union and North American Free Trade Agreement can exclude poorer nations from gaining access to lucrative global consumer markets. Exclusion from trade opportunities has an enormous impact on poor countries.
- 12** B World Bank economists have calculated that administrative costs of trade agreements have a significant impact on developing economies and contribute to global inequality. A, C and D are not correct because some trade agreements involve developing economies, reduce agricultural protection levels, and, while trade agreements drive structural change, this often creates job opportunities for lower-skilled workers in developing economies.
- 16** C Income inequality has increased in many developing economies because the global mobility of skilled labour means that highly skilled workers may emigrate to more advanced economies with higher paying jobs unless they receive higher pay. This contributes to large increases in pay for highly skilled workers while incomes for other workers grow at a much slower rate.
- 17** D Purchasing power parity (PPP) is a theory that states that exchange rates should adjust to equalise the price of identical goods and services in different economies throughout the world.
- 19** C Human Development Index (HDI) is a measure of economic development that takes into account life expectancy at birth, levels of educational attainment and material living standards (as measured by Gross National Income per capita).

- 20** A Developing economies are characterised by lower income levels (with around half of the population in absolute poverty), moderate growth rates, high population growth, and heavy reliance on the agricultural sector.

## Short Answers

### Question 1

- (a)** Comparisons of GNI in different economies (using US dollars) may present an inaccurate picture of relative living standards because these comparisons portray differences in purchasing power. Adjusting GNI statistics for purchasing power parity allows us to take into account the prices of goods and services in different countries, so GNI comparisons are more accurate.
- (b)** Economists are able to develop a more complete picture of a country's level of economic development by using both the Human Development Index and Gross Domestic Product. While GDP provides a valuable guide to the overall value of the output of an economy, it does not tell us how income is distributed within an economy. HDI provides a measure of economic development by focusing on some key measures of economic outcomes that reflect the quality of life of people within a country.
- (c)** Economies with less 'human capital' (that is, a working age population with relatively low levels of skills and education) is likely to be less productive, slower growing and have lower income levels than other economies. A country's political and economic institutions can also contribute to inequality. Political instability or corruption can undermine the confidence of investors and reduce financial inflows and therefore contribute to a lower level of national income.
- (d)** Differences in access to capital and technology between economies contribute to global inequality. Historically, there have been much stronger flows of foreign direct investment to developed economies. Although there has been a sustained trend towards higher levels of FDI flows into developing economies in the past two decades, on a per capita basis developing economies still receive only a fraction of the level of investment received in developed economies, resulting in a weaker capital base and contributing to weaker levels of productivity. The same is true for technology transfers, with poorer economies often dependent on importing new technologies from wealthier economies. Rules surrounding trade (such as the protection of intellectual property rights) can also make access to new technologies more difficult for lower income countries.

### Question 2

- (a)** Developing economies such as Madagascar and Sudan generally have lower income levels, a population with poorer education and health outcomes, higher levels of income inequality, and lower levels of industrialisation. Emerging economies such as China and Mexico are in the process of industrialisation and generally experience high levels of economic growth, an increasingly skilled workforce and strong export growth.
- (b)** Advanced economies tend to have high levels of GNI per capita and economic development. These economies have already experienced the benefits of industrialisation, and now have economies comprising large service industries and advanced manufacturing. In recent decades, these economies have experienced slower rates of economic growth.
- (c)** Globalisation has had a mixed impact on developing countries. On the one hand, globalisation has provided developing countries with the opportunity to grow by producing goods and services for global markets. Developing countries now have greater access to new technologies that enhance business innovation, while foreign investment has accelerated business growth and infrastructure development. On the other hand, globalisation has also had negative effects. The benefits of globalisation have generally been skewed to wealthier economies. It has contributed to rising inequality, as many of the benefits are concentrated among a small proportion of populations. Some economies have also been negatively affected by financial instability and environmental degradation.

**Question 3**

- (a)** The Human Development Index measures economic development by accounting for life expectancy at birth, levels of educational attainment and gross national income per capita.
- (b)** Economic growth is the increase in the amount of goods and services produced in an economy over a period of time. Economic development is a broader measure of welfare within an economy, encompassing issues such as health, education and the quality of life.
- (c)** In 2015, a new global agenda of development goals named the Sustainable Development Goals (SDGs) was agreed globally, building on the Millennium Development Goals to reduce all forms of poverty. The new SDGs call for action by all countries, poor, rich and middle-income, to promote prosperity while protecting the planet. They recognise that ending poverty must go hand-in-hand with economic growth and social needs, including education, health, social protection, and job opportunities, while tackling climate change and environmental protection.
- (d)** Answers can be based on the experiences of any economy other than Australia. For the Indonesian economy a response may consist of the following: Over the past three decades, Indonesia has gradually adopted policies embracing globalisation. Since the mid-1980s it has shifted from a policy of import substitution towards export-led development, reducing tariffs to similar levels in the East Asia and Pacific region. It is also a member of the Association of South-East Asian Nations and has signed trade agreements with ASEAN, and through ASEAN, with Australia and New Zealand. However, compared with its neighbours, Indonesia is less integrated through trade. Indonesia has increased participation of transnational corporations to attract foreign direct investment, with companies such as Adidas and LG Electronics establishing manufacturing operations. Indonesia has liberalised financial flows, but this has had both positive and negative effects. Indonesia experienced a major downturn following the Asian financial crisis in the late 1990s and the currency depreciated sharply during the global financial crisis in the late 2000s. A major objective of the Widodo Government is to raise per capita income to US\$15,000 by 2025, but this will be difficult to achieve.

## Skills Revision Answers

	Positive impacts	Negative impacts
<b>Economic growth</b>	Economic growth rates have generally been higher in countries that have opened their markets to global trade and foreign investment. China, Vietnam and other economies are in some ways examples of the benefits of global markets.	Advanced economies are the most globally integrated yet have experienced comparatively weak growth in the past two decades. The globalisation era has also seen several highly destabilising events such as the Asian financial crisis, global financial crisis and COVID-19 pandemic.
<b>Economic development</b>	Emerging and developing economies have benefited from a rising quality of life (including resources for education and health care) and for some countries a convergence in living standards.	Globalisation has contributed to increased income inequality and accelerated climate change and environmental damage.
<b>Income inequality</b>	Increases in pay and global employment opportunities for highly skilled workers. Populations of emerging economies have generally experienced rising income levels.	Inequality within countries has tended to widen – in advanced economies between highly skilled workers vs those in import-competing sectors; in emerging countries between those in cities and manufacturing sectors vs those in rural areas who have not benefited as much from globalisation.
<b>Globalisation of financial markets</b>	Increased access to overseas funds for investment, creating more economic activity.	Lower levels of foreign direct investment for lesser developed countries relative to advanced economies. The growth of short-term financial flows can also have a destabilising impact on some countries.
<b>Environmental sustainability</b>	Globalisation offers opportunities for countries to collaborate on environmental preservation, such as through international mechanisms like the exchange of 'carbon credits'. Globalisation also can increase global scrutiny of environmental practices. It can also facilitate the transfer of new technologies to improve energy efficiency.	Some countries seeking to attract foreign investment may not consider the social costs of production and may gain a short-term economic advantage by attracting investors who want to produce at lower costs by neglecting the negative environment impacts of production. As a result more companies may engage in economic behaviour that harms the environment.



# Australia's Trade and Financial Flows



## Multiple Choice

<b>1</b>	C	<b>6</b>	A*	<b>11</b>	C	<b>16</b>	B*
<b>2</b>	B	<b>7</b>	B	<b>12</b>	A*	<b>17</b>	B
<b>3</b>	C	<b>8</b>	C	<b>13</b>	C	<b>18</b>	D
<b>4</b>	B*	<b>9</b>	D	<b>14</b>	B	<b>19</b>	D*
<b>5</b>	C*	<b>10</b>	D*	<b>15</b>	C	<b>20</b>	C*

\*Indicates that an enhanced answer has been provided in the section below.

## Enhanced Answers

- 4** B Assuming a floating exchange rate, the balance of payments should balance to zero when net errors and omissions are factored in.  
The balance of payments formula is:  
Current account + capital and financial account + net errors and omissions = 0.  
Noting that:
- Current account = net goods + net services + net primary income + net secondary income
  - Capital and financial account = capital account + financial account
- We can substitute the values (in \$billions) in the formula:  
Net goods (12) + net services (-8) + net primary income (?) + net secondary income (-3) + capital account (10) + financial account (13) + net errors and omissions (0) = 0  
Net primary income + 24 = 0  
Therefore net primary income = -\$24 billion.
- 5** C Iron ore is a good. An export of a good would be a credit on the net goods section of the current account. This would raise the value of net goods from \$12 billion to \$20 billion, that is, increasing the size of the net goods surplus.
- 6** A Income from Australian exports is recorded as a net goods credit. Net primary income does not refer to income from primary production; instead it refers to earnings on investments, such as interest payments on borrowings and returns on foreign investments.
- 10** D The major contributor to Australia's consistent current account deficit (CAD) is the low level of domestic savings, meaning foreign sources of money are needed to fund investment in Australia. This is reflected by Australia's Capital and Financial Account surpluses. However, Australia must pay for the use of foreigners' savings, usually via interest and dividend payments to overseas investors. These represent an outflow of funds from Australia and are recorded as a debit on the current account's net primary income account. Thus, D is the only answer that would reduce Australia's current account over time, as all other answers would actually increase the CAD.

- 12** A Terms of trade is an index relative to a base year. It measures export prices relative to import prices. The base year is always 100. If the index number is higher relative to the year before, the terms of trade have improved. If the index number is lower relative to the year before, the terms of trade have deteriorated.

Turning to the example, the terms of trade index improved from Year 1 to Year 2 (100 to 108) but deteriorated from Year 2 to Year 3 (108 to 99). This movement in Year 3 can be explained by a fall in export prices, a rise in import prices or a combination of both. Therefore the only answer that fits is A.

- 16** B To measure CAD as a percentage of GDP, use the formula  $\frac{\text{CAD}}{\text{Real GDP}} \times \frac{100}{1}$ .

$$2021 = \frac{50}{1900} \times \frac{100}{1}$$

$$2021 = 2.63\%$$

$$2022 = \frac{40}{1853} \times \frac{100}{1}$$

$$2022 = 2.2\%$$

The CAD is lower in 2022 than in 2021, therefore the answer is B.

- 19** D With a floating exchange rate, CA + KAFA + Errors and Omissions = 0  
Another way of saying this is that the CA figures and the KAFA figures must be the inverse of each other to 'balance' the balance of payments.

$$\text{CA} = \text{Net g} + \text{Net s} + \text{NPY} + \text{NSY}$$

Note that net figure means X of goods minus M of goods for net goods, and export of services minus import of services for net services.

Substituting in:

$$\text{CA} = \text{Net goods and services (630 - 320)} + \text{Net PY (-85)} + \text{Net SY (-15)}$$

$$\text{CA} = 310 + (-85) + (-15)$$

$$\text{CA} = 210$$

Hence, a Current Account Surplus of \$210 billion.

$$\text{CA} (\$210) + \text{KAFA} + \text{Errors and Omissions} = 0$$

$$\text{KAFA} = \$-210$$

KAFA deficit of \$210 billion

Therefore, D is the correct answer.

- 20** C The terms of trade shows the relationship between the prices Australia receives for its exports and the prices it pays for its imports. An improvement in the terms of trade is reflected in an increase in the index value. For this hypothetical economy, the terms of trade index increased from 100 in 2021 to 104 in 2022. An improvement in the terms of trade reflects export prices increasing relative to import prices, hence the same volume of exports can now buy more imports.

## Short Answers

### Question 1

- (a) Current account balance = balance on goods and services + net primary income + net secondary income  
= 175 – 300 – 30  
= –\$155 billion
- (b) A \$25 billion decrease in foreign debt servicing costs would decrease the deficit on the net primary income account by \$25 billion, that is from –\$300 billion to –\$275 billion.
- (c) One structural factor that may worsen the balance on goods and services (BOGS) is Australia's narrow export base. Australia's exports are heavily weighted towards commodities, such as coal, iron ore and agriculture, reflecting the fact that Australia's comparative advantage lies in low value-added products. This narrow export base (two-thirds of our exports) means that Australia is more vulnerable to fluctuations in commodity prices. Secondly, the volatility of the Australian dollar (responding to changing commodity prices) is a structural problem that makes it more difficult to increase manufactured exports. Uncertainty about the future value of the dollar, and the dollar's tendency to appreciate during periods of higher world growth and increased commodity prices, makes it less attractive to invest in manufacturing capacity within Australia. This results in fewer manufactured exports and more manufactured imports, worsening the BOGS.
- (d) The balances on the current account and the capital and financial account are closely related because in every year they add up to zero. In other words, a deficit on the current account will be equal to the surplus on the capital and financial account (although there is usually a small difference explained by statistical errors and omissions). This means that an increase in the capital and financial account surplus will result in an increase in the current account deficit and vice versa. A long-term relationship also exists between the two accounts, because over time, surpluses on the capital and financial account will increase foreign liabilities, which in turn will increase the current account deficit (through servicing costs for foreign liabilities on the net primary income account).

### Question 2

- (a) The last two decades have seen an increase in the relative importance of minerals and metals in the export mix, reflecting the impact of sustained increased prices for Australia's minerals and energy exports. On the other hand, the proportion of exports from agricultural and manufacturing industries has declined. The decline of agricultural exports as a share of total exports reflects fluctuations in world prices, more challenging conditions for production (drought) and barriers to trade from other countries' protection of agricultural producers. Manufacturing exports have fallen as a share of total exports as a result of reduced competitiveness due to the higher value of the exchange rate and increased competition from lower-cost international producers.
- (b) The terms of trade affects both the balance on goods and services (BOGS) and the exchange rate. A higher terms of trade tends to increase export revenue and improve the BOGS. A higher terms of trade also reflects an increase in demand for Australian exports, which leads to an appreciation of the Australian dollar. As the increase in the terms of trade contributes to a higher Australian dollar, imports can become more competitive in comparison to domestically produced goods. The resulting increase in imports can offset the effect of the increased value of exports on the BOGS.
- (c) A high current account deficit (CAD) can increase the risks to the Australian economy over the medium to longer term. A high CAD results in increased overseas borrowing or the sale of Australian assets, reflected in the larger surplus on the capital and financial account, and leading to an increase in net foreign debt or net foreign equity. Over time, increased debt or equity levels will result in increased servicing costs, reflected in a higher net primary income account deficit on the CAD. If overseas investors believe that the level of net foreign debt is becoming unsustainable, they may demand a higher return for their risk in the form of increased interest rates. Sustained external imbalance can also contribute to a loss of international confidence in the Australian economy, resulting in greater volatility in the Australian dollar, and if the dollar depreciates this will contribute to higher inflation and an increase in the cost of living. A sustained high CAD can also limit economic growth through the balance of payments constraint, if governments are forced to constrain the rate of growth in order to achieve a sustainable external imbalance.

### Question 3

- (a)** The main structural factor influencing Australia's net primary income balance is the savings and investment gap. In the absence of sufficient domestic savings, the capital investment necessary for economic growth must be financed by foreign investment – either foreign debt or foreign equity. This increases Australia's foreign liabilities and creates future servicing obligations (interest repayments or dividends).
- (b)** One cyclical factor affecting Australia's net primary income balance is the prevailing level of interest rates in Australia and overseas. As Australia has a significant level of gross foreign debt, higher interest rates will increase primary income debits. While higher interest rates also increase primary income credits back to Australian lenders, the funds owed to Australians are less than our foreign debt so the overall effect will be a larger deficit on net primary income.
- (c)** A global commodities boom can result in an improvement in the balance on goods and services and a lower current account deficit, as Australia experienced in the first two decades of the 21st century. Higher prices for commodities, which are Australia's largest export, led to an increase in total export revenue, and also prompted an expansion of investment in the mining industry in order to increase production capacity and further expand exports.
- (d)** Financial inflows in the capital and financial account have an impact on the net income balance on the current account by creating debits in two ways. Firstly, international borrowing will increase debt maintenance costs, requiring regular interest repayments, which are recorded as a debit on the current account. Only the repayment of the principal is recorded in the financial account, while the servicing costs are recorded as debits on the net primary income account in the current account. The largest contributor to Australia's current account deficit (CAD) in recent years has been the servicing cost of overseas borrowing, and this in turn adds to foreign debt. Secondly, foreign investment requires return on equity. Financial inflows of investments are recorded as a credit on the financial account, but the returns on these investments are recorded as a debit on the net primary income account. They therefore contribute to the CAD. Foreign ownership of land will mean that rent is sent back overseas, owners of shares will send dividends overseas and owners of companies will send profits overseas.

## Skills Revision Answers

- 1 Balance on goods and services, net secondary income
- 2 Net goods, net services
- 3 Capital account, financial account
- 4 Financial account, portfolio investment, other investment, financial derivatives
- 5 Capital and financial account, balance of payments
- 6 Balance on goods and services, current account
- 7 Financial account, net primary income, balance on goods and services
- 8 Current account, capital and financial account
- 9 Direct investment, portfolio investment, other investment, reserve assets, financial derivatives
- 10 Net goods, net services, current account

### Left-hand side

(a)  $CA + KAFA + E/O = 0$   
 $-44 + -15 + FA + 0 = 0$   
 $-59 + FA = 0$   
 $FA = 59$

(b)  $CA + KAFA + E/O = 0$   
 $40 + 4 + FA + 0 = 0$   
 $44 + FA = 0$   
 $FA = -44$

$FA = \text{direct investment (DI)} + \text{portfolio investment (PI)} + \text{other investment (OI)} + \text{reserve assets (RA)}$

$-44 = DI + -20 + -2.5 + -3.5$   
 $-44 = DI + -26$   
 $DI = -18$

(c)  $CA + KAFA + E/O = 0$   
 $CA + 8 + 35 + 0 = 0$   
 $CA + 43 = 0$   
 $CA = -43$

$CA = BOGS + NPY + NSY$   
 $-43 = (20 = -5) + NPY + -15$   
 $-43 = NPY$

(d)  $CA = BOGS + NPY + NSY$   
 $CA = -20 + -10 + -2$   
 $CA = -32$   
 $CA + KAFA + E/O = 0$   
 $-32 + -4 + FA + 0 = 0$   
 $FA + -36 = 0$   
 $FA = 36$

**Right-hand side**

**(e)**  $CA + KAFA + E/O = 0$

$$CA + 17 + 0 = 0$$

$$CA = -17$$

$$CA = BOGS + NPY + NSY$$

$$-17 = -30 + NPY + 9$$

$$-17 = -21 + NPY$$

$$NPY = 4$$

**(f)**  $CA = BOGS + NPY + NSY$

$$CA = 20 + -50 + -5$$

$$CA = -35$$

$$CA + KAFA + E/O = 0$$

$$-35 + 10 + FA + 0 = 0$$

$$-25 + FA = 0$$

$$FA = 25$$

FA = direct investment (DI) + portfolio investment (PI) + other investment (OI) + reserve assets (RA)

$$25 = 5 + PI + 4 + 3$$

$$25 = PI + 12$$

$$PI = 13$$

**(g)**  $CA = BOGS + NPY + NSY$

$$CA = 15 + 20 + 5$$

$$CA = 40$$

$$CA + KFA + E/O = 0$$

$$40 + -10 + FA = 0$$

$$30 + FA = 0$$

$$FA = -30$$

Hence financial account is the missing component from the table with a value of -30.

**(h)**  $CA + KAFA + E/O = 0$

FA = direct investment (DI) + portfolio investment (PI) + other investment (OI) + reserve assets (RA)

$$FA = 14 + 20 + 4 + 8$$

$$FA = 46$$

$$KAFA = KA + FA$$

$$KAFA = 46 + 5 \text{ (figure given but not named in the table)}$$

$$KAFA = 51$$

$$CA = BOGS + NPY + NSY$$

$$CA = -10 + -40 + NSY$$

$$CA = -50 + NSY$$

$$CA + KAFA + E/O = 0$$

$$-50 + NSY + 51 + 0 = 0$$

$$1 + NSY = 0$$

$$NSY = -1$$

# Exchange Rates

# 5

## Multiple Choice

<b>1</b>	A*	<b>6</b>	D	<b>11</b>	D	<b>16</b>	D*
<b>2</b>	B*	<b>7</b>	C*	<b>12</b>	A	<b>17</b>	B
<b>3</b>	C	<b>8</b>	D*	<b>13</b>	A	<b>18</b>	D
<b>4</b>	C*	<b>9</b>	B*	<b>14</b>	B*	<b>19</b>	B*
<b>5</b>	A*	<b>10</b>	B*	<b>15</b>	A*	<b>20</b>	D

\*Indicates that an enhanced answer has been provided in the section below.

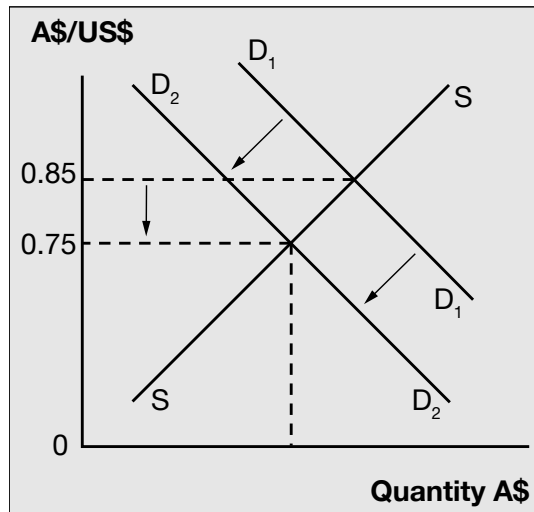
## Enhanced Answers

- 1** A Exchange rates are the price of one currency in terms of another economy's currency – see the glossary entry in *Australia in the Global Economy* (textbook).
- 2** B Selling the Australian dollar puts downward pressure on the price of the Australian dollar, which would slow the appreciation of the currency.
- 4** C A floating exchange rate is when the value of an economy's currency is determined by the forces of demand and supply in foreign exchange markets.
- 5** A Floating exchange rate, meaning answers B and D don't apply. Increase in demand for Australian dollar puts upward pressure on price – this would lead to an appreciation in the currency.
- 7** C Australia has a floating exchange rate, albeit one that allows limited central bank intervention (dirtying the float).
- 8** D Loosening monetary policy would lead to lower interest rates. Lower interest rates would see money move from the Australian dollar to other currencies as investors chase a better return due to interest differentials.
- 9** B An increase in Australian interest rates would see the Australian dollar appreciate as money from overseas would come into Australia seeking the higher rate of return. This would lead to an increase in demand for the Australian dollar, which would lead to an appreciation in the currency.
- 10** B Increases in exports (X) and reductions in imports (M) would follow a depreciation in the Australian dollar. A lower dollar would also increase the Australia dollar value of dividends and interest repayments from its overseas investments and lending. However, a lower dollar could increase the cost of servicing Australia's foreign debt that has been borrowed in foreign currency terms. Given all this, the impact on the current account deficit (CAD) is uncertain as these factors work against each other in terms of the Balance of Payments (BoP).
- 14** B Depreciation of the Australian dollar leads to increased international competitiveness.
- 15** A As around two-thirds of Australia's exports and around half of imports are priced in US dollars, the A\$/US\$ exchange rate is more important than the weight it receives in the TWI calculation.
- 16** D A depreciation in the Australian dollar means one Australian dollar does not buy as much of a given foreign currency. This effectively reduces the purchasing power of Australian consumers buying goods from overseas.
- 19** B When the Reserve Bank feels that a large short-term change in the exchange rate will be harmful to the domestic economy, it may decide to step in to stabilise the Australian dollar.

## Short Answers

### Question 1

- (a) An exchange rate is the price of one currency in terms of another.
- (b) A decrease in demand for Australia's exports of goods and services could lead to a depreciation of the Australian dollar.



- (c) The Reserve Bank may intervene in foreign exchange markets if it believes that the dollar is being harmed by excessive speculation, resulting in a rapid depreciation. Speculation could lead to a rapid depreciation of the Australian dollar. The Reserve Bank could dirty the float by purchasing Australian dollars to slow down its depreciation and provide support in the forex market.
- (d) The valuation effect is a situation where a depreciation of the Australian dollar may increase the value of foreign debt or assets in Australian dollar terms (or vice versa for an appreciation). This is because many of those assets may be held in overseas currencies, and therefore a depreciation will increase their value in Australian dollar terms.
- (e) A depreciation of the Australian dollar has mixed impacts upon the different components of the balance of payments. It would increase the price of imports and decrease the price of exports, causing an initial worsening and then a medium to longer term improvement in the balance of goods and services. A depreciation can increase the Australian dollar value of foreign debt and increase the value of servicing costs on the primary income account. This could see some worsening of the current account. Against this, the Australian dollar value of income earned on foreign investments would increase, improving the primary income account and the CAD. Overall, the impacts on the current account are complex, but a depreciation should over time contribute to an improvement in the current account outcome.

### Question 2

- (a) An exchange rate measures the price of the Australian dollar in terms of another currency – for example, the United States dollar or the Euro. In contrast, the Trade Weighted Index measures the value of the Australian dollar against a 'basket' of currencies of Australia's major trading partners, weighted according to their share of Australia's trade.
- (b) The major advantage of the Trade Weighted Index (TWI) as the main measure of the value of the Australian dollar is that it gives a more accurate illustration of changes in the value of the Australian dollar against all currencies in general. However, a disadvantage of the TWI is that it is weighted according to volumes of trade with different countries, not the currency in which trade takes place. This underestimates the importance of the US dollar exchange rate, since Australia often trades goods and services with other countries in US dollar prices (for example, selling goods to Hong Kong at US dollar prices).



- (c) The US dollar is the world's most traded currency and has a trade weight of 9.6 per cent of the TWI in 2019–20. A large movement in the value of the US dollar against other currencies (such as the Chinese yuan) could result in the Australian dollar moving in opposite directions against the US dollar and the TWI.
- (d) An appreciation of the Australian dollar occurs when the supply of Australian dollars is reduced. Several factors could lead to a reduced supply of dollars. These include a contraction in the Australian economy, reducing demand for imports, and a decrease in Australian investment overseas leading to lower financial flows out of Australia (perhaps because investing domestically has become more attractive), reducing the supply of Australian dollars on foreign exchange markets.

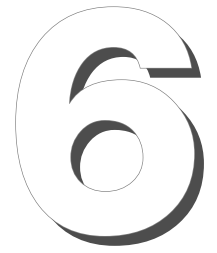
### Question 3

- (a) In the figure, the market equilibrium is given by the intersection of demand and supply, where A\$ = US\$0.80.
- (b) At US 70 cents the exchange rate is undervalued. The demand for Australian dollars exceeds the supply of Australian dollars. To bridge this gap, the central bank could intervene directly by selling Australian dollars (Q1 to Q2) in the foreign exchange market and buying foreign exchange reserves, putting downward pressure on the equilibrium exchange rate.
- (c) One disadvantage of a floating exchange rate system is the risk that it could contribute to import-induced inflation. If the exchange rate depreciates, it becomes more expensive to import goods, adding to inflation. Australia is reliant on imports, especially elaborately transformed manufactures (ETMs) so cannot easily find domestic substitutes when prices rise.
- (d) 95 per cent of transactions of the forex market are for speculative or technical investment reasons not related to trade. Expectations of a future appreciation of the dollar can fuel current demand for Australian dollars by speculators, thus contributing to the expected appreciation. Conversely, if foreign exchange traders and investment banks and hedge funds predict a future depreciation, it will lead to an increase in supply and outflow of dollars leading to a depreciation.
- (e) The Reserve Bank of Australia can influence the value of the Australian dollar directly or indirectly. If the Australian dollar is experiencing excessive volatility, the Reserve Bank may intervene directly by buying or selling Australian dollars to affect the value of the currency. This is known as 'dirtying the float'. However, the size of the Reserve Bank's foreign exchange reserves is relatively small, and this type of intervention is generally done only in response to extreme exchange rate movements. The Reserve Bank may also affect the exchange rate indirectly by changing the level of interest rates in Australia through monetary policy. A change in domestic interest rates alters the interest rate differential between Australia and the rest of the world. If the Reserve Bank increased interest rates, this makes Australia a relatively more attractive investment destination. This would increase financial inflows into Australia, increasing demand for the Australian dollar, causing an appreciation.

## Skills Revision Answers

- 1 decrease
- 2 decreases, valuation
- 3 decreased
- 4 buy, an appreciation
- 5 react to developments
- 6 increase
- 7 right, an appreciation
- 8 sell, a depreciation
- 9 an increase, a decrease
- 10 a decrease, an increase

# Protection in Australia



## Multiple Choice

<b>1</b>	C*	<b>6</b>	B	<b>11</b>	D	<b>16</b>	C
<b>2</b>	A	<b>7</b>	D	<b>12</b>	B*	<b>17</b>	A*
<b>3</b>	B	<b>8</b>	C*	<b>13</b>	D*	<b>18</b>	C
<b>4</b>	D*	<b>9</b>	D	<b>14</b>	C	<b>19</b>	C
<b>5</b>	B	<b>10</b>	A	<b>15</b>	D	<b>20</b>	B

\*Indicates that an enhanced answer has been provided in the section below.

## Enhanced Answers

- 1** C Answers A, B & D all reduce protection. Answer D – increased quotas for certain goods increases the number of imported goods allowed into Australia under the quota – reduces protection because an increase in a quota means that a higher number of imports are allowed into the economy.
- 4** D The size of the subsidy is given by the vertical distance between the two supply curves in the diagram. This distance is  $P_1 - P_3$ .
- 8** C Subsidies are a cost for the government. Increasing subsidies increases government spending.
- 12** B Tariff raises the price of imported goods. This leads to a fall in imports. Before the tariff imports were represented by  $QQ_1$  on the graph. After the tariff imports are represented by  $Q_2Q_3$ .
- 13** D A reduction in a tariff increases competition from imports. This can lead to job losses in an import-competing domestic industry, increasing unemployment. Consumers will benefit from the increased competition in the form of lower prices. Tariff revenue for the government will fall.
- 17** A In the short run, phasing out protection will lead to an increase in imports, and a worsening of the CAD. However, in the long run, lower protection will result in structural change and improved competitiveness. Exports will grow, improving the CAD.

## Short Answers

### Question 1

- (a)** Australia has lower levels of protection than most other nations. Australia's average tariff level (around 1 per cent in 2019) is similar to other high-income economies, such as the United States and the European Union (both around 1.5 per cent). In addition, Australian subsidies are very low compared to other industrialised economies – particularly in the agricultural sector where the US, EU and Japan still maintain high levels of protection. Australia also has fewer non-tariff barriers than other developed nations, although it is sometimes criticised for using overly stringent quarantine laws as a means of preventing agricultural imports.

- (b)** In the short term, domestic consumers may spend more on imports as a result of lower prices, worsening the balance on goods and services and the current account deficit. However, in the long term, resources should flow away from inefficient import-competing industries to more efficient export industries in which Australia has a comparative advantage. Exporting firms should also have lower input costs, improving their competitiveness. Over time as the economy restructures, the volume of exports should increase, improving the balance on goods and services and improving the current account deficit.
- (c)** Australia's agricultural sector has the potential for further expansion if it can continue to increase exports to rapidly developing economies in East Asia and benefit from improved access to export markets through trade agreements. Investment in the agricultural sector will be enhanced if investors are confident that the Australian dollar is likely to remain at stable or lower levels for the foreseeable future. Increasing Australia's agricultural exports is nevertheless difficult because Australia is a price taker on international markets, has relatively high costs of production for some inputs such as labour, and is distant from many international markets. In recent years, Australia has concluded free trade agreements with some of its biggest trading partners, including Korea and Japan, allowing some Australian agricultural producers to compete with less protected foreign products in some of their biggest export markets. So far this has particularly benefited exports of Australian wine, livestock and dairy products. In the short term, Australian agricultural exports are unlikely to grow significantly, both because reductions in protection are unlikely, and because of disruptions to international trade and supply chains caused by the 2020 COVID-19 pandemic. In addition, any increase in geopolitical tensions could have negative effects on export markets – for example, in 2020 China placed heavy tariffs on Australia's barley exports, due to tensions between the Chinese and Australian governments.

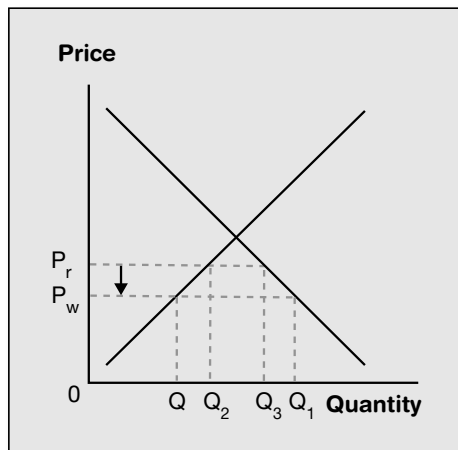
## Question 2

- (a)** A bilateral trade agreement involves just two nations. They are the easiest trade agreements to negotiate because they are tailored to suit the interests of just two nations, thereby making it possible to reach agreement more quickly since fewer parties are involved. An example is the Australia-United States Free Trade Agreement or the Korea-Australia Free Trade Agreement. In contrast, multilateral trade agreements involve multiple parties and provide free or preferential trade on a regional basis. They are generally complex to negotiate and enforce due to the amount of conflicting political and national interests of the parties involved. The ASEAN – Australia-New Zealand Free Trade Agreement (AANZFTA) is an example.
- (b)** Currently, Australia's most important multilateral trade agreement is the ASEAN – Australia-New Zealand Free Trade Agreement (AANZFTA) established in 2009. Consisting of a total of 12 member nations, the members of the agreement account for 20 per cent of Australia's total trade in goods and services. Prior to the agreement in 2010, around 67 per cent of Australian exports to AANZFTA members were tariff free. By 2020, 96 per cent were tariff free as protection was reduced in key industries such as agriculture and pharmaceuticals. Reductions in protection across a broad range of Australian exports should expand Australia's export markets, leading to increased economic growth and higher living standards.
- (c)** The impact of a reduction in domestic protection on governments is mostly felt through fiscal policy. Cutting tariffs leads to a reduction in revenue, which worsens the budget position; on the other hand, cutting subsidies reduces expenditure, which improves the budget position. Further, reducing protection will also have short-term effects on government spending because of the costs associated with structural adjustment measures, such as retraining programs. Moreover, governments are also adversely affected by the political consequences of tariff reductions. Despite the general consensus amongst economists that lower tariffs benefit an economy, tariff reduction is sometimes opposed by the wider community. This is because the costs of free trade are more visible amongst society than the benefits. As a result, governments can be reluctant to take necessary steps to reduce protectionism.

- (d) Historically, Australia was a highly protectionist economy as the government felt the need to protect manufacturers who found it difficult to compete internationally because of the inability to achieve economies of scale and efficiency. However, the government began reducing protection levels to force domestic industries to become internationally competitive by exposing them to foreign competition. Further, reducing protection encourages the efficient allocation of scarce economic resources by directing them towards sectors where Australia has a comparative advantage. It also allows for greater integration with the global economy by giving consumers and businesses more choice and lower prices. Finally, the government aims to promote positive structural change and long-run economic prosperity by ensuring efficient firms produce goods and services demanded by the global economy.

### Question 3

(a)

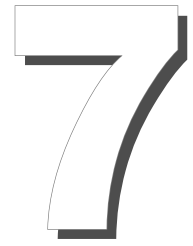


- (b) When the tariff is removed, the price falls to the world price ( $P_w$ ), that is, the price that the good is traded for in the world market. With a fall in price, domestic demand for the good increases, from  $Q_3$  to  $Q_1$ . However, the fall in price means that domestic producers may be less competitive. The change from  $P_r$  to  $P_w$  results in a reduction in domestic production from  $Q_2$  to  $Q$ . Imports make up the difference to meet the quantity demanded. The removal of the tariff leads to an increase in imports from  $Q_2Q_3$  to  $QQ_1$ .
- (c) The removal of a tariff results in a fall in the price of imported goods and services. Import-facing domestic producers are able to supply less at the lower price, and are likely to cut back on production. Less efficient producers may go out of business, and the remaining producers will need to become more efficient to stay in the market and compete at the world price. Overall, the levels of employment in the import-competing sector are likely to fall.
- (d) In the long run, the economy will undergo structural change. It is likely that there will be a change in the mix of industries in the domestic economy. Industries that are more globally competitive are likely to benefit as resources are reallocated to them, while less efficient import-competing industries will become a smaller part of the domestic economy. As the economy recovers from initial negative impacts, improved competitiveness and a more efficient allocation of resources should result in increased economic growth and more job opportunities for individuals in internationally competitive industries. Consumers will benefit from lower prices and increased consumer choice. Trade should become a larger proportion of the economy as both imports and exports grow at a faster rate.

## Skills Revision Answers

- 1 decreased
- 2 import competing
- 3 import competing
- 4 lower, greater
- 5 decrease
- 6 has no direct effect on
- 7 efficient/competitive
- 8 structural change
- 9 increase
- 10 increase

# Economic Growth



## Multiple Choice

- |          |    |           |    |           |    |           |    |
|----------|----|-----------|----|-----------|----|-----------|----|
| <b>1</b> | A  | <b>6</b>  | D* | <b>11</b> | C* | <b>16</b> | A* |
| <b>2</b> | B* | <b>7</b>  | C* | <b>12</b> | C  | <b>17</b> | B* |
| <b>3</b> | D* | <b>8</b>  | A  | <b>13</b> | A  | <b>18</b> | B* |
| <b>4</b> | B  | <b>9</b>  | B  | <b>14</b> | D* | <b>19</b> | D  |
| <b>5</b> | A* | <b>10</b> | C* | <b>15</b> | C* | <b>20</b> | A  |

\*Indicates that an enhanced answer has been provided in the section below.

## Enhanced Answers

- 2 B** Domestic slowdown means imports will decrease. An overseas boom with two of our major trading partners would see our exports increase.
- 3 D** Need to calculate the multiplier.  $k = 1/(1 - MPC)$ ,  $k = 1/0.6$ ,  $k = 1.67$ . Government spending increase multiplied by  $k = \$100$  billion.
- 5 A**  $k = 1/MPS$ ,  $k = 1/0.2$ ,  $k = 5$ . Increase of \$20 billion  $\times k = \$100$  billion.  
Existing GDP \$675 billion + \$100 billion = \$775 billion.
- 6 D** Policies that increase disposable income are likely to increase consumption and hence economic growth. Lower income earners tend to have a higher marginal propensity to consume than higher income earners, so policies that increase the income of lower income earners are most likely to accelerate economic growth. On the other hand, imports and taxation are leakages from the economy, and all else being equal, an increase in leakages will reduce economic growth.
- 7 C** To calculate real GDP use the formula:  $\text{real GDP} = \text{nominal GDP} \times \text{CPI (previous year)}/\text{CPI (current year)}$ .  
Country A real GDP is \$521.7 billion, Country B is \$571.4 billion.  
Country A HDI is 0.845, Country B HDI is 0.905.  
Therefore, Country B has a higher real GDP and greater level of development as shown by HDI.
- 10 C** For an economy to be in equilibrium, injections must equal leakages. If injections are greater than leakages, the economy will grow. If injections are less than leakages, the economy will shrink. Only when injections are equal to leakages will the economy be in equilibrium.
- 11 C** Lower MPC means a lower multiplier. A lower consumption and higher savings will lead to a lower level of economic activity and a lower equilibrium income.
- 14 D** From Year 1 to Year 2 change in Y was 100, while change in C was 60.  
 $MPC = \text{change in C}/\text{change in Y}$ . Therefore  $MPC = 0.6$ .  
To calculate multiplier use the formula  $k = 1/(1 - MPC)$ . Therefore  $k = 1/0.4$ ,  $K = 2.5$ .
- 15 C** Economic growth of 2 per cent would create more jobs by itself. However, productivity growth of 2 per cent will cancel this out in terms of jobs growth. Therefore, increase in participation rate of 2 per cent, given these other factors, would just add more people that are not working but are actively seeking work, thereby increasing unemployment.

- 16 A** Firstly, we can calculate MPS from the table.  $MPS = \text{change in } S / \text{change in } Y = 100/500 = 0.2$ .  
 If national income rises to \$3200 billion, this is an increase of \$200 billion relative to Year 3.  
 Again, as  $MPS = \text{change in } S / \text{change in } Y$ ,  $0.2 = \text{change in } S / 200$ , so change in  $S = 40$ .  
 So in Year 4, income = \$3200 billion, saving = \$440 billion (\$400 billion + \$40 billion).  
 Income = consumption + saving, \$3200 = consumption + \$440, so consumption = \$2760 billion.
- 17 B** Lower income tax rates and lower interest rates would stimulate the economy.
- 18 B**  $AD = C + I + G + X - M$ .  
 If everything else stays equal, the change in  $AD = \text{change in } G - \text{change in } M$ .  
 Hence the change in  $AD = \$10 \text{ billion} - \$15 \text{ billion} = -\$5 \text{ billion}$ .  
 The multiplier is calculated by  $k = 1/MPS = 1/0.2 = 5$ .  
 Change in national income =  $k \times \text{change in aggregate demand} = 5 \times -\$5 \text{ billion} = -\$25 \text{ billion}$ .

## Short Answers

### Question 1

- (a)** Aggregate demand (the total level of expenditure in an economy) is influenced by levels of consumption, savings, consumer expectations, the level of interest rates and the distribution of income.
- (b)** An increase in the level of economic growth leads to higher living standards, meaning that individuals are able to enjoy greater material well-being as a result of increases in their disposable income. Economic growth also creates jobs in an economy and lowers cyclical unemployment. Higher demand for goods and services leads firms to increase their demand for labour as an input into production. Economic growth can also lead to higher levels of investment in an economy as business expectations improve. However, unsustainable increases in economic growth may also have negative consequences. If demand outstrips supply, this is likely to lead to higher inflation and faster growth in imports than exports, thus worsening the current account balance. Increased economic growth can also lead to a faster depletion of non-renewable resources and environmental damage, thus reducing the living standards of future generations.
- (c)** One recent trend in Australia's economic growth was the downturn in 2008–09. This was a result of the slowdown in the global economy due to the global financial crisis and global recession. A sharp decrease in global demand reduced both the prices of Australia's commodity exports and export volumes. The collapse in business confidence around the world also resulted in reduced investment and greater difficulties in accessing loans for business investment. A second trend is that after the economy recovered in 2010, it experienced a slower average pace of growth than it had enjoyed in the years before 2010, averaging around 2.5 per cent. This is the result of several factors, including the slower pace of economic growth in the economies of many trading partners, lower export prices, lower levels of investment and slow wage growth resulting in weaker consumption growth.

### Question 2

- (a)** The simple multiplier for this economy is:  $k = 1/(1 - MPC) = 1/(1 - 0.5) = 2$
- (b)** Increase in  $Y = k \times \text{change in } I = 2 \times \$50 \text{ billion} = \$100 \text{ billion}$
- (c)** For national income to reach \$810 billion would require an increase of \$100 billion. Using the formula above, we know that:  
 Increase in  $Y = k \times \text{change in } I$   
 Substituting these numbers into the equation:  
 $\$100 \text{ billion} = 2 \times \text{change in } I$   
 Therefore:  
 Change in  $I = \$50 \text{ billion}$ .

- (d)** The multiplier determines the size of the overall increase in national income resulting from an initial increase in aggregate demand. An increase in the simple multiplier will mean that a change in the level of aggregate demand will now have a larger effect on the level of national income. If aggregate demand increases, for example through an increase in investment, the level of national income will increase by a larger amount. If aggregate demand decreases, the level of national income will decrease by a larger amount. This means that the economy is now more susceptible to external shocks like changes in net exports; however, national income is now also more responsive to government fiscal policy.
- (e)** Economic growth has many positive impacts on the Australian economy. Two of these are increasing employment and improving living standards. Economic growth creates jobs, and higher economic growth is associated with the development of new and more advanced industries, which can lead to more highly paid and highly skilled jobs. With more people employed, including on higher incomes, disposable incomes increase, and people experience a higher standard of living.

### Question 3

- (a)** The government can use fiscal policy to stimulate economic growth. Examples of fiscal policies that would increase economic growth are a reduction in taxation and an increase in government expenditure. Both of these policies represent an increase in injections into the economy. All else being equal, injections will increase relative to leakages, resulting in an increase in the level of economic growth. Similarly, the government could use monetary policy to increase economic growth by lowering interest rates, which should encourage increased consumption and investment.
- (b)** Aggregate supply represents the economic potential of an economy and is important for sustainable long-term economic growth. Aggregate supply can be increased by increasing the level of output that can be produced at a given cost. This can be achieved through increasing the quantity, or improving the quality, of factors of production. For example, population growth can contribute to increased aggregate supply. More people of working age in the economy can contribute to increased production. Technology can also play a role in increasing aggregate supply, by improving the efficiency of production. Productivity gains leading to increased aggregate supply could also be achieved through improvements in infrastructure such as faster broadband or improved transport links.
- (c)** The business cycle involves the rise and fall in the general level of economic activity over time. Changes in the levels of aggregate supply and demand lead to fluctuations in the business cycle between periods of stronger economic growth (booms) and periods of decreased or negative growth (recessions). While the Australian economy has experienced both booms and recessions, the underlying rate of economic growth in recent years has averaged around 2 to 3 per cent. In the early 1990s, the Australian economy went through a recession, but then experienced relatively strong economic growth through the 1990s and into the 2000s. Australia experienced a sudden slowdown of growth during the global financial crisis of 2008 and 2009, but avoided recession, with a smoother business cycle in Australia than most other OECD economies. During the 2010s, Australia achieved the longest unbroken period of economic growth of any developed country in recorded history. While there was less volatility in growth rates during the 2010s (until the COVID-19 slump in 2020), the underlying rate of economic growth slowed during this decade.



## Skills Revision Answers

### Left-hand column

$$I + G + X = S + T + M$$

$$25 + G + 35 = 110 + 55 + 60$$

$$G + 60 = 225$$

$$G = 165$$

$$I + G + X = S + T + M$$

$$65 + 65 + X = 66 + 90 + 22$$

$$X + 130 = 178$$

$$X = 48$$

$$I + G + X = S + T + M$$

$$20 + 85 + 70 = 40 + T + 45$$

$$175 = 85 + T$$

$$90 = T$$

$$T = 90$$

### Right-hand column

$$AD = C + I + G + X - M$$

$$125 = 20 + 25 + 60 + X - 30$$

$$125 = 75 + X$$

$$50 = X$$

$$X = 50$$

$$\text{At equilibrium } AS = AD$$

$$AD = C + I + G + X - M$$

Therefore

$$AS = C + I + G + X - M$$

$$95 = 15 + I + 10 = 35 - 25$$

$$95 = 35 + I$$

$$60 = I$$

$$I = 60$$

$$\text{At equilibrium } AS = AD$$

$$AD = C + I + G + X - M$$

Therefore

$$AS = C + I + G + X - M$$

$$AS = 34 + 75 + 90 + 37 - 37$$

$$AS = 199$$

## Skills Revision Answers

- 1** Aggregate demand can be calculated by the formula  $AD = C + I + G + X - M$   
In Economy A,  $AD = 50 + 20 + 30 + 40 - 15 = 125$   
In Economy B,  $AD = 40 + 10 + 70 + 15 - 60 = 75$   
Hence, aggregate demand is higher in Economy A.
- 2**  $MPS = 1 - MPC$   
In Economy A,  $MPS = 1 - 0.2 = 0.8$   
In Economy B,  $MPS = 1 - 0.75 = 0.25$   
Hence, Economy A has the higher MPS.
- 3**  $k = 1/MPS$   
In Economy A,  $k = 1/0.8 = 1.25$   
In Economy B,  $k = 1/0.25 = 4$   
Hence, Economy A has the lower multiplier.
- 4**  $Leakages = S + T + M$   
In Economy A, leakages =  $60 + 15 + 15 = 90$   
The value of leakages in Economy A is \$90 billion.
- 5**  $Injections = I + G + X$   
In Economy B, injections =  $10 + 70 + 15 = 95$   
The value of injections in Economy B is \$95 billion.
- 6**  $Change\ in\ Y = k \times change\ in\ AD$   
In this case, we increase AD by increasing government spending. The increase in government spending required to achieve an increase in national income (AD) of \$100 billion in Economy A can be calculated by:  
 $100 = 1.25 \times change\ in\ government\ spending$   
 $Change\ in\ government\ spending = 100/1.25 = 80$   
Hence, an increase in government spending of \$80 billion is required in Economy A to increase national income by \$100 billion.
- 7**  $Change\ in\ Y = k \times change\ in\ AD$   
In this case, AD falls because of the decrease in exports. The resulting decrease in national income in Economy B can be calculated by:  
 $Change\ in\ Y = 4 \times (-50) = -200$   
Hence, a fall in exports of \$50 billion would result in a fall in national income of \$200 billion in Economy B.

# Unemployment

# 8

## Multiple Choice

- |          |    |           |   |           |    |           |    |
|----------|----|-----------|---|-----------|----|-----------|----|
| <b>1</b> | D  | <b>6</b>  | B | <b>11</b> | A  | <b>16</b> | A* |
| <b>2</b> | C  | <b>7</b>  | D | <b>12</b> | D* | <b>17</b> | B  |
| <b>3</b> | B* | <b>8</b>  | D | <b>13</b> | C  | <b>18</b> | B  |
| <b>4</b> | A* | <b>9</b>  | B | <b>14</b> | C  | <b>19</b> | C* |
| <b>5</b> | A  | <b>10</b> | B | <b>15</b> | C* | <b>20</b> | C  |

\*Indicates that an enhanced answer has been provided in the section below.

## Enhanced Answers

- 3 B** Unemployment has increased from 4 per cent in Year 1 to 6 per cent in Year 2. B is the only answer that would lead to an increase in the official rate of unemployment.
- 4 A** The participation rate has fallen by 5 per cent from 68 per cent in Year 1 to 63 per cent in Year 2. Increased school retention rates could lead to the participation rate falling as more students who are above the age of 15 would be kept in full-time study and thus not be counted as part of the labour force as they are not activity seeking work.
- 12 D** When the unemployment rate is below NAIRU (non-accelerating inflation rate of unemployment) this is a skills shortage leading to very strong wage growth that transfers through the rest of the economy as inflation.
- 15 C** Labour force = employed + unemployed (who are actively seeking work)  
Labour force = 28 million + 4 million  
= 32 million  
Working-age population = 36 million  
Labour force participation rate =  $\frac{\text{labour force}}{\text{working-age population}} \times \frac{100}{1}$   
Labour force participation rate =  $\frac{32}{36} \times \frac{100}{1} = 88.9\%$  to 1 dp
- 16 A** Unemployment rate =  $\frac{\text{number of persons unemployed}}{\text{total labour force}} \times \frac{100}{1}$   
Unemployment rate =  $\frac{4}{32} \times \frac{100}{1}$   
Unemployment rate = 12.5% to 1 dp, which is rounded up to 13%
- 19 C** Large increases in the rate of unemployment in a short period of time are usually the result of a sharp reduction in economic activity, reflected in cyclical unemployment. Although seasonal factors can cause significant changes in the rate of unemployment from one month to the next, they would not account for such a large change, and the question states that the type of unemployment that has increased is seasonal unemployment (which is excluded from the seasonally adjusted rate of unemployment).

## Short Answers

### Question 1

- (a) A social cost of unemployment could include higher incidents of crime and antisocial behaviour as people who are out of work become increasingly unhappy about their future prospects. An economic cost of unemployment could include increased government spending on transfer payments and unemployment benefits.
- (b) There is an inverse relationship between unemployment and inflation. As unemployment decreases and approaches the NAIRU, inflation is likely to increase. This is because as cyclical unemployment is reduced, skills shortages often emerge. If the economy continues to expand, these skills shortages will bid up the price of labour and induce wage-inflation. However, when unemployment increases, it may not necessarily bring about a corresponding decrease in inflation. This is because wage levels in an economy can sometimes be 'sticky', that is, wages will not necessarily fall during a time of economic recession. Rather, employers are more likely to keep wages constant for existing employees, which in turn may prevent prices from falling significantly.
- (c) Headline labour force statistics classify people as either employed or unemployed, and do not take into account the number of hours people work. A person is counted as employed if they have worked at least one hour of work in the previous four weeks. In fact, many people who are counted as employed want to work more hours than they currently do (that is, they are underemployed rather than unemployed). This means the employment statistics are limited in their ability to accurately measure the real level of economic activity or demand for labour, especially as recent decades have seen an increase in part-time and casual jobs (especially with the rise of the 'gig economy'). Headline labour force statistics also fail to measure the 'hidden unemployed', those who have become discouraged job seekers and are no longer actively seeking work even though they may want to find a job. As a result, the official rate of unemployment understates the full extent of the underutilisation of labour.

### Question 2

(a) Labour force participation rate =  $\frac{\text{labour force}}{\text{working-age population}} \times \frac{100}{1}$

First, calculate the number of people in work:

Population in employment = (population aged 15+) minus (population aged 15+ without employment)

Population in employment = 34 – 8 = 26 million

Next, calculate the labour force:

Labour force = (persons 15+ in work) plus (persons 15+ actively seeking work)

Labour force = 26 + 3 = 29 million

$$\text{Labour force participation rate} = \frac{\text{labour force}}{\text{working-age population}} \times \frac{100}{1}$$

$$\text{Labour force participation rate} = \frac{29}{34} \times \frac{100}{1} = 85.3\%$$

(b) Unemployment rate =  $\frac{\text{unemployed}}{\text{labour force}} \times 100$

$$\text{Unemployment rate} = \frac{3}{29} = 10.34\%$$

- (c) Hidden unemployment (which describes discouraged job seekers) exists where a person is not counted in the official unemployment statistics because they are no longer actively looking for a job. While not included in official unemployment statistics, the effect of hidden unemployment is reflected in a lower labour force participation rate.

- (d) From part (a) the participation rate in Year 1 is 85.3 per cent. In Year 2 the participation rate is calculated by:

Population in employment = 35 – 9 = 26 million

Labour force = 26 + 2 = 28 million

$$\text{Labour force participation rate} = \frac{28}{35} \times \frac{100}{1} = 80.0\%$$

The participation rate has decreased by 5.3 percentage points between Year 1 and Year 2.

- (e) Underemployment will increase if full-time workers are switched to part-time hours or if more people who are not in full-time employment wish to work more hours. Changes in the underemployment rate do not directly affect the unemployment rate as underemployed workers are classified as employed. However, the underemployed, as well as the unemployed, represent underutilised labour resources in the economy. The ABS therefore publishes a quarterly underutilisation rate, which is a wider and more comprehensive measurement of unemployment.
- (f) Because of the ageing population, the participation rate is expected to fall in coming decades, and this means that governments need to consider long-term measures to increase labour force participation. These measures include encouraging parents of young children and older workers to stay in work and trying to bring people on the fringes of the labour market to integrate more fully. Successive governments have expanded the available number of subsidised childcare places. A national paid parental leave scheme was introduced in 2011, to allow new mothers to take up to 18 weeks' paid leave at the time of their baby's birth without leaving the workforce (paid at the minimum wage rate). For older workers, incentives to stay in work have been strengthened through changes to tax and superannuation policies. Governments have also imposed tighter welfare requirements to reduce incentives to stay out of the workforce.

### Question 3

- (a) Economic growth can create jobs, which increases the level of employment in the economy, since demand for labour is a 'derived demand' (that is, it is derived from the demand for goods and services, whose production requires labour). Because the size of the labour force and the rate of productivity growth tend to increase each year, a certain level of economic growth must be achieved every year, or else the rate of unemployment will rise. The relationship between the rate of economic growth and the rate of unemployment is known as Okun's Law. Okun's Law states that to reduce unemployment, the annual rate of economic growth must exceed the sum of the percentage growth in productivity plus the increase in the size of the labour force in a given year.
- (b) Unemployment can be caused by structural change. The change in the structure of the economy will see some industries decline, resulting in job losses and unemployment for workers if their skills are not readily transferrable to other industries or occupations.
- (c) During the 2000s and 2010s decades, the Australian economy reaped the benefits of the significant structural change and microeconomic reform that occurred during the 1990s, alongside the boost to national income resulting from the mining boom that began in 2004. While unemployment in the 1992–93 recession reached a high of 10.7 per cent, unemployment fell after the recession and remained relatively stable (generally between 5 and 6 per cent) in the two decades from 2000. This relatively stable unemployment rate was correlated with Australia's record unbroken run of economic growth, which was generally high enough to create jobs for people entering or returning to the labour market, and hence keep the unemployment rate stable. This changed in 2020 with the global economic slump caused by the COVID-19 pandemic, leading to a rapid loss of jobs and a sharp increase in unemployment.
- (d) As observed in Okun's Law, there is a relationship between productivity growth and unemployment. In the short term, lower productivity growth can improve the unemployment rate as employers who want to increase output will need to employ more workers than they otherwise would. Conversely, higher productivity growth can contribute to higher unemployment rates in the short term as employers will have less need for additional labour to increase production. However, the opposite is true in the long term. Higher productivity growth is more likely to lead to greater competitiveness, economic growth, job creation, and a reduction in the unemployment rate, and vice versa for lower productivity growth, which limits economic growth and the growth in jobs.

## Skills Revision Answers

### Left column

- (a)** Working aged population in Purpleland = 250 million (data from table)  
Working aged population in Orangeland = 274 million  
Hence, Orangeland has the larger working aged population.
- (b)** The labour force is the total of employed and unemployed persons.  
In Purpleland, labour force = 190 million + 18 million = 208 million  
In Orangeland, labour force = 180 million + 23 million = 203 million  
Hence, Purpleland has the larger labour force.
- (c)** Labour Force Participation Rate (LFPR) =  $\frac{\text{labour force}}{\text{working-age population}} \times \frac{100}{1}$   
In Purpleland, LFPR =  $\frac{208}{250} \times \frac{100}{1} = 83\%$   
In Orangeland, LFPR =  $\frac{203}{274} \times \frac{100}{1} = 74\%$   
Hence, Purpleland has a higher labour force participation rate.
- (d)** Unemployment rate =  $\frac{\text{persons unemployed}}{\text{labour force}} \times \frac{100}{1}$   
In Purpleland, unemployment rate =  $\frac{18}{208} \times \frac{100}{1} = 9\%$   
In Orangeland, unemployment rate =  $\frac{23}{203} \times \frac{100}{1} = 11\%$   
Hence, Orangeland has the higher unemployment rate.
- (e)** Working-age population in Blueland = 136 million (data from table)  
Working-age population in Megaland = 95 million  
Hence, Megaland has the smaller working-age population.
- (f)** The labour force is the total of employed and unemployed persons.  
In Blueland, labour force = 58 million + 6 million = 64 million  
In Megaland, labour force = 40 million + 6 million = 46 million  
Hence, Megaland has the smaller labour force.
- (g)** Labour Force Participation Rate (LFPR) =  $\frac{\text{labour force}}{\text{working-age population}} \times \frac{100}{1}$   
In Blueland, LFPR =  $\frac{64}{136} \times \frac{100}{1} = 47\%$   
In Megaland, LFPR =  $\frac{46}{95} \times \frac{100}{1} = 48\%$   
Hence, Blueland has a lower labour force participation rate.
- (h)** Unemployment rate =  $\frac{\text{persons unemployed}}{\text{labour force}} \times \frac{100}{1}$   
In Blueland, unemployment rate =  $\frac{6}{64} \times \frac{100}{1} = 9\%$   
In Megaland, unemployment rate =  $\frac{6}{46} \times \frac{100}{1} = 13\%$   
Hence, Blueland has the lower unemployment rate.

# Inflation

# 9

## Multiple Choice

- |          |    |           |    |           |    |           |    |
|----------|----|-----------|----|-----------|----|-----------|----|
| <b>1</b> | B  | <b>6</b>  | B  | <b>11</b> | B* | <b>16</b> | D  |
| <b>2</b> | D  | <b>7</b>  | B* | <b>12</b> | A* | <b>17</b> | A* |
| <b>3</b> | C* | <b>8</b>  | B  | <b>13</b> | B  | <b>18</b> | D* |
| <b>4</b> | B  | <b>9</b>  | D* | <b>14</b> | D  | <b>19</b> | A  |
| <b>5</b> | D  | <b>10</b> | D* | <b>15</b> | C* | <b>20</b> | C* |

\*Indicates that an enhanced answer has been provided in the section below.

## Enhanced Answers

**3** C 
$$\text{Inflation Rate} = \frac{\text{CPI}_{\text{CY}} - \text{CPI}_{\text{PY}}}{\text{CPI}_{\text{PY}} \times \frac{100}{1}}$$

From the question we know that the inflation rate is 2.6%.

So:  $2.6\% = \frac{154 - 150}{150 \times 100}$ . Thus, answer C is correct.

**7** B 
$$\begin{aligned} \text{Year 2 Inflation Rate} &= \frac{\text{CPI}_{\text{CY}} - \text{CPI}_{\text{PY}}}{\text{CPI}_{\text{PY}} \times \frac{100}{1}} \\ &= \frac{99 - 92}{92 \times 100} \\ &= 7.6\% \end{aligned}$$

$$\begin{aligned} \text{Year 3 Inflation Rate} &= \frac{\text{CPI}_{\text{CY}} - \text{CPI}_{\text{PY}}}{\text{CPI}_{\text{PY}} \times \frac{100}{1}} \\ &= \frac{102 - 99}{99 \times 100} \\ &= 3\% \end{aligned}$$

- 9** D Stagflation occurs when the rate of inflation and the rate of unemployment rise simultaneously.

**10** D 
$$\text{Inflation rate} = \frac{\text{CPI}_{\text{CY}} - \text{CPI}_{\text{PY}}}{\text{CPI}_{\text{PY}} \times \frac{100}{1}}$$

From the question we know that the inflation rate is 17.6%, so  $\frac{100 - 85}{85 \times 100} = 17.6\%$ .

- 11** B The introduction of a new indirect tax will have a one-off impact on inflation, increasing headline inflation. Underlying inflation removes the effects of one-off price movements.
- 12** A Sustained drought conditions could push up the price of food, and depreciation of the exchange rate can increase imported inflation.

- 15** C Imported inflation is transferred to Australia through international transactions like rising import prices. An increase in the price of imported goods will increase the inflation rate in the same way as would an increase in the price of domestically produced goods. A depreciation of the Australian dollar will also increase the domestic price of imports and will lead to inflation.
- 17** A Inflation Year 2 =  $\frac{CPI_{CY} - CPI_{PY}}{CPI_{PY} \times \frac{100}{1}}$   
 $= \frac{106 - 102}{102 \times 100}$   
 $= 3.9\%$
- Inflation Year 3 =  $\frac{CPI_{CY} - CPI_{PY}}{CPI_{PY} \times \frac{100}{1}}$   
 $= \frac{109 - 106}{106 \times 100}$   
 $= 2.8\%$
- 18** D Demand-pull inflation is caused by an increase in demand when the economy is nearing its supply capacity. If the economy is not near its supply capacity, an increase in demand leads to more output. When demand exceeds the productive capacity of the economy, an increase in output cannot meet the increase in demand. Prices are pushed up, resulting in inflation. Answer A is not correct because an increase in demand for imported goods is likely to lead to more goods being imported, but not to an increase in price (assuming there are no constraints on overseas production and export to Australia).
- 20** C A tariff directly causes the price of imports to rise.

## Short Answers

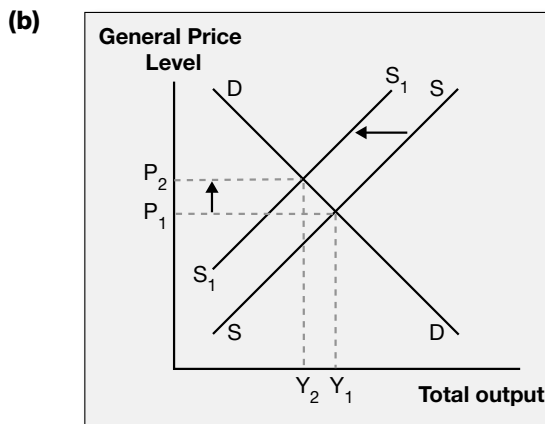
### Question 1

- (a)** Headline inflation measures changes in the general level of consumer prices in an economy. It is typically defined as the percentage change in the Consumer Price Index (CPI) over time, which summarises the movement in prices of a basket of goods and services weighted according to their significance to the average household. Underlying inflation is a measure of inflation that is adjusted for one-off, volatile and seasonal price movements. It tends to be less variable than headline inflation. There are several measures of underlying inflation but only one measure of headline inflation.
- (b)** The Australian Bureau of Statistics calculates the inflation rate each quarter. It is the percentage change in the Consumer Price Index (CPI), a weighted index based on price changes for a fixed basket of goods that represents spending patterns of the average household.
- (c)** Oil is a major energy source for transport and production, and therefore an increase in the price of oil is likely to increase the costs of production in many industries. This might cause cost-push inflation as firms raise their prices in advance (aiming to pass on their increased production costs to consumers so that they can maintain their profit margins). If businesses act on the expectations of increased oil prices, that may cause inflation. If consumers expect higher oil prices to increase the prices of goods, they may bring forward planned purchases, leading to an increase in consumption and possibly higher demand-pull inflation.
- (d)** The main policy change that governments can use to combat inflation is monetary policy – influencing interest rates to aggregate demand and thus how much demand is contributing to price pressure in the economy. Fiscal policy may also play a support role by reinforcing the effect of monetary policy, such as by exerting a contractionary impact on an economic experiencing strong growth. A range of microeconomic policies such as deregulation, tariff cuts and labour market policies may also reduce inflationary pressures by lowering the prices of imported goods, or increasing competition in product or factor markets.



### Question 2

- (a) Cost-push inflation is inflation caused by an increase in the costs of factors of production.



- (c) Cost-push inflation can result from an increase in the prices of inputs. For example, a sustained drought can increase the price of agricultural products, which increases the cost of producing other goods. Another source of cost-push inflation is an increase in wages, particularly if this increase is faster than productivity growth. An increase in wages may result from changes in labour market policies, or a shortage of labour availability.
- (d) A depreciation of the Australian dollar makes imports more expensive. Where Australian businesses import their inputs to production, this can result in cost-push inflation as higher production costs feed into higher costs for outputs.
- (e) When businesses face higher costs for inputs into production, they can seek to protect their profits by passing on the increased costs to their customers in the form of higher prices. However if the higher input costs are related to higher labour or capital costs are accompanied by an even greater proportional increase in productivity, there would not be any need for price increases. Labour, for example, is a key factor of production, typically making up 60 per cent of business costs. Higher wages usually put upward pressure on prices, but if those wage increases are given in exchange for productivity increases, prices may need not to rise for businesses to retain their profit margins.

### Question 3

- (a) Stagflation occurs where there is simultaneously high or rising unemployment and inflation.
- (b) Monetary policy is the main tool used to achieve low inflation in Australia. When inflation rises, the Reserve Bank tightens monetary policy. When the Reserve Bank increases the cash rate, interest rates throughout the economy rise, which dampens consumer and business spending. The reduction in spending lowers economic growth and hence reduces inflation. If inflation falls, the Reserve Bank can loosen monetary policy.
- (c) Unemployment and inflation are inversely related, particularly in the short term. In general, periods characterised by high unemployment have low inflation rates, and vice versa. This relationship is depicted by the Phillips curve. When inflation is high, the Reserve Bank is more likely to tighten monetary policy to reduce spending in the economy. Businesses can reduce spending by reducing employment, resulting in an increase in unemployment in the short to medium term. The converse is true for periods of low inflation.
- (d) It is difficult for governments to combat stagflation in the short term, because most policy measures in the short term are likely to worsen either unemployment or inflation. Governments have achieved the greatest success in balancing these objectives through the use of an inflation target, giving priority to reducing inflation. However, this can cause higher interest rates, lower growth and increased unemployment. In the longer term, microeconomic reforms can also play an important role in reducing the trade-off between unemployment and inflation and so allowing for the economy to increase employment without increasing inflation. Reforms such as increasing competition in different sectors of the economy, reducing trade barriers and decentralising wage determination can all contribute to lower inflation over the longer term without having a negative long-term impact on unemployment.

## Skills Revision Answers

### Page 121

Total output			
Year	CPI	Inflation rate %	Likely monetary policy response (tightening, loosening, no change to interest rates)
0	100		
1	103	3.0	Tighten
2	104	1.0	Loosen
3	106	1.9	Loosen
4	109	2.8	No change
5	113	3.7	Tighten

$$\text{Inflation rate (\%)} = \frac{\text{CPI}_{\text{CY}} - \text{CPI}_{\text{PY}}}{\text{CPI}_{\text{PY}} \times \frac{100}{1}}$$

$$= \frac{103 - 100}{100 \times \frac{100}{1}}$$

$$\text{Inflation rate} = 3.0\%$$

$$= \frac{104 - 103}{103 \times \frac{100}{1}}$$

$$\text{Inflation rate} = 1.0\%$$

$$= \frac{106 - 104}{104 \times \frac{100}{1}}$$

$$\text{Inflation rate} = 1.9\%$$

$$= \frac{109 - 106}{106 \times \frac{100}{1}}$$

$$\text{Inflation rate} = 2.8\%$$

$$= \frac{113 - 109}{109 \times \frac{100}{1}}$$

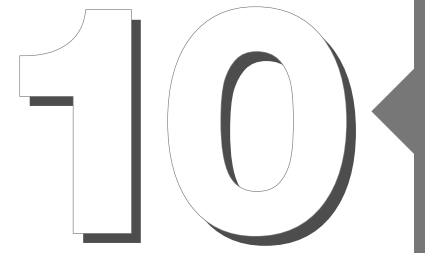
$$\text{Inflation rate} = 3.7\%$$

When the inflation rate is below the Reserve Bank's 2–3 per cent target band, it loosens monetary policy (lowers interest rates) to stimulate economic growth and hence inflation. When the inflation rate is above the target band, the Reserve Bank tightens monetary policy (increases interest rates) to slow economic growth and hence inflation.

## Page 122

Event	Impact on Inflation	Type of Inflation
Rapid increase in oil prices	Increase	Cost-push
Increase in housing construction following a catastrophic bushfire season	Increase	Demand-pull
Consumer confidence and spending in the economy fall due to the onset of a recession	Decrease	Demand-pull
Large depreciation of the exchange rate	Increase	Imported inflation
The central prints money in order to increase liquidity in the economy	Increase	Monetary inflation
Consumers expect that prices are likely to rise at some point in the future	Increase	Inflationary expectations
The government doubles the goods and services tax	Increase	Government policies
The central bank decreases interest rates	Decrease	Government policies
Fall in the price of fuel	Decrease	Cost-push
The economy's major trading partners all experience lower rates of inflation	Decrease	Imported inflation
Labour productivity across the economy rises	Decrease	Cost-push

# External Stability



## Multiple Choice

<b>1</b>	B*	<b>6</b>	C*	<b>11</b>	D	<b>16</b>	B*
<b>2</b>	B	<b>7</b>	A*	<b>12</b>	B	<b>17</b>	D*
<b>3</b>	C	<b>8</b>	C*	<b>13</b>	D*	<b>18</b>	C*
<b>4</b>	C	<b>9</b>	A	<b>14</b>	C	<b>19</b>	D*
<b>5</b>	D	<b>10</b>	D	<b>15</b>	A*	<b>20</b>	B

\*Indicates that an enhanced answer has been provided in the section below.

## Enhanced Answers

- 1** B External stability is a broad term that describes a situation where external indicators such as the current account deficit, foreign liabilities and the exchange rate are at a sustainable level, that is, a level where they can remain in the longer term without negative economic consequences.
- 6** C The Pitchford thesis states that if a current account deficit is the result of savings and investment decisions by the private sector that are not the result of distortions to normal market mechanisms, then there is no cause for concern about an economy's external stability. Given this, the Pitchford thesis would argue that foreign direct investment into private exporting industries is sustainable, as this investment is made by private firms to increase their productive capability.
- 7** A Net foreign liabilities = net foreign debt + net foreign equity (where net foreign equity is calculated as Australian assets held by foreign investors – foreign assets held by Australian investors)  
Net foreign liabilities = \$950bn + (\$800bn – \$900bn)  
Net foreign liabilities = \$950bn – \$100bn = \$850bn
- 8** C A loan by an Australian bank to foreigners would reduce the value of Australia's foreign debt, as that is money that must be paid back by foreigners to Australia in the future with interest.
- 13** D Inflation pushes up the costs associated with Australian exports. Australian products therefore go up in price relative to foreign goods. Australia becomes less internationally competitive and we sell fewer exports.
- 15** A An economy that is not externally stable may struggle with achieving its domestic economic policy goals. If a country's external position is considered to be unsustainable, effects can include a depreciation of the currency, withdrawal of foreign investment funds, difficulties in accessing overseas financial markets, higher interest rates and slower economic growth.
- 16** B Terms of trade refers to export prices relative to import prices. The only correct answer of those provided is B, as an increase in export prices and no change in import prices would see an improvement of Australia's terms of trade.

- 17** D An increase in the Consumer Price Index in Australia is likely to result in a loss of confidence in the Australian economy, because higher inflation will result in reduced competitiveness. Other things being equal, this is likely to increase the supply of Australian dollars on foreign exchange markets and therefore reduce the value of the exchange rate. Thus, Australians would supply Australian dollars to convert into foreign currency, leading to an increase in supply of the Australian dollar, as shown in the diagram, and a depreciation of the Australian dollar.
- 18** C A 'debt trap' refers to a country being unable to meet the debt servicing costs from income earned. In this case money is borrowed to meet the debt servicing costs, but the borrowing of this money increases the total debt earned, which increases the debt servicing costs. In Australia's case, excessive growth in Australia's foreign debt could lead to a debt sustainability problem. If the size of the debt is rising faster than the increase in GDP, the interest payments on the debt will progressively take up a greater proportion of our GDP. This reduces both Australia's overall standard of living and its economic growth potential. High foreign debt can also create a vicious cycle, sometimes known as the debt trap scenario.
- 19** D Microeconomic reform aims to improve productivity and international competitiveness. Greater productivity and international competitiveness should improve Australia's balance on goods and services, improving the CAD and improving external imbalance.

## Short Answers

### Question 1

- (a)** Net foreign debt is the total stock of loans owned by Australians to foreigners minus the total stock of loans owed by foreigners to Australians. Net foreign equity is the total value of assets in Australia owned by foreigners minus the total value of assets overseas owned by Australians.
- (b)** A rise in foreign liabilities worsens the current account deficit. This is because increased foreign liabilities lead to a rise in servicing costs, such as interest and dividends recorded on the net primary income account in the current account. Exchange rate movements have a mixed impact on the current account. A depreciation can worsen the net primary income account balance as the Australian dollar value of servicing costs increases. On the other hand, a depreciation improves the international competitiveness of Australian exports, which, in the medium term, improves the balance on goods and services.
- (c)** External stability indicates the extent to which external imbalances may limit Australia's ability to achieve economic growth or other domestic economic policy goals. The first key indicator is the current account deficit (CAD). A persistent CAD can become a problem as a high CAD puts Australia at risk of not being able to finance its external liabilities – however, economists consider that Australia's CAD has become more sustainable in the past decade. Second, the terms of trade reflect the prices for exports relative to the prices for imports, which is influenced by global fluctuations in commodity prices. In the past two decades the terms of trade have been above historic averages. Third, the level of the exchange rate is an important indicator because it can affect Australia's international confidence, the competitiveness of Australian industries, the costs of servicing foreign debt, inflation and interest rates. Finally, the level of net foreign debt and net foreign liabilities provides an indicator of the extent to which Australia's accumulated liabilities may impose servicing costs and increase Australia's risk exposure to adverse developments in the global economy.

## Question 2

- (a)** External stability refers to the aim of government economic policy that seeks to promote sustainability on the external accounts so that Australia can continue to service its financial obligations to the rest of the world. Maintaining external stability involves keeping net foreign liabilities and the current account deficit at sustainable levels, as well as avoiding exchange rate volatility.
- (b)** The first problem for maintaining external stability issue is Australia's persistent current account deficit, which has in the three decades between the 1980s and 2000s averaged above 4 per cent of GDP (although it has been lower since 2010). This has resulted in a steady increase in foreign liabilities. Second, Australia's strong export performance in recent years rests on two potentially volatile foundations: first, Australia relies very heavily on export demand from China. This makes Australia vulnerable to adverse developments in the Chinese economy or in relations with the Chinese government. Third, Australia has a high proportion of exports of carbon-based energy resources, which economies around the world are seeking to phase out as they aim to reduce their carbon emissions and slow down global warming.
- (c)** The savings-investment gap describes the shortfall between domestic investment and domestic savings. Historically, Australia's domestic savings have not been sufficient to fund domestic investment. The savings-investment gap has been made up through drawing on the savings of foreigners, through borrowing from overseas. This is a long-term contributor to Australia's current account deficit.
- (d)** A current account deficit may lead to an improvement in economic growth, if it is related to increased overseas investment in production capacity and improved productivity (such as the large investment in the resources sector during the recent mining boom). To the extent that increased financial inflows allow a higher level of investment and overcome a lack of domestic savings, this should result in increased export capacity and higher growth in the longer term. On the other hand, in the short term a high CAD resulting from excessive domestic demand is likely to prompt a tightening of monetary policy and a slowdown in growth. A sustained high CAD may also constrain economic growth in the long term due to the balance of payments constraint, where an increasing share of export revenues must be spent on servicing the growing stock of foreign liabilities.

## Question 3

- (a)** The trade gap explanation for Australia's current account deficit (CAD) suggests that the CAD is a result of persistent deficits on the balance on goods and services, caused by Australia's demand for imports of goods and services consistently outstripping exports of goods and services for several decades. The trade gap explanation considers that Australia's low international competitiveness in the higher value-added areas of global trade, the narrow export base and dependence on commodity exports, and the heavy reliance on overseas suppliers for capital and consumer goods have contributed to a high CAD.
- (b)** Servicing costs for foreign equity reflect profits, dividends and rent payments that are returned to foreign owners of Australian assets. These payments are only made when those assets are generating income. They are recorded as debits on the net primary income account, and are also offset by the profits and dividends from Australia's overseas investments. On the other hand, the servicing costs for foreign debt involve interest payments that must be paid annually regardless of the state of the economy. For that reason, economists tend to be less concerned about the servicing costs of foreign equity than foreign debt.

- (c) The Pitchford thesis, also known as the ‘consenting adults’ thesis, notes that Australia’s CAD and foreign liabilities are mostly generated by the private sector, and hence are of less concern than a CAD resulting from government borrowings. Many economists have largely accepted the Pitchford thesis of Australia’s CAD and foreign debt. However, the Pitchford thesis has been criticised for ignoring the risks and vulnerability of a country with large external imbalances when global economic conditions suddenly change. There is debate about whether it is right to assume that private-sector decision making involves a proper calculation of risks, given the systemic crises and business failures seen both during the global financial crisis and after the COVID-19 global pandemic. Further, the Australian Government was forced to step in to provide guarantees for the banks who held most of Australia’s private-sector foreign debt during the global financial crisis, suggesting that private-sector debt is not entirely separate from public-sector debt.
- (d) In the long term, excessive growth in foreign debt could lead to a debt sustainability problem. If growth in foreign debt exceeds growth in GDP, the costs of servicing the foreign debt increase as a share of GDP. This has the potential to reduce Australia’s standard of living and the economy’s overall growth potential. Excessive growth of foreign debt could also lead to a ‘debt trap scenario’. A debt trap scenario occurs when an increase in foreign debt is required to service the CAD. The interest payments on the foreign debt are recorded as net primary income debits, which add to future CADs and extend the problem into the future. Finally, a change in global economic conditions, such as a return of inflationary forces and rising global interest rates, would substantially increase the cost of servicing Australia’s large stock of foreign debt.

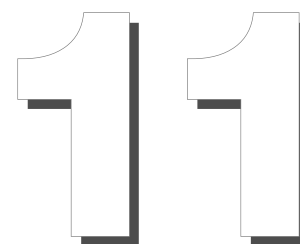
## Class Activity Answers

Event	Impact on Australia’s balance of payments	Impact on net foreign liabilities	Impact on Australia’s exchange rate
Increase in Australian interest rates relative to overseas	Increased financial inflows. Increased net primary income outflows.	Increased financial inflows add to the total level of foreign debt.	Increased demand for the A\$, causing an appreciation.
Australia’s inflation rate rises faster than that of its major trading partners	Loss of international competitiveness; more imports, fewer exports; CAD may increase.	A higher CAD will contribute to an increase in foreign liabilities. A lower A\$ (see column to the right) would on the other hand increase the value of foreign assets, potentially reducing foreign liabilities.	Higher domestic inflation will result in a loss of confidence and depreciation of the A\$ over time, although this may be offset if the RBA raises interest rates to reduce inflationary pressures.
The global economy experiences a synchronised downturn	Lower commodity prices and a reduction in export volumes. While offset by lower imports (if the Australian economy slows) it is generally assumed the CAD would rise. Reduced financial inflows and outflows as investment falls.	Mixed effects. Foreign debt and liabilities are likely to rise due to a higher CAD and a lower dollar. However the lower A\$ would increase the value of foreign assets, potentially reducing foreign liabilities.	A\$ is likely to depreciate, since its value is influenced by global commodity price movements. The extent of the fall in the A\$ depends on the performance of the Australian economy compared to trading partners.
The household savings rate in Australia rises	Improvement in the CAD as the savings-investment gap is one of the long-term drivers of the deficit. Higher domestic savings will make Australia less reliant on overseas borrowing, reducing net primary income deficit over time.	Higher domestic savings will make Australia less reliant on overseas borrowing, reducing net foreign debt and liabilities.	The level of domestic savings is not a major influence on the exchange rate in the short to medium term, but a reduced demand for foreign currency (a lower supply of A\$) should put upwards pressure on the A\$.

Event	Impact on Australia's balance of payments	Impact on net foreign liabilities	Impact on Australia's exchange rate
Foreign investors lose confidence in the Australian economy	This will be reflected in reduced financial inflows into Australia (overseas loans and equity investment) which might trigger other consequences – slower economic growth, a lower dollar, possibly an increase in interest rates – with further impacts	In the immediate term, foreign investors' reluctance to invest in Australia may result in slower growth in foreign liabilities	A loss of confidence will result in a depreciation of the A\$ as investors and speculators reduce their demand for the A\$
Australia's terms of trade worsens due to decreased demand for commodity exports	Reduced export revenues, higher BOGS deficit, increase in the CAD	Increased net foreign liabilities as a result of a rising CAD	Decreased demand for the A\$, causing a depreciation
The growth rate of labour productivity rises	Assuming that productivity improvements result in increased international competitiveness, exports should rise and domestic producers become more competitive with imports; therefore CAD should fall	A lower CAD should result in a lower level of net foreign liabilities	The level of productivity growth is not a major influence on the exchange rate in the short to medium term, but the improvement in competitiveness should make it more attractive to invest in the Australian economy and therefore put upwards pressure on the A\$
Australia runs a series of large budget deficits	No direct impact, but through the 'twin deficits' relationship, larger budget deficits are likely to put upwards pressure on the CAD	Higher budget deficits will widen the savings/ investment gap and contribute to higher net foreign liabilities	High levels of borrowings can reduce investor confidence, decreasing demand for the \$A, causing a depreciation
Australia experiences an economic growth boom	Depends on the source of growth, and the relative growth in exports relative to imports. Historically, when Australia's growth has outstripped other countries it has tended to increase the CAD.	Impact depends on how the CAD is affected, and the extent to which stronger growth is associated with an increase in foreign investment.	If the higher level of economic growth is regarded as sustainable, it is likely to contribute to increased confidence in the A\$ and an appreciation
Wages stagnate across all major industries in the economy	Decrease in demand for imports and reduces inflation for trade-competing sectors, improving the BOGS and reducing the CAD	Reduced CAD results in lower balance on capital and financial account, and reduced net foreign liabilities	Assuming that the lower wages growth results in lower inflation and increased exports, this should put upwards pressure on the A\$
Labour productivity across the economy falls	Assuming that the worsening in productivity result in reduced international competitiveness, exports growth will fall and imports become more competitive against domestic producers; therefore CAD should rise	A higher CAD should result in a lower level of net foreign liabilities	The level of productivity growth is not a major influence on the exchange rate in the short to medium term, but the worsening in competitiveness should make it less attractive to invest in the Australian economy and therefore put downwards pressure on the A\$



# Distribution of Income and Wealth



## Multiple Choice

<b>1</b>	C*	<b>6</b>	B*	<b>11</b>	B	<b>16</b>	B
<b>2</b>	D	<b>7</b>	A*	<b>12</b>	A	<b>17</b>	D
<b>3</b>	B*	<b>8</b>	D*	<b>13</b>	C	<b>18</b>	D*
<b>4</b>	A*	<b>9</b>	C	<b>14</b>	D	<b>19</b>	A
<b>5</b>	C	<b>10</b>	B*	<b>15</b>	C	<b>20</b>	C*

\*Indicates that an enhanced answer has been provided in the section below.

## Enhanced Answers

- 1** C Country A has a more equal distribution of income than Country B. The most likely explanation of this is Country A spends more on transfer payments, as transfer payments lessen the inequality gap between rich and poor.
- 3** B Workers earning the minimum wage are likely to be low-income earners. An increase in the minimum wage would therefore lead to higher incomes for low-income earners, creating a more equal distribution of income. The other options would all lead to greater inequality (note that option A refers to an increase not in the pension itself, but the age at which individuals become eligible; this means that they would need to wait longer before they can receive the pension, which would reduce incomes for low-income earners without other sources of income).
- 4** A If the tax system becomes less progressive (that is, more regressive), inequality will increase. Therefore, the Lorenz curve will move further away from the line of perfect equality (the dotted line). This will cause area A to increase.
- 6** B Workers are more likely to migrate to other countries for better income-earning opportunities if the global distribution of income becomes more unequal.
- 7** A In economic terms, lower income earners have a higher marginal propensity to consume (MPC) because they spend more of each additional dollar they earn than higher income earners do. That means that in an economy with a high level of income inequality, there will be a relatively lower level of consumption and higher level of savings. This in turn would lead to lower economic activity, employment, investment and living standards. Thus, a reduction in income inequality would lead to an increase in spending as lower income earners would have more money to spend. This would lead to an increase in consumption.
- 8** D There has been an increase in inequality in the distribution of income in Australia in recent decades.
- 10** B  $\text{Gini coefficient} = \frac{A}{A + B}$ .  $\text{Gini coefficient} = \frac{44}{44 + 56} = 0.44$
- 18** D D is further away from the line of equality.
- 20** C Income inequality encourages entrepreneurs to accept more risk. If there were no extra reward for entrepreneurial risk-taking, there would be fewer entrepreneurs and businesses, a lower rate of economic growth, weaker investment, less innovation, fewer jobs and a reduced productive capacity in the economy.

## Short Answers

### Question 1

- (a)** Income is a flow of money from the sale of the factors of production over a period of time, such as wages, profit, rent and interest. Wealth is a stock of net assets owned by an individual or household at a point in time, such as property or shares. Wealth generally increases according to the share of an individual's income that is saved, and so low-income earners tend to have little wealth. Also, high levels of wealth can in turn generate income as they are used to fund investment in the economy and earn interest or other returns.
- (b)** Gender is a significant factor influencing income inequality in the Australian economy. On average, women receive lower wages than men (even for the same job) and are more concentrated in lower skilled and lower paid jobs. Historically women have been given fewer opportunities to acquire skills and qualifications than men. Even when women have attained the same level of qualifications and experience as men in full-time jobs, women still receive lower wages on average, indicating that there still is discrimination in the labour market.
- (c)** Fiscal policies have a direct impact upon the amount of inequality in an economy. Through changes in taxation and transfer payments, the government is able to influence the distribution of income to different groups within an economy. For example, a government may reduce inequality by making the tax system more progressive, that is, increasing the proportion of tax paid on higher levels of income. Equally, by reducing the number of tax brackets or the differences in tax rates, governments may increase the level of income inequality. Because the GST is a regressive tax, increasing the rate or widening the base of the GST would increase inequality. Governments can also influence income inequality by targeted policy changes, such as adjustments to specific transfer payments, such as the disability support pension or the age pension. Labour market policies also have an important influence on incomes and therefore on income inequality. The decentralisation of the labour market has widened inequality between wage earners as lower skilled workers have less bargaining power and rely on legislated minimum standards such as the award wage system. An increase in award wages would therefore decrease income inequality.

### Question 2

- (a)** Country B. Country A's Income Gini coefficient is 0.42 while Country B's is 0.26. A lower Gini coefficient denotes a more equal distribution.
- (b)** The Gini coefficient is a numerical measure of the degree of income (or wealth) inequality in an economy. Its value lies between zero (which represents perfect equality) and 1 (which represents perfect inequality).
- (c)** Country B has a more equitable distribution of income and wealth than Country A. This may be caused by more equitable taxation policies in Country B, such as a progressive tax system and a capital gains tax, reducing inequality in both income and wealth distribution compared to Country A.
- (d)** In economics, income is a 'flow' concept while wealth is a 'stock' concept. This means that over the longer term, differences in the distribution of income contribute to a greater inequality in the distribution of wealth. An initial inequality in income enables higher income earners to accumulate more wealth in a shorter period of time. Not only do their higher incomes result in faster growth in wealth year by year, those households with greater wealth tend to achieve a higher return from their existing wealth. This leads to a greater concentration of wealth that compounds wealth inequality (that is, a higher Gini coefficient for wealth) compared to income.
- (e)** Income inequality generates numerous social and economic costs. Higher levels of inequality contribute to greater divisions between people on the basis of their social class, as well as between geographic regions. This can lead to increased rates of crime and social problems among marginalised groups in the community. An economic cost of income inequality is that economies experience lower economic growth, because lower income earners have a higher marginal propensity to consume because they spend more of each additional dollar they earn than higher income earners do. Increased inequality also reduces a country's productivity as people growing up in lower income households have fewer educational opportunities and are less able to achieve their potential.

### Question 3

- (a) Gini coefficient calculation =  $\frac{A}{(A + B)} = \frac{50}{(50 + 120)} = 0.294$
- (b) Two ways of measuring income inequality are through graphical and numerical methods. The Lorenz curve is a graphical representation of income inequality that shows an economy's deviation from the line of equality. The Gini coefficient is a number between 0 and 1 that accounts for income inequality through measuring the gap between the Lorenz Curve and the line of equality. A lower Gini coefficient represents less income inequality.
- (c) Geographic inequality in Australia exists between regional areas and major cities. Regional areas do not have the population to support the same level of economic activity or specialisation as cities, which can result in fewer job opportunities and lower living standards. Inequality also exists among the different states of Australia as varying concentrations of natural resources allow for different types of economic activity. For example, Queensland and Western Australia received greater material benefit from the mining boom than other states because of their access to coal and iron ore resources.
- (d) Policies that influence the distribution of wealth directly include those relating to superannuation, housing and the taxation of investment assets. For most Australians, the highest proportion of their wealth is tied up in their family home; therefore, policies that assist low-to-middle-income earners to buy a home (such as the first home owner's scheme) will have a longer term impact on wealth distribution. Superannuation is often the second most valuable asset for households on low to middle incomes because Australia's system of compulsory superannuation payments essentially forces individuals to accumulate wealth and prevents them from accessing that wealth until their retirement. Since its introduction in the 1990s, compulsory superannuation has played an important role in creating financial assets for the poorest 20 per cent of households and offsetting increased wealth inequality. Increases to superannuation for lower income earners will help to reduce wealth inequality. Similarly, reductions in the tax concessions for contributions to superannuation by high income earners can reduce the extent to which superannuation adds to wealth inequality at the top of the income scale.

## Skills Revision Answers

### Year 1

$$\text{Gini coefficient} = \frac{A}{A + B}$$

$$\text{Gini coefficient} = \frac{45}{45 + 55}$$

$$\text{Gini coefficient} = 0.45$$

### Year 2

$$\text{Gini coefficient} = \frac{A}{A + B}$$

$$\text{Gini coefficient} = \frac{20}{20 + 80}$$

$$\text{Gini coefficient} = 0.20$$

The smaller the Gini coefficient the more equal the distribution of income. Thus, the income distribution in Year 2 is more equal than in Year 1.

### Explain one factor that might have contributed to this change

A more progressive tax system, removal of tax loopholes for higher income earners, means-tested tax offset, rebates or government payments to lower income earners, etc.

### Explain one economic benefit of this change

Answers could include increased overall utility for citizens of the country, potential for higher economic growth, reduction in poverty and social problems and the economic costs associated with these problems, reduction in welfare support.

# Environmental Sustainability

# 12

## Multiple Choice

<b>1</b>	A	<b>6</b>	C	<b>11</b>	B	<b>16</b>	B*
<b>2</b>	A*	<b>7</b>	B*	<b>12</b>	C*	<b>17</b>	A*
<b>3</b>	D*	<b>8</b>	D	<b>13</b>	C*	<b>18</b>	D
<b>4</b>	C	<b>9</b>	C	<b>14</b>	C*	<b>19</b>	A
<b>5</b>	B*	<b>10</b>	D*	<b>15</b>	B*	<b>20</b>	A

\*Indicates that an enhanced answer has been provided in the section below.

## Enhanced Answers

- 2** A The price mechanism does not effectively consider the long-term effect of economic activity on the environment. Stocks of fish, for example, may continue to be farmed until they run out, forests may be logged until there are none left, and rivers and the atmosphere may be polluted. This is because producers enjoy a private benefit from the activity that depletes resources or pollutes the environment.
- 3** D The tragedy of the commons refers to the fact that the environment and other common resources can be destroyed through overuse (such as overfishing the seas or rivers or polluting the atmosphere and waterways).
- 5** B The tragedy of the commons is most likely to occur for a non-excludable good. It is a common area, meaning everyone has access, leading to overuse/exploitation of the resource.
- 7** B A negative externality is an unintended negative outcome of an economic activity whose cost is not reflected in the operation of the price mechanism. Burning fossil fuels to produce electricity results in air pollution, which can cause illnesses.
- 10** D All the other options are market-based solutions.
- 12** C Public goods are non-excludable and non-rival. People cannot be excluded from enjoying clean air and one person's use does not affect anyone else's. National parks are rival when overcrowded, council swimming pools can be excludable via an entry fee, and natural resources are rival and can be depleted through unsustainable consumption.
- 13** C The product has negative externalities as the private cost of the good is much lower than the social cost (or true cost to society) of the good.
- 14** C The socially optimum level of production occurs at the intersection of the demand curve and the supply curve (social cost)
- 15** B \$20 – which reflects the difference between the private cost and the social cost at that quantity of production (that is,  $\$40 - \$20 = \$20$ )
- 16** B The optimum level of production for society is the intersection of the demand curve and the supply curve (social cost). This quantity is 1000. But due to market failure 1200 units are produced. Thus, the good is overproduced by 200 units.
- 17** A A tax on the product would discourage production, reducing the level of negative externality associated, by making the private cost of the product better reflect the social cost of producing the product.

## Short Answers

### Question 1

- (a)** A public good is characterised as being both non-excludable and non-rival. That is, once the good is provided, consumers cannot be excluded from enjoying the benefit. The consumption of the good by one person does not diminish the quantity available for others.
- (b)** The tragedy of the commons relates to the market failure that arises from overuse, destruction or depletion of environmental resources. As there are no property rights associated with environmental resources, their value is not properly accounted for by producers, and the resource is used beyond what is socially optimal. Examples include overfishing the seas and releasing carbon dioxide emissions into the atmosphere.
- (c)** To achieve emissions reductions, the government could introduce a total ban on emissions. This would reduce emissions entirely, but would be detrimental for industries that produce emissions and sharply reduce economic growth. Alternatively, the government could introduce a tax on emissions, which would 'internalise the externality' by making producers take into account the social cost of emissions, which is higher than the private cost of production. The government could also consider a subsidy for producers of emissions reduction technology. This would introduce a cost to the government, and would not directly reduce emissions by producers, but would incentivise the development of technology to indirectly reduce emissions in the longer term.
- (d)** Policies to preserve the natural environment may create challenges for governments. Taxes on industrial processes may make businesses uncompetitive, losing export contracts and causing businesses to close and unemployment to rise. Regulations on production may create business costs that are passed onto consumers. Subsidies for environmentally friendly activities require higher taxes or spending cuts elsewhere. A final challenge is governments must make decisions with limited information, such as forecasts and estimates, which will not always be correct because of limitations in our knowledge of the natural environment.

### Question 2

- (a)** An externality is an unintended cost or benefit of an economic activity whose cost is not reflected in the price mechanism. In this diagram, the vertical distance between the social marginal cost and the private marginal cost represents the externality.
- (b)** This diagram represents a negative production externality as the private cost paid by the producer is less than the social cost. This means that producer exceeds the socially optimum level of production, creating a negative externality for society.
- (c)** Private markets do not provide public goods because they cannot capture the benefits of provision. Public goods are non-excludable, leading to 'free-rider' behaviour. If a private market were to provide an environmental good such as cleaner air, it would not be able to charge individual consumers to use it, as all consumers would benefit, whether or not they were willing to pay for its provision.
- (d)** Resource depletion is a major concern for the Australian economy, which relies heavily on non-renewable resources for its exports. The impact of depleting resources is greatest on future generations who will not have the benefit of these resources once they are depleted. The Australian economy is already affected by the depletion of resources in areas such as agriculture, fisheries and forestry. Depletion of soil quality from over-farming, depletion of water resources from excessive irrigation use, depletion of fishery stock from overfishing and the depletion of old growth forests are all examples of a loss of productivity and output in industries that have mismanaged natural resources.

### Question 3

- (a) Ecologically sustainable development involves conserving and enhancing the community's resources so that ecological processes and quality of life are maintained.
- (b) The possible economic impacts of climate change are severe, with the decisions made today having lasting consequences for future generations. For example, rising sea levels increase the risk of damage caused by storm surges, in turn aggravating coastal erosion, with the risk of damage to coastal infrastructure including beaches and loss of land. Related impacts include the displacement of hundreds of millions of people affected by rising sea levels and extreme weather events such as floods, droughts and cyclones. Climate change may also cause detrimental health effects, which flow on to the economy. The World Health Organisation predicts that between 2030 and 2050, climate change is expected to cause approximately 250,000 additional deaths per year, from malnutrition, malaria, diarrhoea and heat stress. Significant increases in illness will be concentrated in lower-income areas, and could contribute to worsening levels of inequity in income and development in these regions. Domestically, it is estimated that climate change could reduce Australia's GDP by 4.8 per cent by 2100. Lost productivity and absenteeism due to extreme heat is already costing the Australian economy an estimated \$8 billion a year.
- (c) There is a mixed relationship between environmental sustainability and economic growth. In the short term, policymakers may face a conflict: pursuing rapid economic growth could see resources overused and depleted. However regulations to improve sustainability may also raise costs, and their effect may be limited if other countries' economic behaviour continues to contribute to environmental damage (such as through carbon emissions which accelerate global warming). At the same time, there are opportunities created by governments fostering greater environmental sustainability. For example, new technologies such as energy-efficient cars or solar panels could be a source of exports and economic growth. In the long term, economic growth depends on managing natural resources, in sectors such as mining and manufacturing, and farming. Policies to enhance sustainability should therefore help achieve economic growth objectives in the long term.

## Skills Revision Answers

### Page 155

public good

free riding

price mechanism

non-renewable resources

tragedy of the commons

ecologically sustainable development

negative externality

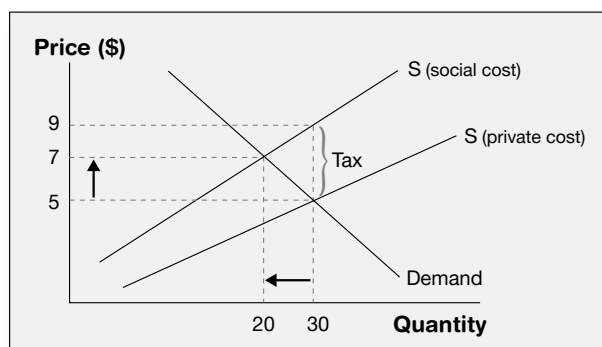
pollution

climate change

market failure

renewable resources

### Page 156



# The Objectives of Economic Policy

# 13

## Multiple Choice

<b>1</b>	A*	<b>6</b>	A*	<b>11</b>	B	<b>16</b>	A*
<b>2</b>	C	<b>7</b>	D*	<b>12</b>	A	<b>17</b>	B
<b>3</b>	A*	<b>8</b>	A	<b>13</b>	B*	<b>18</b>	D
<b>4</b>	B	<b>9</b>	C	<b>14</b>	D	<b>19</b>	B*
<b>5</b>	D	<b>10</b>	D	<b>15</b>	B*	<b>20</b>	C

\*Indicates that an enhanced answer has been provided in the section below.

## Enhanced Answers

- 1** A Economic growth is defined as the increase in output of goods and services produced in an economy over a period of time and is the primary goal of most economic decisions.
- 3** A Structural unemployment will increase due to sunset industries being pushed out by more imports from countries with a comparative advantage.
- 6** A Addressing the rising inflation rate would involve slowing down the rate of economic growth (via contractionary fiscal and/or monetary policy). This would have a negative impact on employment – potentially higher levels of unemployment.
- 7** D Productivity growth and low inflation go hand in hand, as productivity growth means more output per input cost, reducing cost-push inflation.
- 13** B Microeconomic reform is aimed at improving the structure of the economy to promote efficiency and productivity. Its long-term aim is to increase aggregate supply.
- 15** B Between Years 1 and 3, both fiscal and monetary policies have become more expansionary, with lower interest rates and a higher budget deficit. This suggests that the government is trying to increase the level of economic growth, which it might do if it is trying to combat a situation of rising unemployment while at the same time inflation is falling.
- 16** A A sustainable position on the Current Account of the Balance of Payments is indicative of stability between Australia and the rest of the world in income receipt transactions. As exchange rates are indicators of short-term confidence in an economy, a stable exchange rate suggests strong international and domestic confidence. A strong terms of trade is associated with higher export income, therefore leading to higher standards of living.
- 19** B The Phillips Curve shows the inverse relationship of the trade-off between low unemployment and low inflation. However, for much of the decade from 2010 to 2019, Australia experienced both low unemployment and low inflation, suggesting a weaker inverse relationship.

## Short Answers

### Question 1

- (a)** The government's economic objective of price stability refers to keeping inflation, the sustained increase in general price, at a rate that minimises distortions in the economy. In Australia, price stability is the primary objective of monetary policy, which is conducted by the Reserve Bank using the policy framework of an inflation target of 2–3 per cent.
- (b)** Macroeconomic policies, such as fiscal and monetary policies, operate on an economy-wide scale to influence the level of aggregate demand in the short to medium term. They generally operate in a counter-cyclical fashion to smooth fluctuations in the business cycle to achieve economic growth with low inflation and low unemployment. Microeconomic policies, such as tariff cuts and industrial relations reform, operate on an industry-specific basis to influence the level of aggregate supply. Microeconomic policies have a long-term focus, addressing structural problems and improving the productivity, efficiency and international competitiveness of firms throughout the economy.
- (c)** Microeconomic reforms generally involve improving the operation of market forces in an economy, with the goals of improving dynamic, allocative and technical efficiency. This should result in higher productivity, increased competitiveness and fewer distortions in the price mechanism. In the short term, changes such as tariff reductions and competition policy may cause unemployment, in import-competing sectors or those facing more competition. In the long term, unemployment should be lower because there will be more job opportunities in an economy with higher productivity and a more efficient allocation of resources. Price impacts of microeconomic reform vary – some changes such as deregulation, corporatisation or the introduction of taxes such as the GST may see price increases in the short term, while others like tariff reductions may lower prices. In the long term, inflationary pressures should be lower as the more productive and efficient economy can respond more quickly to changing circumstances.

### Question 2

- (a)** Governments aim to foster a fairer distribution of income and wealth as the outcomes of free markets often disadvantage some individuals and groups. A progressive tax system and transfer payments aim to reduce the gap between high and low income earners to create equality of opportunity to increase social and economic utility.
- (b)** One measure of external stability is to calculate net foreign debt as a percentage of GDP. Net foreign debt is the aggregate of loans owed by Australia to global investors, less the aggregate of loans owed by global investors to Australians. The larger the level of foreign debt, the larger the servicing costs which are recorded on the net primary income section of the current account. Secondly, the terms of trade can be used to determine the external stability of an economy. The terms of trade reflects the relative prices of Australia's exports and imports. An increase in the terms of trade improve external stability because Australia is able to buy more imports with a given quantity of exports.
- (c)** The pursuit of economic growth can come at the cost of environmental damage. This is particularly relevant for economies that are heavily dependent on natural resources, such as mineral and energy producers, and economies with large-scale manufacturing. While such activities can generate employment, exports and improvements in living standards, they cause resource depletion and irreversible or costly environmental damage in the long run. This can lead to reduced economic growth and living standards in the long run. Economies can implement policies that encourage environmentally sustainable economic growth. These aim to balance the goals of environmental preservation and economic growth by focusing on the longer term and ensuring that the social and environmental costs of production are reflected in the price mechanism. These policies may need to be complemented by working in cooperation with others to address collective environmental challenges where all countries' behaviour is important, such as addressing climate change and pollution in oceans.



### Question 3

- (a) At point A there is 5 per cent unemployment and no inflation – if unemployment falls below this level, prices will rise.
- (b) Higher economic growth results in more demand which creates jobs and lowers unemployment. However, higher economic growth also increases demand and can increase prices, resulting in inflation. Therefore, there can be a conflict between achieving lower unemployment and lower inflation.
- (c) Any attempts to reduce unemployment below the Non Accelerating Inflation Rate of Unemployment (NAIRU) in the short term will lead to a higher level of inflation. This is because if expansionary policies push unemployment below the NAIRU, wage growth is likely to accelerate (due to a shortage of skilled workers), contributing to higher inflation. This in turn will prompt the reserve bank to raise interest rates and reduce economic growth, therefore in time increasing unemployment. The NAIRU is comprised of structural and frictional unemployment. These two types of unemployment can be reduced over the long term only through structural reform rather than short-term macroeconomic policy measures.
- (d) The government could adopt expansionary macroeconomic policy in order to boost the level of aggregate demand and reduce cyclical unemployment. Expansionary monetary policy, lowering interest rates, would stimulate consumption and investment, increasing aggregate demand and reducing cyclical unemployment. The government can also introduce measures to reduce structural unemployment, such as training programs and improved incentives for employers to take on school leavers as apprentices. Wage subsidies can be used to help businesses hire employees who might otherwise find it difficult to get a job. By improving the skills of the workforce, governments can help ensure that job vacancies are filled, reducing structural unemployment.

## Skills Revision Answer

Economic issue/objective	Best type of policy response	Brief explanation of how it can achieve the objective
Fluctuations in short-term economic growth	Macroeconomic policy	<ul style="list-style-type: none"> <li>• A combination of fiscal policy and monetary policy could be used to keep the level of economic growth at a sustainable level, where the rate of inflation does not rise above the target range and progress can be made in reducing the level of unemployment.</li> </ul>
Price stability in the short and long run	Mix of macroeconomic policy and microeconomic policy	<ul style="list-style-type: none"> <li>• Price stability in the short-run can be achieved through the appropriate use of monetary policy to keep inflation in the 2–3 per cent target band.</li> <li>• In the long run, microeconomic reform can allow the economy to grow at faster rates while also containing inflation.</li> </ul>
External stability	Microeconomic policy	<ul style="list-style-type: none"> <li>• Policies to expose firms to international competition and raise productivity should improve competitiveness and the trade balance, over time.</li> </ul>
Income inequality	Mix of policies	<ul style="list-style-type: none"> <li>• Policies that provide more support to those on the margins of the labour market, income support for those facing other disadvantages and progressive taxation should reduce inequality.</li> </ul>
Environmental sustainability	Mix of policies	<ul style="list-style-type: none"> <li>• Taxes or subsidies or the direct provision of certain services can shift production techniques over time to be more sustainable.</li> </ul>
Long-term economic growth	Microeconomic policies	<ul style="list-style-type: none"> <li>• Policies that lift employment and productivity in the long term will help growth at a rate which does not lift inflation or thereafter external stability.</li> </ul>
Productivity growth	Microeconomic policies	<ul style="list-style-type: none"> <li>• Improving the skills of the workforce, improving infrastructure and fostering the take-up of new technologies should raise productivity.</li> </ul>

# Fiscal Policy

# 14

## Multiple Choice

<b>1</b>	C*	<b>6</b>	A*	<b>11</b>	D*	<b>16</b>	D*
<b>2</b>	B	<b>7</b>	A	<b>12</b>	C	<b>17</b>	C
<b>3</b>	B	<b>8</b>	C	<b>13</b>	D*	<b>18</b>	B
<b>4</b>	C*	<b>9</b>	B	<b>14</b>	B	<b>19</b>	C
<b>5</b>	A	<b>10</b>	B*	<b>15</b>	C	<b>20</b>	A

\*Indicates that an enhanced answer has been provided in the section below.

## Enhanced Answers

- 1** C Fiscal policy is a macroeconomic policy that can influence resource allocation, redistribute income and reduce the fluctuations of the business cycle. The other options all describe aspects of fiscal policy: the budget outcome, specific elements of the budget, and an outcome that can be influenced by fiscal policy. C is the correct answer because none of these other options describe the overall concept of fiscal policy.
- 4** C During a recession, more people are out of work and household incomes generally fall. More people unemployed will see the government spend more money on unemployment benefits. At the same time, with increases in unemployment and falling household incomes, the government's taxation revenue will also fall.
- 6** A During an economic boom, there will be an increase in employment. This will see the government's spending on unemployment benefits fall. At the same time, the government will increase its tax revenues as more people are working and paying tax. While a surplus is more likely during a boom, A is the more correct answer.
- 10** B The impact of a severe recession is an example of a cyclical factor affecting the budget outcome. As a result of the recession, companies will experience lower profits and as a result tax revenues will be reduced. Option C is not correct because policy changes to reduce income tax are an example of a structural, not cyclical, factor that could influence the budget outcome.
- 11** D An expansionary budget stance refers to a situation in which the government is looking to increase economic activity. This can be achieved through a reduction in taxation, increase in government expenditure and either an increase in the size of the budget deficit or a reduction in the size of the budget surplus.
- 13** D Crowding out effect occurs where government spending is financed through borrowing from the private sector, which limits the supply of borrowable funds and puts upward pressure on interest rates and 'crowds out' private sector investors who cannot borrow at the higher rates of interest.
- 16** D During an economic upturn, there will be an increase in employment. This will see the government's spending on unemployment benefits fall. At the same time, the government will increase its tax revenues as more people are working and paying tax.

## Short Answers

### Question 1

- (a)** The budget has shifted from a \$40 billion deficit to a \$10 billion surplus. Since the budget has gone from deficit to surplus, the stance of fiscal policy is contractionary.
- (b)** Nurmengard's income tax receipts increased from \$225 billion to \$300 billion between 2020–21 and 2021–22. One possible reason is that the level of economic growth increased during this time. This would result in falling unemployment and rising income levels, which would translate into higher income tax receipts. Another possible reason is that the government might have made discretionary policy changes in the 2021–22 Budget in response to an increase in economic activity, for example by raising income taxes in order to moderate economic growth or move the budget into surplus.
- (c)** Changes to fiscal policy can have mixed and large impacts on external stability. Firstly, changes to fiscal policy can directly impact the external accounts. For example, should the federal government increase the budget deficit, it may decide to finance the deficit with external borrowing, in which case the size of foreign liabilities would increase along with the servicing costs to foreign investors. Secondly, fiscal policy can have an indirect impact on external stability through its influence on international investor confidence in an economy, which in turn will influence the currency and the willingness of overseas countries to lend to that country. By pursuing a policy of fiscal consolidation, a government demonstrates to the international investor community that it is a low-risk borrower and these perceptions will lead to a better international credit rating and therefore it may enjoy lower levels of interest rates on its overseas borrowings.
- (d)** A government can finance a budget deficit by borrowing from the domestic private sector, from overseas investors, or through monetary financing. The Australian Government mostly borrows from within Australia. One advantage of borrowing from domestic markets in Australian dollar securities is that the government is not exposed to the risk involved with exchange-rate movements. On the other hand, borrowing from the domestic private sector can 'crowd out' private sector investment. If the government borrows from overseas, it can minimise the crowding out effect, but it will also add to Australia's foreign debt. The government can also finance a budget deficit through the Reserve Bank printing money, but the government generally avoids this approach as it can add to inflationary pressures.

### Question 2

- (a)** Year 1: \$375m surplus; Year 2: \$175m surplus; Year 3: \$50m deficit; Year 4: balanced budget.
- (b)** The fiscal stance reflects the change in the budget outcome from one year to the next. Fiscal policy is expansionary in Year 2 and Year 3.
- (c)** Discretionary changes refer to deliberate adjustments to fiscal policy, such as reducing spending or making changes to the taxation system. Discretionary changes influence the structural component of the budget outcome. In contrast, non-discretionary changes are changes in spending or taxation that result from changes in the general level of economic activity. These changes are cyclical in nature and are also known as automatic stabilisers, as they do not involve any change in government policy. For example, they include changes in spending on unemployment benefits (because of changes in the level of unemployment) or revenue from personal income tax or company tax resulting from changes in levels of income or profits from one year to the next.
- (d)** Automatic stabilisers are policy instruments in the budget that help to smooth fluctuations associated with the business cycle by either increasing or reducing aggregate demand. Two examples of automatic stabilisers are unemployment benefits and progressive taxation policies. During a downturn, the level of economic activity falls and unemployment rises. As a result, the provision of transfer payments and social security benefits will increase, resulting in a larger budget deficit or smaller surplus. Likewise, an upturn or downturn in the economy will affect government revenues and therefore the budget outcome. In periods of stronger growth, a progressive tax system takes a higher proportion of the incomes and profits of households and businesses, contributing to an improved budget outcome; the opposite will occur in periods of economic slowdown. The budget outcome reflects the effect of automatic stabilisers as economic conditions change.

### Question 3

- (a) The budget outcome sets out the difference between the government's total level of expenditure and its total level of revenue. The three possible budget outcomes are surplus, deficit or a balanced budget. The fiscal stance refers to the impact of fiscal policy on economic growth, indicated by comparing the budget outcome in the previous financial year with the current financial year. The budget stance may be expansionary, contractionary or neutral.
- (b) The underlying cash balance is the most commonly used budget measure, and the one favoured by the government. It shows the budget's short-term impact on the economy and does not distinguish between spending for capital or recurrent purposes. The net operating balance is considered the best measure of the longer-term sustainability of the budget. It is based on recurrent expenditure and removes spending on capital from the balance.
- (c) The Australian Government's main fiscal policy objective is to achieve budget surpluses, on average, over the course of the economic cycle. One benefit of budget surpluses is the ability to use the surplus to pay off public sector debt, which frees up funds on financial markets for other purposes (the reverse of the crowding out effect). Another benefit is that sustained surpluses and lower debt levels give a government greater flexibility to respond to adverse economic events, such as the economic impact of the COVID-19 pandemic, which resulted in the largest short-term fiscal support measures in Australian history. Budget surpluses help ensure that the government is not directly adding to Australia's savings imbalance and may contribute to international confidence in the government's ability to service its debt.
- (d) In most years, fiscal policy plays a lesser support role to monetary policy in macroeconomic management. However, during an economic downturn, fiscal policy can be more effective in stimulating growth in the short-to-medium term as it has a shorter impact lag. During an economic downturn, the government is likely to adopt an expansionary fiscal stance, which could involve increasing government spending on areas such as welfare and infrastructure, or reducing taxation. The government's discretionary fiscal measures during a downturn aim to stimulate aggregate demand, which can help to reduce the rate at which cyclical unemployment increases.

## Skills Revision Answers

Revenue =  $195 + 60 + 80 + 20 = \$355$  billion.

Expenditure =  $100 + 95 + 90 + 65 = \$350$  billion.

Since revenue > expenditure, the budget is in surplus.

The budget can be balanced either by a reduction in revenue or increase in expenditure. For example, health expenditure could increase by \$5 billion, or income and company taxation could fall by a combined \$5 billion.

To stimulate the economy after a particularly destructive bushfire season, the government may look to change the budget outcome from surplus to deficit. Increasing government expenditure will have a more immediate impact on the economy than reducing taxation, so the government may look to make one-off social security payments to people in the worst-affected areas. The government may also provide funding to local community organisations who are providing emergency relief, and it may fund reconstruction efforts to accelerate economic recovery in affected areas.

# Monetary Policy

# 15

## Multiple Choice

<b>1</b>	D*	<b>6</b>	A	<b>11</b>	C*	<b>16</b>	A
<b>2</b>	B*	<b>7</b>	D	<b>12</b>	C	<b>17</b>	B
<b>3</b>	C*	<b>8</b>	C	<b>13</b>	A	<b>18</b>	C*
<b>4</b>	B*	<b>9</b>	A*	<b>14</b>	D	<b>19</b>	D
<b>5</b>	C	<b>10</b>	A*	<b>15</b>	A*	<b>20</b>	B

\*Indicates that an enhanced answer has been provided in the section below.

## Enhanced Answers

- 1** D Fiscal policy relates to government expenditure and tax revenues, whilst monetary policy involves action by the Reserve Bank, on behalf of the government, to influence the cost and availability of credit in the economy through the cash rate.
- 2** B The RBA has three main objectives when using monetary policy: maintaining low and stable inflation, the maintenance of full employment in Australia and encouraging a sustained level of economic growth.
- 3** C If inflationary expectations move below the target band this would suggest that the economy is slowing, perhaps headed for recession. In this situation it is likely that the RBA would decrease the cash rate to stimulate economic activity.
- 4** B A decrease in the cash rate lowers borrowing costs, leading to increased borrowing by households and firms.
- 9** A Banks hold exchange settlement accounts to transfer money between themselves relating to customer transactions between banks. An example of this would be a customer at Bank A transferring money to a different outside bank. In this case, the two different banks involved would use their exchange settlement accounts to facilitate this transaction (as it is a transaction between two different banks).
- 10** A Lower inflationary expectations below the target band indicates the economy is slowing, perhaps headed for recession. In this circumstance the RBA would decrease the cash rate to stimulate economic activity.
- 11** C To increase the cash rate, the RBA needs to restrict the amount of cash in the market, as a shortage of cash will put upward pressure on the price of cash (the cash rate). To do this the RBA will sell government securities to the banks to reduce the amount of funds available to be lent out. This restricts the availability of cash and pushes the cash rate up. This process is called domestic market operations and a detailed discussion of this process can be found on pages 307–309 of the textbook.
- 15** A When the Reserve Bank buys securities, it deposits money into the seller's exchange settlement account. This increases the supply of settlement funds. Because of the forces of demand and supply, an increase in the supply of settlement funds puts downward pressure on the cash rate.

check page ref  
when SB is final

- 18 C** Increasing the supply of funds would push the cash rate lower. The lower cash rate would see a weaker return for investors. Some money invested in Australia would move offshore seeking better returns. This would lead to a depreciation in the currency.

## Short Answers

### Question 1

- (a)** The three broad objectives of monetary policy in Australia are to maintain price stability, full employment and sustained levels of economic growth. In the short term, there can be a conflict between these goals, since the policies that may be implemented in order to reduce inflationary pressures may result in a reduction in the level of economic growth. In contrast, the policies required to achieve full employment may require an increase in the level of economic growth. The Reserve Bank seeks to balance these goals through its policy of inflation targeting.
- (b)** Inflationary expectations are often 'self-fulfilling' in the sense that higher expectations of future inflation by individuals in an economy can lead them to act in a way that causes an actual increase in inflation (such as by raising prices or wage demands before the expected inflation occurs). When inflationary expectations become entrenched, it can become difficult for policymakers to reduce inflation because of the difficulty in changing economic behaviour. After two decades of high inflation rates, in the 1990s the Reserve Bank introduced its policy of inflation targeting, which proved successful in reducing inflationary expectations. The Reserve Bank's 2–3 per cent target band for inflation gained credibility, and businesses and consumers began to factor low inflation into their economic behaviour, helping to lock in the low, stable level of inflation that had been achieved.
- (c)** A tightening of monetary policy would put upward pressure on interest rates. As interest rates rise, aggregate demand – calculated by  $AD = C + I + G + (X - M)$  – will fall. Higher interest rates should discourage borrowing by both consumers and firms, leading to a decline in consumption and investment demand in the economy. For businesses and consumers that have existing loans, the cost of servicing these loans will increase, further limiting their ability to fund other consumption and investment. Additionally, a rise in the level of interest rates will likely lead to an appreciation of the Australian dollar by increasing financial inflows into Australia. This makes imports less expensive relative to domestic goods so that consumers may buy less locally made goods, while also making Australian goods less competitive in overseas markets. Thus, a tightening of monetary policy should decrease consumption, investment and net exports, resulting in reduced aggregate demand and a lower level of economic activity. It should be noted, however, that monetary policy can have a significant time lag of up to 18 months before the full impact of interest rate changes affect the economy, and so the transmission mechanism through which monetary policy influences economic activity may take time.

### Question 2

- (a)** The money supply is the total amount of funds in an economy that can be used as a medium of exchange, a measure of value, a store of value and a method of deferred payment.
- (b)** By loosening monetary policy, the central bank increases the provision of credit and reduces average borrowing costs. This encourages debt-fuelled consumption and provides households with higher disposable incomes, increasing aggregate demand. Similarly, it encourages businesses to expand and proceed with investment plans which support demand as well as long-term economic growth.
- (c)** Although monetary policy is a highly effective demand management tool, it must be proactive and forward thinking as its effectiveness is limited by a significant transmission lag. Whilst monetary policy may be implemented within 15 minutes, adjustments to the benchmark cash rate can take between 6 and 18 months to travel through the transmission mechanism and have a material impact on the real economy. This extended causation essentially implies that the central bank must speculate on the economic and inflation outlook within the forward estimates, and such pre-emptive anticipations are not always accurate.

- (d)** If the Reserve Bank of Australia (RBA) wants to increase interest rates, it will sell second-hand Commonwealth Government Securities (CGS) or repurchase agreements (repos) in the short-term money market. These transactions are reflected in a fall in the banks' exchange settlement accounts, which subtracts from the total money supply or liquidity in the short-term money market. The decreased supply of loanable funds will put upward pressure on the cash rate. Banks will pass on the increased borrowing costs by increasing their interest rates, resulting in an increase in the general level of interest rates across the economy – for example, home loans, personal loans and commercial loans.

### Question 3

- (a)** An inflation target influences inflationary expectations and contributes to lower inflation in the long term. Lower inflation maintains the purchasing power of consumers, reduces uncertainty and has been successful in reducing the volatility of the business cycle, resulting in less cyclical unemployment. These factors contribute to maximising welfare in the economy.
- (b)** The independence of the Reserve Bank is important, as it reduces the role of political factors in its decision-making processes. The Reserve Bank is able to make interest rate decisions most appropriate for the level of economic growth in the economy and expected economic outlook. If the Reserve Bank were not independent of the government, it might need to follow decisions that are driven by political as well as economic factors, such as timing interest rate movements in accordance with political factors such as election timing or the preferences of particularly influential industry sectors.
- (c)** The role of the cash rate corridor is to help the Reserve Bank maintain the cash rate at its target level. The cash rate corridor works through the interest rate paid by the Reserve Bank. The Reserve Bank pays an interest rate to banks on their balances that is 0.25 percentage points below the cash rate target, and it lends to banks at an interest rate that is 0.25 percentage points above the cash rate. These two rates form the upper and lower bounds of the cash rate corridor. Banks have no incentive to trade with each other outside of this range because they could borrow or deposit exchange settlement balances with the RBA instead.
- (d)** Monetary policy operates through an increase or decrease of interest rates. These interest rates represent the opportunity costs of borrowing for consumers and businesses – when interest rates are low, consumers and businesses face a lower opportunity cost for spending. This results in greater expenditure in the economy and economic growth. On the other hand, high interest rates present a higher opportunity cost of investment – consumers and businesses may be better off reducing spending and gaining returns from interest, where these gains exceed the likely gains from alternative spending.

## Skills Revision Answers

	Reserve Bank decides to <i>increase</i> cash rate to 2.5%	Reserve Bank decides to <i>decrease</i> cash rate to 2%
Reserve Bank lending rate (ceiling of the cash rate target)	2.75%	2.25%
Reserve Bank deposit rate (floor of the cash rate target)	2.25%	1.75%
Illustrate the bounds of the cash rate corridor on the diagram		
Reserve Bank domestic market operations to maintain the cash rate target when the demand for exchange settlement (ES) funds increases	The Reserve Bank will buy financial securities, increasing the supply of ES funds in the short-term money market	
Reserve Bank domestic market operations to maintain the cash rate target when the supply of ES funds increases	The Reserve Bank will sell financial securities, decreasing the supply of ES funds in the short-term money market	
Impact of the change in the cash rate on borrowing by financial institutions	It becomes more expensive for financial institutions to borrow in the short-term money market	It becomes less expensive for financial institutions to borrow in the short-term money market
Impact on mortgage interest rates	Mortgage interest rates are likely to increase so that financial institutions can maintain their profit margins	Financial institutions are likely to pass on some or all of the decrease in interest rates. An institution that does not pass on the decrease may risk being less competitive than those that do.



## Transmission Mechanism

### For an increase in interest rates

Cost of borrowing capital **increases**

Interest repayments on existing loans **increase**

Exchange rate **increases**

Inflationary expectations **decrease**

Aggregate demand falls as higher interest rates decrease the amount of consumption and investment within the economy, while the higher exchange rates increase imports and reduce the amount of exports.

### For a decrease in interest rates

Cost of borrowing capital **decreases**

Interest repayments on existing loans **decrease**

Exchange rate **decreases**

Inflationary expectations **increase**

Aggregate demand rises as lower interest rates increase the amount of consumption and investment within the economy, while the lower exchange rates decrease imports and increase the amount of exports.

## Impacts of Monetary Policy

	Increased interest rates	Decreased interest rates
<b>Economic growth</b>	Decreased economic growth from less aggregate demand	Increased economic growth from higher aggregate demand
<b>Unemployment</b>	Less consumption and investment, greater unemployment	More consumption and investment, lower unemployment
<b>Inflation</b>	Less consumption as cost of money is higher, lower inflation	Greater consumption as cost of money is lower, higher inflation
<b>Consumer and business spending</b>	Higher cost of borrowing (opportunity cost), reducing consumer spending	Lower cost of borrowing (opportunity cost), increasing consumer spending
<b>Imports</b>	Appreciation of the Australian dollar reduces the cost of imports, increasing volumes	Depreciation of the Australian dollar increases the cost of imports, decreasing volumes
<b>International financial flows</b>	Greater interest rate differential in Australia increases financial inflows	Lower interest rate differential in Australia decreases financial inflows
<b>Distribution of income and wealth</b>	Borrowers face higher costs in servicing their debts, increasing inequality	Borrowers face lower costs in servicing their debts, decreasing inequality

# Microeconomic and Environmental Policies

# 16

## Multiple Choice

<b>1</b>	A*	<b>6</b>	D*	<b>11</b>	B	<b>16</b>	C
<b>2</b>	B	<b>7</b>	C	<b>12</b>	C	<b>17</b>	A*
<b>3</b>	B*	<b>8</b>	B*	<b>13</b>	B	<b>18</b>	B
<b>4</b>	D*	<b>9</b>	D	<b>14</b>	B*	<b>19</b>	B*
<b>5</b>	B*	<b>10</b>	B	<b>15</b>	D	<b>20</b>	C

\*Indicates that an enhanced answer has been provided in the section below.

## Enhanced Answers

- 1** A Microeconomic policies are policies that are aimed at individual industries, seeking to increase aggregate supply by improving the efficiency and productivity of producers.
- 3** B Dynamic efficiency refers to the economy's ability to shift resources between industries in response to changing patterns of consumer demand.
- 4** D Sale of these assets would improve the headline budget position.
- 5** B A reduction in protection would lead to structural change and resources flowing to more productive industries. This is an increase in allocative efficiency.
- 6** D Microeconomic reform leads to increases in aggregate supply. Increases in aggregate supply put downward pressure on prices.
- 8** B The concept of internalising an externality refers to policy changes which adjust the price mechanism so that it better reflects the true costs of production of a good or service. Of the four options listed, the one which involves market-based mechanisms and brings the negative externality within a price mechanism is a carbon price. A carbon price would apply broadly to activities that generate carbon emissions, so that the price mechanism better reflected the negative effects of carbon emissions. The price mechanism would therefore be used to change consumer and producer behaviour.
- 14** B The permit cost of \$28 is less than the \$30 cost to avoid emissions per tonne. If the business buys a permit for twenty thousand tonnes this will cost \$560,000, which is a significant figure, but a modest component of the \$3 million margin between the prevailing production cost and the market price for light rail carriages.
- 17** A The focus of supply-side economics is reducing business costs, which should have the effect of shifting the aggregate supply curve to the right – that is, more goods and services should be provided at lower prices.
- 19** B The major cost of microeconomic reform is increased structural unemployment, as changes in jobs, industries and sectors of the economy lead to short-term job loss as productivity improvements are sought.

## Short Answers

### Question 1

- (a)** Environmental management and microeconomic reforms usually have different objectives: the former is typically concerned with managing resources and minimising environmental degradation; the latter are directed towards promoting structural and increasing economic growth. However, some policies, such as reducing subsidies for fossil fuels, may both improve resource allocation and improve sustainability.
- (b)** Many environmental challenges are the result of global rather than national influences, and individual nations cannot address environmental issues in isolation; as such, collective action is needed because without collective action some countries might decide not to take any action because it wants to avoid the costs of changes to reduce pollution, overuse of natural resources or whatever other measure. International agreements, such as the Montreal Protocol 1989, Kyoto Protocol 2008 and the Copenhagen Accord 2009 are examples of international agreements to promote environmental sustainability. The Paris 2015 UN Climate Change Conference saw 174 countries sign a global agreement to reduce global warming.
- (c)** Market-based policies can help achieve environmental goals by restructuring the financial incentives and disincentives of businesses to internalise negative environmental externalities associated with some types of production. By levying a tax or fee on production, the private supply curve of businesses can be decreased to the level of the social supply curve, ensuring that the equilibrium price and quantity occur at their socially optimal levels. For example, the Australian government imposes a tax equal to 38 cents per litre on unleaded petrol. This should have the effect of internalising externalities because it makes consumers and producers pay for some of the environmental costs of using petrol (including greenhouse gas emissions, congestion and pollution). Between 2012 and 2014, Australia had a carbon tax which imposed a \$23 per tonne tax on each tonne emitted by the nation's 500 biggest polluters. This is an example of a policy that was designed to influence the price mechanism. Market mechanisms aim to foster innovation and better promote technical and allocative efficiency by providing a direct profit motive for companies to seek solutions by investing in new technologies. Regulations, on the other hand, require firms to comply with specific rules and may be less effective in fostering innovation and be more prone to mistakes. Market mechanisms may be easier to apply globally given the difficulties involved in coordinating regulations set by individual countries.

## Question 2

- (a)** Regulation describes the rules determined by governments and agencies that influence the operation of markets and the participants in markets.
- (b)** The role of regulation is to address market failure, where the price mechanism creates economic outcomes judged to be adverse to society or the economy. For example, regulation has a role in ensuring safety for workers in industries such as construction and transport and giving consumers rights in relation to items they purchase – for example around safety and accuracy. Environmental regulations affect the nature of industry operations in agriculture and mining.
- (c)** Deregulation involves the simplification or removal of rules and regulations that constrain the operation of market forces. Deregulation may take place because past regulations are regarded as no longer necessary, outdated, ineffective or because a government's priorities have changed. The goal of deregulation is to foster a more productive and competitive business environment, resulting in structural change across a number of industries. In Australia, there has been a shift towards deregulation since the 1980s.
- (d)** Deregulation can create the benefit of a more competitive business environment, which should result in higher productivity and gains for consumers through lower prices. One example of a cost of deregulation might come from streamlining planning rules, which could cause overdevelopment in environmentally sensitive areas.
- (e)** The telecommunications industry was deregulated in the 1990s, resulting in the entry of new market participants, increasing industry competition. Prior to deregulation, Telecom Australia was the monopoly provider of services to businesses and individuals, but since deregulation the telecommunications market has included a large number of specialised providers of goods and services. Deregulation has also opened up the industry to international competition, such as in mobile phones and long-distance calls. The increase in industry competition has reduced the market share of the monopoly provider, and competition has resulted in greater choice and variety for consumers and businesses.

## Question 3

- (a)** Corporatisation aims to encourage public trading enterprises to operate independently from the government, as if they were a private business enterprise. An example is Australia Post. Privatisation takes corporatisation further by selling-off public trading enterprises so they become private enterprises. An example is Telstra.
- (b)** Microeconomic policy is action taken by the government to improve the economic efficiency of firms and industries, to maximise productivity. Macroeconomic policy targets the level of economic activity in the economy. Microeconomic and macroeconomic policy complement each other in economic management because they play different roles and target different outcomes over the shorter and longer term. The government uses a combination of microeconomic and macroeconomic policies to achieve its economic objectives.
- (c)** In almost all instances of microeconomic reform, the benefits are only fully realised in the long term. Firstly, microeconomic reform increases the efficiency of the market mechanism and the acceleration of structural change, resulting in more efficient allocation of scarce economic resources. Secondly, microeconomic reform enhances international competitiveness and therefore improves the ability of the export sector to compete. Thirdly, microeconomic policies increase national productivity, boosting the economy's international competitiveness, leading to higher growth and living standards.
- (d)** Microeconomic reform can reduce inflationary pressures over time by increasing the level of competition and reducing tariffs on imported goods. Such reforms should reduce consumer prices in the short term and the long term, as a more competitive market structure results in slower price increases. This has occurred in Australia's passenger motor vehicle market during the past three decades as tariffs have largely been phased out. Micro reform can reduce inflationary pressures by encouraging increased productivity. For example, the introduction of a national system of occupational health and safety laws allows businesses to adopt consistent practices across the country, reducing the costs of complying with separate rules in every state and reducing the amount of time required for training staff in those different laws. This should flow into higher productivity and contribute to lower inflation.

## Skills Revision Answers

	Deregulation	Reforms to public trading enterprises (PTEs)
<b>Productivity</b>	Deregulation of an industry should increase competitive forces and increase productivity.	The goal of PTE reforms is generally to make a firm more efficient. By exposing a firm to greater competitive pressures, the productivity of the enterprise should increase.
<b>Economic growth</b>	Deregulation should improve allocative efficiency and result in structural change. Higher productivity is a key long-term driver of economic growth.	As PTEs become more efficient and market-oriented, they should be able to generate more output at a lower cost. These reforms should contribute to a higher level of economic growth and increased productivity.
<b>Employment</b>	Higher levels of economic growth and increased productivity should in the long-term lead to a net increase in employment in competitive industries.	Reforming PTEs often involves a reduction in its workforce. Overall a more efficient economy should produce more jobs elsewhere in the long run.
<b>Inflation</b>	Deregulation should allow businesses to be more efficient and in the long term, achieve lower prices. Removing certain price regulations (such as price ceilings) may however cause price increases in the short term. In some instances such as natural monopoly industries like energy distribution, poorly-designed deregulation may actually result in higher levels of inflation.	More efficient PTEs may offer services at lower prices, reducing inflationary pressures. However, privatising PTEs without sufficient regulatory oversight could create opportunities for excessive price rises.
<b>Distribution of income</b>	Deregulation tends to lead to more divergence in economic outcomes, which can add to inequality. As industries face greater competition, structural change is likely to occur. Workers in less competitive industries may face lower income levels than those in more competitive industries.	Reforming PTEs has often involved reductions in workforces, which contribute to greater inequality in the distribution of income. PTE reforms may also involve the removal of subsidies or lower pricing for specific types of customers (such as age pensioners), contributing further to inequality.

# Labour Market Policies

# 17

## Multiple Choice

<b>1</b>	A*	<b>6</b>	B	<b>11</b>	B	<b>16</b>	A*
<b>2</b>	D	<b>7</b>	B	<b>12</b>	C	<b>17</b>	D
<b>3</b>	C	<b>8</b>	A	<b>13</b>	B*	<b>18</b>	B
<b>4</b>	B	<b>9</b>	D	<b>14</b>	B*	<b>19</b>	A*
<b>5</b>	B	<b>10</b>	A	<b>15</b>	B*	<b>20</b>	C

\*Indicates that an enhanced answer has been provided in the section below.

## Enhanced Answers

- 1** A Enterprise bargaining refers to negotiations between employers and employees (or their representatives) about pay and work conditions at the level of the individual firm.
- 13** B Governments intervene in the labour market to achieve macroeconomic objectives such as low inflation. As wages have a major influence on inflation, a key objective of labour market policies is to sustain low inflation, by trading off wage increases against productivity improvements. The other answers are either not related to labour market policy or involve changes that go in the opposite direction of labour market policies in recent years.
- 14** B Cyclical unemployment is caused by downturns in the business cycle and thus labour market reform has little impact upon this type of unemployment.
- 15** B Conciliation is a dispute resolution process in which firms and employees meet to discuss their differences in front of a third party (such as an industrial tribunal) who attempts to bring the parties to an agreement. It does not involve a resolution being forced on the parties.
- 16** A A policy of allowing people working as seasonal employees in the agricultural sector to earn their first \$5000 tax-free is likely to attract people into the labour market who were not actively seeking work, therefore increasing the participation rate. This might include older people who were no longer looking for work, younger people who might be in full-time study (but decide to work during their holidays) and people attracted to come to Australia on holiday working visas.
- 19** A The national wage determination system covers around 7 out of 10 Australian workers, including private sector employees in all states (except Western Australia). Workers outside of the national wage determination system are those whose conditions are unregulated (independent contractors and other business operators) and those whose conditions are regulated by a state workplace relations system.

## Short Answers

### Question 1

- (a)** Awards are a set of pay and conditions that are specific to an employee's work or industry sector and that provide a safety net of minimum wages and working conditions.
- (b)** Flexibility clauses are now included in modern awards because they enable individual employees and employers to vary the effect of an award to meet their individual needs without having to negotiate a separate agreement. However, flexibility clauses can vary only certain specific award terms, such as overtime rates and leave loading. Flexibility clauses are not permitted to reduce an employee's conditions of employment.
- (c)** As a minimum, all enterprise agreements must comply with the 10 National Employment Standards. Further, they must comply with the relevant award or awards for the employees covered by the agreement. They cannot offer pay rates below those set out in the equivalent award. If the enterprise agreement varies provisions within the award, it must pass the 'Better Off Overall Test', which requires that the employees be made better off overall by the agreement compared to the applicable award.
- (d)** There are several advantages of a decentralised wage system. As wage outcomes are determined at an enterprise or workplace level, there is greater flexibility to set wages that reflect the market forces of supply and demand for particular skills. Workers who have the skills required by businesses will be in greater demand and can be better compensated for their skills. This can lead to a more efficient allocation of resources, with workers moving to the jobs and industries that are the most efficient and can offer them the highest wages. This can lead to structural change and increased economic efficiency. Greater flexibility to set wages also helps during an economic downturn, with the ability to help the labour market adjust by reducing wages but retaining jobs, potentially reducing unemployment. A decentralised system can also promote productivity, if workers are directly rewarded for improving their productivity.

### Question 2

- (a)** A centralised wage system is more equitable than a decentralised system. When wages are set centrally, workers doing similar jobs are less likely to experience differences in pay or working conditions across industries. Further, wages set in a centralised system are less likely to be subject to differences in bargaining power between employers and employees, and this can be of particular benefit to lower-skilled workers who have less bargaining power and are therefore less able to demand pay increases.
- (b)** There has been a decline in the number of employees covered by awards over the past 30 years. This has mainly been the result of a move to a less centralised wage-fixing system. As wages have increasingly been set through negotiations between employers and employees, a much higher proportion of employees have had their wages set through enterprise bargaining. The Fair Work Act introduced a right for employees to engage in enterprise bargaining with employers, so that even those employees still covered by awards are able to seek an enterprise agreement, with the award system now operating only as a safety net for employees who are unable to obtain an enterprise agreement.
- (c)** Governments intervene in the labour market for several reasons: first, to achieve macroeconomic objectives such as low inflation and macroeconomic stability; second, to ensure minimum standards and especially to protect more vulnerable workers from exploitation, overwork, unsafe work environments and non-payment; third, to improve income inequality more generally; fourth, to limit the disruptive impact of widespread industrial action; and fifth, to encourage productivity growth. The cost of labour generally represents around 60 per cent of business costs, so policy changes influencing labour costs are a major influence.
- (d)** Awards establish the minimum wage and working conditions for employees. Their main role is to provide a safety net of minimum wages and conditions. Modern awards extend the protection of the National Employment Standards, with provisions tailored to the needs of the specific industry or occupation. They also must include a flexibility clause that enables an individual employee or employer to vary the effect of an award to meet their individual needs without negotiating a separate agreement. An enterprise agreement is negotiated collectively between an employer and employees, usually represented by unions.

### Question 3

- (a)** Industrial disputes can result in reduced productivity, lower output, lower profits, and interruptions to supply chains that can have an effect on the economy that go well beyond a single firm. In this way, industrial disputes can be damaging to the economy when they remain unresolved. An increased level of industrial disputes can also affect business and consumer confidence, as well as international confidence in the reliability of supply from firms in an economy.
- (b)** An increase in the minimum wage is positive for low-paid workers because it can increase their incomes and therefore improve their living standards. On the other hand, an increase in the minimum wage can increase labour costs for employers, discouraging them from hiring additional workers, and it could therefore result in slower growth in employment.
- (c)** Education and training policies can influence the labour market by increasing workforce participation, for example, by giving individuals who have been out of the workforce the skills necessary for them to be able to find work. Education and training policies can also improve worker productivity or prepare workers for future changes in the labour market through upskilling or training in newer or more efficient production processes.
- (d)** Arbitration involves a third party intervening to resolve a dispute between an employer and an employee (or employees). The parties to a dispute often turn to arbitration when efforts at conciliation (resolving their differences directly with each other) have not been fruitful. Arbitration, unlike conciliation, allows the industrial tribunal to make a ruling to resolve the dispute that is legally binding on the parties.
- (e)** Childcare subsidies can increase workforce participation by making it easier for parents to stay in paid employment while caring for children. Policies can also directly target workforce participation among certain parts of the population, such as providing employability skills training for jobseekers under 25, or providing digital skills for older people, in both cases preparing them for participation in the labour market.



# Effectiveness and Limitations of Economic Policy

# 18

## Multiple Choice

<b>1</b>	D	<b>6</b>	C	<b>11</b>	D	<b>16</b>	C
<b>2</b>	C	<b>7</b>	A	<b>12</b>	C	<b>17</b>	D
<b>3</b>	C	<b>8</b>	B	<b>13</b>	B*	<b>18</b>	A*
<b>4</b>	B	<b>9</b>	A	<b>14</b>	D*	<b>19</b>	B*
<b>5</b>	D	<b>10</b>	A	<b>15</b>	B	<b>20</b>	C

\*Indicates that an enhanced answer has been provided in the section below.

## Enhanced Answers

- 13** B Microeconomic policies are focused on structural issues; macroeconomic policies target cyclical factors in the economy. As such, microeconomic policy is least likely to address cyclical unemployment in the economy.
- 14** D Economic growth has consistently fallen over the five years, from 3.5 per cent in Year 1 to 2.5 per cent in Year 5. This would indicate contractionary macroeconomic policy, such as contractionary monetary policy. Inflation has consistently risen over the five-year period, from 2.2 per cent in Year 1 to 2.9 per cent in Year 5. This rise in inflation given the contractionary monetary policy would indicate a rise in tariffs, which increases the prices Australians pay for imports. Further, with a centralised system of wage determination, it is more likely that an increase in inflation would flow automatically into increased wages and therefore labour costs, resulting in a further increase in inflation in the following year.
- 18** A Inflation and unemployment are generally regarded as conflicting policy goals. An increase in interest rates to reduce inflationary pressures is likely to reduce economic activity and increase cyclical unemployment.
- 19** B Monetary policy has a short-term implementation time lag because a decision made by the Reserve Bank can be implemented immediately, and the Reserve Bank also meets on a monthly basis (and can authorise the RBA governor to act between meetings if required). The time lag for its impact on the economy, in contrast with its implementation time lag, is 6 to 18 months.

## Short Answers

### Question 1

- (a)** The international business cycle results in the growth patterns of different economies becoming more synchronised (that is, more similar to each other). This means that the economy is more influenced by economic events that take place overseas or in global financial markets. These effects influence the level of economic growth through their immediate influences on financial markets (and settings such as interest rates) and indirectly through their influence on exchange rates, the terms of trade, demand for exports and the conduct of overseas investors.

- (b)** Governments are constrained by several political factors that they must take into account in the conduct of economic policy. Australia's parliamentary system of government requires major changes in policy to be voted on in the parliament, and this requires the government to win a majority of votes in both the House of Representatives and the Senate. In order to have their MPs and Senators elected (and to persuade others to support their policy proposals) governments need to convince the public of their economic policy solutions. Australians are increasingly voting for smaller political parties and independent candidates, which means that governments must undertake negotiations to pass legislation (especially in the Senate). In some areas of policy, federal governments must also obtain the agreement of state and territory governments (because of the powers that the states are given under the Australian Constitution). Sometimes, policy changes are also opposed by special interest groups who run campaigns that aim to change government policy decisions.
- (c)** Fiscal and monetary policy are both demand-management policies that can be used to stimulate the economy during a downturn. Fiscal policy is considered the more effective policy in addressing an economic downturn because of its short impact time lag, which means that it can be more effective in quickly increasing aggregate demand. For example, an increase in government spending or economic stimulus can provide an immediate boost to economic conditions. On the other hand, despite the ability of monetary policy to be implemented relatively quickly (either at a monthly meeting of the Reserve Bank or more frequently if the need arises), there is an impact time-lag of around 6 to 18 months for monetary policy changes to have an impact on consumer and business borrowings and savings.

## Question 2

- (a)** Authorities or agencies such as the Reserve Bank of Australia or the Australian Competition and Consumer Commission operate independently of the government. This means that their decision making is much less influenced by political constraints, which can result in distortions in economic management. For example, if the government was directly responsible for interest rates it would be unlikely to raise them during an election year (because that would be unpopular in the short term), even if an increase was necessary to achieve Australia's economic objectives. Governments delegate authority for some decisions to independent government agencies, in part because this allows them to focus on economic rather than political factors in policymaking.
- (b)** Historically, economists have generally accepted that there is a trade-off between faster economic growth and reducing inequality in the distribution of income and wealth. It has been assumed that policies to redistribute income (such as higher taxes on companies and high-income earners) will result in slower economic growth. However, the OECD and IMF have recently championed the push for inclusive growth, based on evidence that increased inequality has contributed to lower rates of economic growth in recent years. As a result, the relationship between these objectives is now seen as being more complex than in the past.
- (c)** Microeconomic reforms aim to increase the efficiency of firms and industries by encouraging increased competition and structural change across the economy. The reallocation of resources away from inefficient firms towards the most efficient areas of the economy should boost productivity growth. Australia's period of strongest productivity growth, in the 1990s, has generally been attributed to the extensive microeconomic reforms undertaken during that decade.
- (d)** Microeconomic reform plays a key role in achieving many of the government's longer-term objectives. Micro reform is able to achieve these objectives by increasing productivity and competitiveness. Micro reform has allowed the economy to grow at faster rates while containing inflation (such as during the mining boom). However, there are limits to its effectiveness. It has much longer time lags, both in its implementation and impact, than macroeconomic policies. It often involves significant economic costs in the short term, including higher levels of structural unemployment, negative budget effects and an increase in inequality in the distribution of income. Not all micro reforms are effective in delivering on their goals, and sometimes they can have counterproductive effects (for example, where privatisation results in privately owned monopolies that use their market power to increase prices). Overall, however, economists believe that micro reform has helped to reduce inflationary pressures, has improved productivity and has facilitated Australia's longest-ever period of unbroken economic growth.

### Question 3

- (a)** An implementation time lag refers to the time taken to implement a change in economic policy after a government has decided to change that policy. An impact time lag refers to the time between the government implementing the policy and its full effect on the economy.
- (b)** There is a medium-term time lag in the implementation of fiscal policy. Major changes to fiscal policy generally occur only annually with the Budget. The implementation of fiscal policy involves several stages, including Budget committee meetings, scrutiny of the proposed policy by several government departments before being approved, and legislation being passed through Parliament.
- (c)** Australia's macroeconomic policies have generally been successful in recent years. During the global financial crisis, expansionary fiscal policy and monetary policy were used to stimulate economic growth and ensure the economy avoided the worst impacts of the global financial crisis. During the 2010s, macroeconomic policy shifted to being slightly contractionary overall, with slightly higher interest rates and reductions in the budget deficit. During that period, economic growth was below average, but arguably that was because of other factors such as weaker conditions in commodity markets and persistently low wages growth. During COVID-19, monetary policy and fiscal policy were again deployed to stave off an economic disaster and while employment fell by some 1 million people by mid-2020, the impacts were lower than in the absence of policy actions.
- (d)** In a world of open international financial markets, the conduct of domestic monetary policy is strongly influenced by global economic conditions. Mostly these factors have an indirect effect on monetary policy by influencing the expected rate of inflation in Australia and the level of economic growth. If economic conditions are weakening for Australia's major trading partners because this is likely to lower growth and inflation in Australia, the Reserve Bank will be more likely to reduce interest rates. Shocks to the global economy can result in immediate policy changes by the Reserve Bank, as occurred in March 2020 with the COVID-19 global pandemic, when the RBA reduced interest rates twice in one month, lowering the cash rate from 0.75 to 0.25 per cent. Overall, interest rates in Australia have trended in a similar direction to those of major economies, although Australia has generally had above-average interest rates until recent years (in part due to Australia's reliance on large-scale financial flows to fill its savings/investment gap). An example of how global influences may affect monetary policy in some shorter-term circumstances is if the Australian dollar is coming under strong pressure from global markets, the Reserve Bank may act, either through adjusting interest rates or intervening in the foreign exchange market to buy or sell Australian dollars.

# Practice Economics

## Extension Examination

### Multiple Choice

1	B	6	D	11	A	16	B
2	C	7	D	12	A	17	D
3	C	8	A	13	C	18	B
4	B	9	C	14	B	19	C
5	C	10	B	15	B	20	D

### Short Answers

#### Question 21

- (a) Domestic and international business cycles impact the current account deficit through trade values and volumes, financial flows and through changes in income payments. Upturns in the domestic business cycle are likely to result in increased spending on imports by consumers and businesses, worsening the balance on goods and services and adding to the current account deficit. An upturn in the global economy, on the other hand, will increase overseas demand for exports, improving the balance on goods and services and reducing the current account deficit. An upturn in the domestic business cycle may result in higher profits and therefore a greater outflow of dividends on the net primary income account (given the high level of foreign ownership of Australian industries), while an upturn in the global business cycle may raise interest rates on foreign debt held in overseas currencies.
- (b) A major structural factor contributing to Australia's current account outcomes is a narrow export base. Australia's exports are heavily weighted towards commodities such as iron ore, LNG and coal, resulting in volatility in the exchange rate and the current account deficit in response to commodity price movements. A second structural factor is Australia's high level of foreign liabilities, with net foreign debt exceeding \$1 trillion and high levels of foreign ownership. This creates a large ongoing deficit on the primary income account.
- (c) A current account deficit (CAD) must be offset by a capital and financial account surplus in an economy with a floating exchange rate. Therefore, a high CAD can increase the level of foreign liabilities, as Australia needs to borrow or attract foreign investment on the capital and financial account. Over time, a higher level of foreign liabilities will contribute to increased servicing costs that can further increase the net primary income deficit (whether through interest rates on debt or returns on foreign equity investment in Australia, in the form of profits, rent or dividends). A high CAD may be perceived as a risk by foreign investors and may contribute to a loss of confidence, causing volatility or a depreciation of the exchange rate. A high CAD can also require a government to take policy action if it is undermining confidence in the economy, and this might lead to lower rates of economic growth to reduce spending on imports.

### Question 22

- (a) Two government objectives are price stability and full employment (that is, lower inflation and lower unemployment). Price stability is important for maintaining the purchasing power of consumers and giving businesses confidence to invest. The RBA has a 2–3 per cent inflation target. Employment is important so that people have jobs to provide incomes. Higher levels of employment and workforce participation contribute to a higher level of economic growth and prosperity.
- (b) Some economic objectives are in conflict. For example, a government may decide to weaken environmental protections such as bans on mining exploration in national parks, because it wants to accelerate economic growth and generate new jobs. This is an example of a government choosing to prioritise economic growth over environmental protection, two policy objectives that are sometimes in conflict. Achieving a higher level of economic growth and creating jobs in the shorter term may require the government to lower interest rates and impose weaker environmental regulations. These policies may result in higher price rises, causing inflation or over-development in environmentally sensitive areas.
- (c) A downturn in the global economy would lead to reduced demand for Australian exports and probably lower prices for commodity exports as well, contributing to a deterioration in the balance of goods and services on the current account. If this contributes to an increased current account deficit, that must be financed by a capital and financial account surplus; this will cause Australia's net foreign liabilities to rise over time. A downturn in the global economy can cause the exchange rate to depreciate quickly, as occurred in 2008 and 2020, which will then affect the trade balance, the primary income account and financial flows – potentially undermining external stability.
- (d) Microeconomic reform is long-term activities to increase the efficiency of the economy and lift aggregate supply. One objective that is suitable for microeconomic reform is productivity – policies such as tariff reductions increase competitive pressures in markets and encourage businesses to be more productive. Another objective is reducing structural unemployment – which involves policies such as labour market reforms and targeted employment policies. Thirdly, the objective of international competitiveness is best achieved through microeconomic reforms such as infrastructure policies that can lower the cost of doing business for exporting and import-competing businesses.

### Question 23

- (a) Foreign direct investment refers to financial flows between economies for the purpose of establishing a new company or buying a substantial proportion of shares in an existing company (10 per cent or more). FDI is generally considered to be a long-term investment, and investors often play an active role in the management of the business.
- (b) Trade flows strengthen the influence of regional business cycles by increasing the transmission of regional growth between different countries in the same economic region, such as countries that are part of regionally integrated production chains. Stronger growth in one economy will lead to increased demand for exports from another economy, boosting growth in the second economy. Investment flows within regions also mean that stronger economic conditions in one economy make it more likely that businesses in that economy will invest in new operations elsewhere in that region, boosting growth in the neighbouring country.
- (c) One role of the World Trade Organisation (WTO) in the global economy is to promote global free trade by providing a forum for negotiating trade liberalisation in order to foster increased trade. A second role of the WO is to resolve trade disputes in order to foster increased trade, such as when a WTO member believes that the government of another country is providing subsidies to exporters in breach of WTO rules.

- (d)** In recent decades China has become Australia's largest trading partner, reflecting its rapid growth in the global economy and its need to import resources such as iron ore and coal. China has benefited from globalisation by engaging in a trade liberalisation program that has resulted in reduced trade protection and greater openness to foreign investment. China has also participated in the World Trade Organisation, as well as regional forums and bilateral agreements such as the China-Australia Free Trade Agreement. China has been effective in using trade to transfer technology knowledge and skills into China, including through joint ventures and investing in overseas technology firms. The Chinese government has fostered the development of large-scale manufacturing through the creation of Special Economic Zones, which has supported export-led development and boosted trade growth. These policies have put China on track to becoming the world's largest economy in coming years. The industrialisation process, urbanisation and rising per capita incomes have also seen rising imports into China.

#### Question 24

- (a)** Okun's Law explains the relationship between unemployment and economic growth. It shows that to reduce unemployment, the annual rate of economic growth must exceed the percentage sum of the growth in productivity plus the increase in the size of the labour force in any one year.
- (b)** The Fair Work Commission, an agency of the Commonwealth Government, can directly increase wages through its annual National Minimum Wage review. This also has flow-on implications for employees on award wages. Secondly, the government could relax some of its restrictions on the ability of unions to engage in industrial action, such as allowing for industry-wide industrial action to achieve higher wages.
- (c)** Structural changes in the economy refer to changes in businesses, industries and the labour market with the goal of creating a more productive and competitive economy. An example of a structural change has been the growth of the sharing economy, such as ridesharing and homesharing. One cost is that such services may see workers in these industries receive lower incomes than similar workers in the industries that they are replacing, because they have less protections and weaker bargaining power since they are legally treated as contractors rather than employees. One benefit is that these services can offer greater convenience and choice to consumers, often at lower prices than those of traditional taxi and hotel businesses.
- (d)** A decentralised system of wage determination will result in increased wage dispersion, that is, greater differences between wages for employees in different jobs and industries. This can promote productivity growth by linking wage rises to productivity improvements. It can help ensure that nominal wage growth does not force businesses to increase prices, since they receive greater output from higher labour productivity. It can help allow workers to enjoy moderate real-wage growth while balancing that goal with the objective of low inflation. A decentralised system also improves allocative efficiency by allowing more efficient and profitable firms to offer higher wages and attract higher skilled employees. Another advantage is that decentralisation creates greater wage flexibility that prevents a high growth in one sector of the economy (for example, during the mining boom) from spilling over into higher wages across the whole economy. On the other hand, decentralised wage determination can result in greater inequality in the distribution of income, as employees with greater bargaining power are better able to achieve wage increases while the incomes of those with the least bargaining power will grow more slowly.

# Practice Year 12

## Economics Examination

### Multiple Choice

1	C	6	C	11	B	16	C
2	B	7	A	12	B	17	C
3	B	8	A	13	B	18	C
4	B	9	C	14	D	19	A
5	D	10	C	15	A	20	D

### Short Answers

#### Question 21

- (a) A key advantage of a floating exchange rate is that currencies are valued at market prices determined by the price mechanism so they can adjust in response to changing international economic conditions. A disadvantage of a floating exchange rate is that it can lead to greater volatility in the short term, which can reduce business confidence and therefore result in lower levels of investment.
- (b) The Trade Weighted Index measures the value of the Australian dollar against a basket of currencies so is less volatile and better measures the dollar's true value than a single exchange rate (it is also much less affected by the changes in a single economy, whereas the exchange rate between the Australian and US dollars is as much affected by factors specific to the US as it is affected by factors specific to Australia). However, the TWI is weighted according to volumes of trade rather than the currencies that are actually used in international transactions. This means some currencies, particularly the US dollar, carry less weight in the measurement than their true importance, since Australia often sells commodities to other countries priced in US\$ terms.
- (c) Although Australia has a floating exchange rate, the RBA may sometimes play a role in influencing the value of the Australian dollar. It can do this through 'dirtying' the float or through monetary policy intervention. When the RBA intervenes in foreign exchange markets and buys or sells Australian dollars, it is said to 'dirty' the float. The RBA may be forced to take this action to curb a rapid appreciation or depreciation, in the interest of stability in the Australian economy. The RBA can also indirectly influence the exchange rate through monetary policy decisions. Rapid depreciations can be curbed by raising interest rates, which increases demand for Australian dollars (and vice versa). However, it is rare for the RBA to do this, since the main focus of monetary policy decisions is to keep inflation within the target range.
- (d) A sustained depreciation of the Australian dollar has several effects. It lowers the purchasing power of Australian consumers, lowering real living standards. Over time, a lower exchange rate will improve Australia's international competitiveness, leading to increase in exports and higher economic growth. A lower exchange rate will have mixed impacts on the balance of payments. While it will become more expensive to service foreign debt in Australian dollar terms, increasing primary income debits, it is likely to increase exports and reduce imports, contributing to an improvement in the trade balance. Earnings on Australian investments overseas will also increase in Australian dollar terms.

**Question 22**

- (a)** Developing economies tend to have low material living standards, low economic development, high levels of absolute poverty and in some more extreme cases may rely on foreign aid and assistance.
- (b)** Economic growth – an increase in GDP – can lead to improvements in economic development – a broader quality-of-life measure. This is because rising incomes allow people to access improved health and educational opportunities, while also allowing the government (through higher taxation revenue) to provide health, education and other services to more people and at a higher level of quality. However, in some instances economic growth may not contribute to economic development such as when it contributes to environmental degradation or high levels of income inequality.
- (c)** A range of global and domestic factors contribute to income inequality between nations: (Answers may include reference to any three of the following)
- The structure of global trade rules favours advanced economies. The high level of agricultural protection in advanced economies reduces the export opportunities for farmers in developing economies. For example, economies in Sub-Saharan Africa have limited access to export markets in advanced economies. Agricultural protection may also reduce the incomes of the world's poorest farmers by reducing prices on global markets.
  - Foreign direct investment inflows tend to be concentrated in advanced economies and a small number of emerging economies in East Asia – making it difficult for poorer countries to expand economic growth.
  - Weak controls over illicit financial flows allow very large amounts of money to be stored in offshore tax havens, and large amounts of money from poor and rich countries alike are kept in those locations under rules that give protection to wealth owners. This undermines the capacity of governments to provide services to their local population.
  - Many countries have limited factors of production such as natural resources, capital or skilled labour, which allows an economy to generate income and economic growth.
  - Some developing countries lack stable economic and political institutions (for example, due to high levels of corruption), discouraging investors from taking risks in those countries.
- (d)** Trade liberalisation through the World Trade Organisation (WTO) has provided developing economies with improved access to overseas export markets and increased incomes. Progress in liberalising manufacturing trade has driven rapid economic growth that has reduced extreme poverty in China from 61 per cent to 1.7 per cent of the population between 1990 and 2018 (according to the World Bank). Another multilateral institution that improves economic development is the World Bank, which provides development assistance to emerging and developing economies to build infrastructure such as roads, ports and airports to help businesses grow. A third strategy is to strengthen political and economic institutions to reduce corruption and encourage investment, such as through adopting international standards of transparency, accountability and improved governance.



**Question 23**

- (a)** An externality refers to an unintended cost or benefit of economic activity that is not reflected in the price mechanism. An example is carbon dioxide pollution arising from power generation.
- (b)** Economic growth can have a detrimental impact on the natural environment through pollution and overusing resources. For example, poor agricultural practices can result in damage to soil quality (or desertification). Waste from manufacturing and mining can cause pollution. Overuse of resources such as logging forests may deplete resources for future use. In the long term, damage to environmental assets may constrain economic growth as subsequent environment issues may need to be addressed at great cost. On the other hand, ecologically sustainable development can drive innovation and environmentally friendly means of attaining economic growth – for example, through the growth of the renewable energy sector.
- (c)** The government can improve environmental sustainability through several instruments of economic policy. The government can impose regulations on certain economic activities in order to reduce pollution. For example, the government bans the use of leaded petrol. The government can also commit to environmental targets. Australia has an aim of reducing carbon emissions by 26 to 28 per cent by 2030. Market-based policies can also be used to internalise the externalities associated with production – the carbon tax was aimed at discouraging carbon emissions through factoring the costs of emissions pollution into the decisions of businesses and households. At the international level, the government can also participate in global agreements such as Paris Agreement, a United Nations framework for reducing carbon emissions to avoid the temperature increases and other impacts of climate change.

**Question 24**

- (a)** The diagram shows a rise in price caused by an increase in aggregate demand, so this represents demand-pull inflation. This may be caused by a reduction in interest rates, which encourages increased consumption by households.
- (b)** Both the headline and underlying inflation rates are calculated through measuring the change in price of a basket of goods on the Consumer Price Index. These goods and services are weighted according to their importance to the average Australian household. However, while the headline inflation rate reflects the price movements in the index from one period to the next, underlying inflation comes from the RBA using the trimmed mean and weighted median measurements to remove volatile price shifts and giving a more accurate estimate of ongoing price pressures.
- (c)** Sustained low inflation contributes to economic growth through removing distortions in the future value of money, creating a greater sense of business certainty that should encourage investment while also providing for greater stability in monetary policy, since fewer changes in interest rates will be required if inflation remains within its target range. Low inflation should also improve Australia's international competitiveness and overseas demand for Australian exports, leading to an improvement in the trade balance as well as higher domestic output. Additionally, all things being equal, low inflation should not lead to further inequality as low-income earners whose wages often rise slowly, do not lose their purchasing power as quickly. Low-income earners also have reduced borrowing costs on outstanding loans as low inflation typically correlates with lower interest rates. Finally, low inflation also makes Australia's exchange rate less vulnerable to excessive volatility.
- (d)** Monetary policy involves actions by the Reserve Bank of Australia to influence the interest rates and, in so doing, influence the level of economic activity and inflation. Monetary policy is guided by an inflation target of 2–3 per cent, which itself influences consumer, employee and business expectations of overall price increases. The Reserve Bank achieves its target for the cash rate through open market operations: paying an interest rate 0.25 percentage points below the cash rate on exchange settlement balances and lending funds at 0.25 percentage points above the cash rate target (these upper and lower bounds are called the rate corridor). Changes in the level of interest rates flow through to the level of economic activity – for example, an increase in interest rates is likely to result in a lower level of consumption and business investment, and therefore reduced economic activity and an easing of inflationary pressures.

# Economics Practice

## Half-Yearly Examination

### Multiple Choice

<b>1</b>	C	<b>6</b>	A	<b>11</b>	C	<b>16</b>	C
<b>2</b>	A	<b>7</b>	C	<b>12</b>	D	<b>17</b>	D
<b>3</b>	C	<b>8</b>	A	<b>13</b>	C	<b>18</b>	D
<b>4</b>	D	<b>9</b>	C	<b>14</b>	B	<b>19</b>	D
<b>5</b>	C	<b>10</b>	B	<b>15</b>	C	<b>20</b>	C

### Short Answers

#### Question 21

- (a)** When the Australian business provides a loan to an overseas company, the value of the loan (outflow) is recorded as a debit on the financial account. The servicing costs (in this case paying interest on the loan) are recorded as a primary income credit on the current account.
- (b)** One structural factor for Australia's ongoing net primary income defect is the savings and investment gap. Australia has low national savings, while at the same time its export industries require high levels of capital investment. Because Australia cannot finance this investment through domestic savings, Australia relies on international borrowings or selling ownership of Australian assets to fund this investment. This increases Australia's total foreign liabilities; therefore, servicing cost obligations increase, and the deficit on the net primary income account and current account deficit (CAD) widen.
- (c)** A high current account deficit can have short- and long-term impacts. A high CAD will increase the level of foreign liabilities over time, as Australia faces higher servicing costs from greater levels of foreign debt and equity. Servicing costs may also increase because a high CAD may be seen as a risk by foreign lenders, so they may demand a higher risk premium (interest rates). The perceived risk by overseas investors can also increase volatility in the exchange rate, as investors may lose confidence and pull out from Australia, causing a depreciation. Long-term economic growth may be undermined, as a high CAD means that a higher share of national income must be allocated to financing foreign liabilities. A high CAD may also prompt governments to implement contractionary macroeconomic policy in the short term to encourage savings in the domestic economy, though this has further negative implications for economic growth. On the other hand, a high CAD can also support increased levels of productive investment in the economy. This may allow Australia to grow at a faster rate than if it was able to access its domestic pool of savings only to fund economic growth.

### Question 22

- (a)** Developing economies are characterised by low income levels, lower education and health outcomes, and lower levels of industrial development. Examples include Uganda and Zimbabwe, which have relatively high levels of absolute poverty. In contrast, emerging economies are in the process of industrialisation or modernisation and are experiencing sustained high levels of economic growth. Indonesia is an example of an emerging economy.
- (b)** An external shock to the global economy, such as a global pandemic, is likely to reduce the process of globalisation. This can be seen in the events following the outbreak of the COVID-19 pandemic in 2020. Measures to control the spread of the pandemic resulted in the closure of national borders and restrictions on the movements of people between countries, resulting in reduced migration for work purposes, a sharp decline in tourism, and a sharp contraction in economic activity. Trade is likely to fall as national governments impose trade barriers in an attempt to secure domestic supplies of medicines and essential equipment, possibly including subsidies and restrictions on exports. Lower levels of economic growth will also contribute to a decline in trade and investment flows between countries.
- (c)** China is an example of an emerging economy that has experienced the benefits of increased trade, investment, financial, technology and labour flows during the globalisation era. Since the 1980s China has undergone a transition from being a centrally planned economy to becoming a more market-driven economy, though still with high levels of state ownership. China has engaged in a trade liberalisation program that has seen reduced trade protection as well as its participation in global trade agreements such as the World Trade Organisation. The Chinese government has fostered the development of large-scale manufacturing and export-led development through the creation of Special Economic Zones. The government has reduced barriers to foreign direct investment inflows and relaxed restrictions on transnational corporations operating in China (although it still retains a high level of ownership of many state-run enterprises and assets). Furthermore, the 13th Five-Year Plan that ended in 2020 supported an acceleration of globalisation through greater support for innovation, abandoning old heavy industry and strengthening information-intensive infrastructure.

### Question 23

- (a)** With the imposition of the tariff, domestic producers supply a greater quantity of the good. As a result, imports decrease from 40,000 units (50,000 – 10,000) to 20,000 units (40,000 – 20,000), after the tariff is imposed.
- (b)** Producer revenue before tariff = 10,000 × \$40  
= \$400,000
- Producer revenue after tariff = 20,000 × \$44  
= \$880,000
- Change in producer revenue = \$880,000 – \$400,000  
= \$480,000
- (c)** An increase in global protection reduces Australia's access to overseas markets and leads to lower export earnings. As a result, Australian exporters are made less internationally competitive, reducing their income and therefore reducing the value of Australian exports and increasing the size of the current account deficit. This will also reduce the level of economic growth in Australia. For example, subsidies and tariffs in the United States give American sugar producers an artificial advantage over Australian sugar producers in the domestic US market, thus reducing Australia's sugar exports.

- (d)** Bilateral and multilateral (or regional) trade agreements have reduced protectionist barriers between member countries and have increased trade flows. However, regional trading blocs that are closed or discriminatory mean that non-member countries still face barriers to market access. For example, the European Union's Common External Tariff and the Common Agricultural Policy restrict non-member countries from accessing European markets. Some economists argue that regional and bilateral trade agreements are an important 'stepping stone' to global free trade, because they demonstrate the benefits of trade liberalisation for countries on a smaller scale. However, critics argue that discriminatory trade agreements only divide the global economy into independent trading regions, excluding many of the world's poorest countries from trading opportunities.

#### Question 24

- (a)** One benefit of a floating exchange rate system is that the value of the currency is determined by market forces that quickly respond to changes in supply and demand to always have an accurate value. One disadvantage of a floating exchange rate system is that currency movements may experience greater volatility due to speculative activity, which can deter longer-term investment.
- (b)** When the terms of trade increases this means that export prices are rising faster than import prices. As such, foreign purchasers who wish to buy Australian exports need to buy more Australian dollars, increasing the demand for the Australian dollar and leading to an appreciation. The opposite occurs when the terms of trade decreases, resulting in a depreciation.
- (c)** The Reserve Bank of Australia (RBA) might influence the value of the Australian dollar by dirtying the float. This involves the RBA entering the market as a buyer or seller using its foreign or domestic currency reserves, with the goal of stabilising the dollar in the short term. For example, to curb a rapid depreciation, the RBA, by selling foreign currency reserves and buying Australian dollars, could create demand that puts upward pressure on the exchange rate.
- (d)** An appreciation of the dollar can have several effects on the economy. A higher dollar value may cause import spending to rise as consumers and businesses enjoy increased purchasing power whereby a greater volume of overseas goods can be bought with the same quantity of Australian dollars. Coupled with a drop in Australia's international competitiveness as Australia's exports become relatively more expensive for overseas buyers, the trade balance is likely to worsen, leading to a deterioration in the current account deficit (CAD). Another effect of an exchange rate appreciation might be a decrease in interest servicing costs on Australia's foreign debt because the cost of buying foreign currency (to make interest payments on the debt) would fall. This would reduce outflow on the net primary income component of the current account and reduce the CAD.