

# VCE ECONOMICS 3/4 CPAP Practice examination D 2023

[Note: This exam is a revised and updated version of the CPAP Practice Exam No. 2 2022. It is consistent with the new 2023 Study Design]

# SUGGESTED RESPONSES, MARKING SCHEME AND ADVICE

# **Answers to MC questions**

1	Α	В	С	D
2	Α	В	C	D
3	Α	В	C	D
4	Α	В	С	D
5	Α	В	С	D
6	Α	В	С	D
7	Α	В	C	D
8	Α	В	С	D
9	Α	В	C	D
10	Α	В	С	D
11	Α	В	С	D
12	Α	В	С	D
13	Α	В	C	D
14	Α	В	С	D
15	Α	В	С	D

#### **SECTION A**

#### Question 1

Material living standards are likely to rise and non-material living standards are likely to fall if:

- A. life expectancy falls and crime rates increase
- B. real GDP per person increases and literacy rates rise
- C. access to goods and services rises and pollution increases
- D. mental health improves and there is a decrease in the rate of depletion of natural resources

The Study Design requires students to demonstrate an understanding of the difference between material and non-material living standards, as well as the factors that may influence living standards including, access to goods and services, environmental quality, physical and mental health, life expectancy, crime rates and literacy rates. **Option C** is the best response because any increase in the access to goods and services will help to boost material living standards, while a rise in pollution will reduce non-material living standards. Option A is incorrect because a fall in life expectancy will reduce non-material living standards rather than improve material living standards. Option B is incorrect because a rise in literacy rates will improve non-material living standards. Option D is incorrect because an improvement in mental health improves non-material living standards - despite the potential for material living standards to improve as a consequence - which makes option D more ambiguous compared to option C.

#### Question 2

Which of the following types of government intervention is best suited to addressing a market failure in the form of asymmetric information?

- A. Indirect taxation
- B. Government regulations
- C. Government subsidies
- D. Direct taxation

The Study Design require students to understand asymmetric information as a form of market failure and it is the market failure that students find most difficult to comprehend. The Study Design also require students to demonstrate an understanding of the role and effect of indirect taxation, subsidies, government regulations and government advertising as types of government intervention to address market failure. It is common for students to attach the wrong policy solution to market failures, such as saying that indirect taxation or subsidies are ways to address market failure in the form of asymmetric information. In preparation for the exam, it could be beneficial for students to draw up a list of each of the market failures listed in the Study Design and then practise going over the relevant government initiatives that will help to address the market failure. In the context of asymmetric information, taxes and subsidies are inappropriate measures to address this form of market failure in comparison to government regulations, which makes option B the correct response. This is because regulations (backed up by fines or other forms of punishment) are more suited to manipulating behaviour, such as forcing or encouraging those who might otherwise be incentivised to leverage off the information asymmetry (e.g. misleading and deceiving consumers) to instead engage in honest behaviour. In contrast, (indirect) taxes and subsidies are more appropriate at manipulating production or consumption directly, disincentivising production/consumption in relation to taxes and incentivising production/consumption in relation to subsidies.

#### **Question 3**

For the year ended 30 June 2022, the CPI increased from 118.8 to 126.1, resulting in a headline inflation rate of 6.1%. For inflation to remain at this level, it means that:

- A. Prices need to increase above the current high levels and the CPI needs to remain at 126.1
- B. Prices need to increase above the current high levels and the CPI needs to increase above 126.1
- C. Prices need to remain at the current high levels and the CPI needs to remain at 126.1
- D. Prices need to remain at the current high levels and the CPI needs to increase above 126.1

Students should appreciate that inflation is a measure of the rate of <u>change</u> of prices and is not a measure of the <u>level</u> of prices. This means that for inflation to remain high, prices will need to keep increasing at an elevated rate. If, instead, prices simply remained at the current high level (i.e. did not increase further) then it must mean that the rate of inflation

falls to zero. For example, if petrol prices increase from \$1.50 per litre on average to \$2.00 per litre on average for any given year, then the 'rate' of growth in prices of petrol (e.g. inflation) is 33.3% for that year. However, if over the course of the next year, petrol prices remain at this elevated level of \$2.00 per litre, then inflation (of petrol prices) will be zero. The level of prices remains high in the second year despite the rate of growth in prices returning to zero. This makes option B the only correct response because for inflation to remain at a high rate of 6.1% it requires an increase in the CPI and, by extension, an increase in prices. All other options incorrectly refer either to the CPI remaining at 126.1 and/or prices remaining at the current high levels.

#### **Question 4**

A lower price of electricity should result in all of the following except:

- A. A decrease in the production of electric cars
- B. A decrease in the costs of production for most businesses
- C. A decrease in the rate of inflation
- D. An increase in the relative price of a substitute such as natural gas

The Study Design requires students to demonstrate an understanding of the factors likely to affect demand and supply of goods and services (such as the price of substitutes and complements) as well as the impact on market prices (including relative prices) and resource allocation. **Option A is the best response** because the production of electric cars increases (NOT decreases) when the price of electricity falls. This is because electricity is a complement for electric cars, and if the price of electricity decreases, it will help to increase the demand for electric cars given that the cost to run electric cars will now be lower, which in turn increases the production of electric cars. All other options contain accurate statements in relation to the impact of a reduction in the price of electricity. With respect to options B and C, given that electricity is a cost of production for many businesses, a reduction in its price will reduce the costs of production, resulting in lower prices and a lower rate of inflation. With respect to option D, despite the absolute price of natural gas remaining unchanged, its relative price increases when compared to the falling price of electricity.

#### **Question 5**

The government's medium term fiscal strategy is to achieve budget balance, on average, over the course of the economic cycle. Which of the following is least likely to represent a rationale for this strategy?

- A. to improve or maintain Australia's AAA credit rating
- B. to reduce the debt burden on future generations
- C. to reduce government expenditure relative to revenue
- D. to reduce the interest expense for the federal government

Questions related to the government's fiscal strategy, or fiscal consolidation more generally, have been asked on a few occasions in Section B of past examinations and each time the average score has been less than 45%. For example, Question 4C of the 2018 examination required students to 'explain one reason for the Australian Government's rationale related to its fiscal strategy and budget repair, and its wish to achieve a surplus by 2020–2021' (3 marks). This proved to be the most difficult question on the paper, with an average score of 43% and with only 23% of students achieving full marks. Students continue to make the same errors, including an inability to appreciate what is meant by the government's 'rationale' for wanting budget balance (or surpluses) on average over time. Many students mistakenly explain how the government achieves a budget surplus (or returns the budget to balance), rather than what motivates it to reduce the size of the deficit over time and achieve budget balance/surplus (e.g. a desire to improve or maintain Australia's AAA credit rating). Option C is the best response because it is the only answer that does not provide a valid rationale or justification for the government wanting to return the budget to balance (i.e. by reducing expenditure relative to revenue) and it is really another way of expressing the strategy in the current context – i.e. to reduce government expenditure relative to revenue. All other options are valid reasons (rationales) for the government wanting to reduce the deficit and achieve budget balance over time.

#### **Question 6**

#### If the government was determined to achieve budget balance (a balanced budget outcome) every year, then

- A. booms and recessions would be more severe
- B. booms and recessions would be avoided
- C. during a boom, the government must reduce expenditure and raise revenue
- D. during a recession, the government must raise expenditure and reduce revenue

These types of multiple-choice questions occasionally surface on VCE exams and students consistently perform poorly, with less than 50% of students able to identify what happens if the government needs to, or wants to, achieve a specific budget outcome every year. Option A is the best response because if the government forces itself to achieve a balanced budget every year (i.e. revenue = expenditure), then automatic stabilisers (and therefore the budget itself) would be less effective at stabilising the business cycle and booms and recessions would occur more frequently. For example, if economic activity increased markedly (e.g. approaching a boom), then the budget automatically moves towards a (cyclical) surplus, as tax revenue automatically rises (e.g. due to higher income tax is being received) and expenditure falls (e.g. reduced need for welfare/income support). If the government was required to avoid the surplus and achieve budget balance (a balanced budget outcome), it would then necessitate a (discretionary) reduction in revenue and/or a (discretionary) rise in government expenditure, the combined effect of which is to stimulate AD further and intensify the boom. This makes option C incorrect. Of course, the reverse applies during a recession or downturn because the budget will move towards a (cyclical) deficit as tax revenue automatically falls and expenditure automatically rises. To achieve budget balance, the government would need to raise revenue and reduce expenditure, which makes the recession more severe (and more prolonged). This makes option D incorrect. Option B is incorrect because the reverse is true.

#### **Question 7**

### Which of the following statements is inaccurate?

- A. Rising prices of crude oil over recent years are having a negative influence on inflation and economic growth
- B. Rising interest rates increase both costs of production and inflation as well as reduce AD and economic growth
- C. COVID-19 induced global supply constraints up until 2023 added to inflationary pressures and reducing the rate of growth in real GDP
- D. The effects of natural disasters over recent years reduced living standards and raised prices

The Study Design requires students to have an understanding of a host of factors that can influence aggregate demand and aggregate supply. Each of the options, A, C and D are accurate reflections of what is happening (or has happened) in the domestic and global economy, with each event representing an example of a supply shock. These supply shocks ultimately raise prices and reduce economic growth (and living standards). **Option B is the best response** because it is an inaccurate statement. While higher interest rates can indeed have negative supply side effects (shifting the aggregate supply curve to the left), they will also have aggregate demand side effects that are more pervasive in the sense that the overall effect on inflation is downwards. This is precisely why the RBA increases interest rates to fight inflation.

# **Question 8**

# If nominal GDP for a nation increases from \$2.0 trillion to \$2.2 trillion over a period when inflation was 5%, then

- A. Real GDP will be \$2.0 trillion and economic growth will be 0%
- B. Real GDP will be \$2.2 trillion and economic growth will be 10%
- C. Real GDP will be \$2.3 trillion and economic growth will be 15%
- D. Real GDP will be \$2.1 trillion and economic growth will be 5%

The current Study Design requires students to demonstrate an understanding of the measurement of the rate of economic growth using real Gross Domestic Product (GDP), as well as develop the skill of calculating relevant economic indicators using real or hypothetical data. Multiple choice questions regularly test students' ability to calculate relevant economic indicators, and students often struggle selecting the right response. This includes Q5 on the most recent 2022 exam, which required students to calculate the rate of economic growth from hypothetical real GDP figures. It is reasonable to expect at least one calculation question to appear in Section A of the 2023 examination. In relation to

the current question, **option D** is the best response because nominal GDP increases by 10%, but half of this increase is attributable to higher prices rather than a greater volume (or real value) of production, which then leaves the other half (5%) as the real increase in production (i.e. economic growth). This is the same as saying that the increase in nominal GDP by 10% to \$2.2\$ trillion is deflated by the rising prices (5% / \$0.1\$ trillion) to arrive at a value for real GDP of \$2.1\$ trillion, with economic growth calculated at 5% (\$0.1\$ trillion/\$2.0\$ trillion X 100). All other options are incorrect because either the dollar value of real GDP or the rate of economic growth is incorrect.

#### **Question 9**

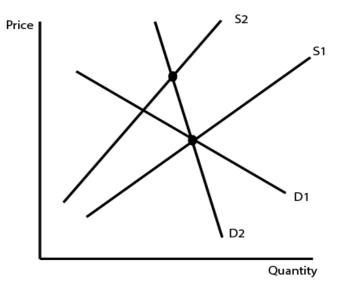
#### The increase in the target cash rate from 1.35% to 1.85% in August 2022 meant that:

- A. the RBA has tightened monetary policy and the monetary policy stance has become restrictive
- B. the RBA has tightened monetary policy and the monetary policy stance has become more restrictive
- C. the RBA has loosened monetary policy and the monetary policy stance has become less expansionary
- D. the RBA has tightened monetary policy and the monetary policy stance has become less expansionary

Any increase in the target cash rate means that there has been a tightening of monetary policy. However, the stance of monetary policy will ultimately depend on where the target cash rate is in relation to what is generally considered to be the cash rate that is consistent with monetary policy neutrality. While there currently exists some uncertainty in relation to what target cash rate is consistent with monetary policy neutrality, students should appreciate that it is not under 2%. During 2022, the RBA Governor indicated that the 'neutral cash rate' sat 'at least' at 2.5%, but is likely to be approximately one percentage higher at 3.5%. This means that despite the tightening of policy in August 2022, the cash rate remained at a low enough level to remain expansionary, and this makes **option D the best response**. Options A and B are incorrect because monetary policy remains expansionary and does not become restrictive or more restrictive. Option C is incorrect because monetary policy has not been loosened.

#### **Question 10**

# Market for widgets



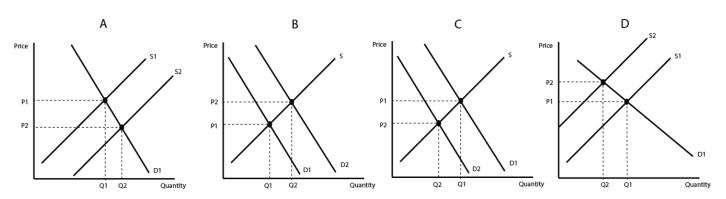
#### The diagram above illustrates that in the market for widgets

- i The quantity supplied of widgets has decreased
- ii The quantity supplied of widgets has remained unchanged
- iii The quantity demanded of widgets has decreased
- iv The quantity demanded of widgets has remained unchanged
- v The price elasticity of supply has decreased
- vi The price elasticity of supply has increased
- vii The price elasticity of demand has increased
- viii The price elasticity of demand has decreased

- B. i, iv, v, vii
- C. i, iii, v, viii
- D. i, iii, vi, vii

The Study Design requires students to understand how shifts of demand and supply curves will impact on markets, as well as know the differences between shifts of curves and movements along curves. They also need to understand price elasticities. For questions such as these it is best to highlight which of the eight events (i – viii) are relevant in the context of the information depicted in the diagram. **Option C** is the best response because the QS of widgets has indeed decreased (as the intersection of D2 and S2 occurs to the left of the intersection of D1 and S1); the quantity demanded of widgets has decreased (represented by the contraction along D2); the price elasticity of supply has decreased given that S2 is steeper than S1; and the price elasticity of demand has decreased given that D2 is steeper than D1. All other options contain at least one of the factors/events that is incorrect.

Question 11
Which of the following diagrams best illustrates the law of supply?



- A. Diagrams A and D
- B. Diagram B and C
- C. Diagram A and B
- D. Diagram C and D

The Study Design requires students to demonstrate an understanding of the law of demand and the demand curve including movements along, and shifts of, the demand curve. Students often confuse shifts of curves with movements along curves and it is useful to remember that it is the law of supply that is the driving force behind any movement along the supply curve. **Option B is the best response** because both diagrams B and C highlight a shift of the demand curve which induces an expansion along the supply curve (Diagram B) and a contraction along the supply curve (Diagram C). In both cases, the decision by producers to supply more or less is driven by the change in price. In market B, the shift to the right of the demand curve causes a higher price which causes supply to expand (in line with the law of supply) while in market C, the shift to the left of the demand curve causes a lower price which causes supply to contract (in line with the law of supply).

#### **Question 12**

The cost to rent a house or apartment has increased significantly over the past two years. Which of the following is a supply factor contributing to the movement in house rents over this period?

- A. The return of international students to Australia
- B. The trend to smaller sized households due to COVID-19
- C. Stricter rental laws favouring tenants
- D. Falling house prices encouraging owners to supply houses to the rental market

**Option C is the best response** because tighter or stricter rental laws in favour of tenants is likely to have discouraged owners/landlords from supplying their properties to the rental market. This reduces the supply of properties to the rental market and therefore causes the price (i.e. rents) to rise. Both options A and B are incorrect because they represent demand factors that have contributed to higher rents. Option D is incorrect because, despite being a supply

factor, it results in downward pressure on rents and is therefore not a factor contributing to the 12% increase in rents over the period.

# **Question 13**

In relation to the effects of both a consumer subsidy and a producer subsidy on the market for a good or service:

- A. a consumer subsidy results in a higher quantity and a higher price whereas a producer subsidy results in a higher quantity and a lower price
- B. a consumer subsidy results in a higher quantity and a lower price whereas a producer subsidy results in a higher quantity and a lower price
- C. a consumer subsidy results in a higher quantity and a lower price whereas a producer subsidy results in a higher quantity and a higher price
- D. both a consumer subsidy and a producer subsidy result in a higher quantity and a lower price

The Study Design requires students to understand subsidies in the context of the ways to address market failures as well as the operation of subsidies in the context of aggregate supply policies. While it is clear that both types of subsidies ultimately end up increasing the volume of production (i.e. quantity), it is common for students to become confused about their respective impact on market prices. If in doubt, students are reminded to use demand and supply diagrams to clarify their thoughts. A producer subsidy shifts the supply curve to the right, resulting in a higher quantity and a lower market price, whereas a consumer subsidy shifts the demand curve to the right, resulting in a higher quantity and a higher market price. This is one of the reasons why subsidies to first home buyers over the past couple of years have been criticised, given that the subsidies raise the price of new homes for subsequent first time buyers. **Option A is the correct response** because it accurately refers to a higher quantity and higher price for consumer subsidies and a higher quantity and lower price for producer subsidies. All other options are invalid because at least one of the relevant variables moves in the wrong direction.

#### **Question 14**

Which of the following examples most accurately represents a market failure in the form of a positive externality in consumption or production?

- A. The consumption of a soft drink where 10% of the purchase price goes towards research into a cure for cancer
- B. The production of electricity that results in carbon emissions
- C. The use of motor vehicles that contributes to road congestion
- D. A person attending a private first aid training course which provides them with the skills to render first aid

**Option D is the best response** because a person attending a private first aid training course, which provides them with the skills to render first aid, is an example of a positive externality in consumption. The consumption of the service (i.e. the training received) results in positive third party (or social) benefits to the extent that the person renders first aid to members of the public during an accident or an emergency. Options B and C are invalid because both are examples of negative externalities in production or consumption. Those students who selected option A as the best response are making the same mistake made by those responding to Question 3d from the 2021 exam. That question required students to explain how the consumption of a good or service may be associated with positive externalities, with only 57% of students receiving the full 2 marks. A common problem was a difficulty in describing third party benefits, with some referring to the benefits associated with the 'purchase' of a good rather than the 'consumption' of a good. For example, the consumption of a soft drink, in itself, does not contribute to positive spin-off benefits for third parties or society more generally. [In fact, it is more likely that ongoing consumption of soft drinks create third party costs owing to the potential long-term costs to health and the demands placed on the health system.] This is not, in itself, reversed if a portion of the proceeds is donated to worthy or charitable causes that create social benefits. The social benefits created by the donations are attached to the 'purchase' of the soft drink, rather than the 'consumption' of the soft drink. The actual consumption of the soft drink will not create third party benefits and it does not become an example of a positive externality in consumption simply because part of the revenue from the sale of the product is donated to charitable causes. [Note: it is important not to confuse consumption in this context with Consumption as a component of AD].

#### **Question 15**

Each of the following is an example of an aggregate supply factor leading to the level of aggregate supply rising, with the exception of:

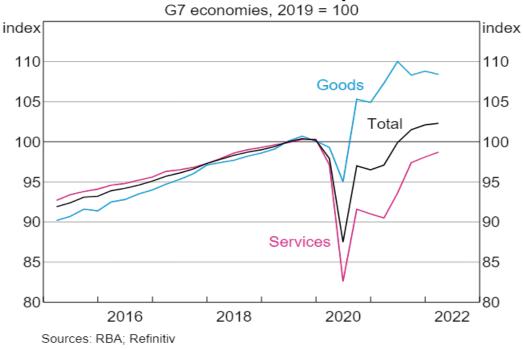
- A. a rise in productivity
- B. a reduction in the exchange rate
- C. a reduction in real unit labour costs
- D. a rise in the quality of human capital

The Study Design requires students to demonstrate an understanding of the meaning and importance of aggregate supply and the factors that may influence the level of aggregate supply in the economy: changes in the general level of prices, quantity and quality of the factors of production, cost of production, technological change, productivity growth, exchange rates and climatic conditions. For these types of questions, it is worth annotating the exam with small AD/AS diagrams to illustrate the impact that each option will have on aggregate supply. **Option B is the best response** because it is the only one which does not shift the AS curve to the right (i.e. cause aggregate supply to rise). This is because a depreciating exchange rate adds to cost inflationary pressures to the extent that the bulk of Australia's imports are either intermediate or capital goods that are then used as inputs in the production process. All other options represent an improvement in the quality of resources (or the quality of human and physical capital) and/or a reduction in the costs of production, which all result in aggregate supply increasing over time.

# Question 1 (13 marks)

During COVID-19, consumption patterns around the world changed significantly, as highlighted in the chart below.

# **Household Consumption**



a. Analyse the chart and outline the implications it has for relative prices, resource allocation and allocative efficiency since 2020.

6 marks

- 1 mark for demonstrating an understanding of relative prices
- 1 mark for accurately interpreting the chart in terms of the impact on relative prices
- 2 marks for an accurate examination of the impact on resource allocation
- 1 mark for demonstrating an understanding of allocative efficiency
- 1 mark for accurately linking the change in relative prices to the impact on allocative efficiency

Advice: As mentioned in CPAP 2023 exams A - C, an understanding of relative prices and the price mechanism is a fundamental building block for understanding the nature of economics in a market system and a structured/short answer question testing this part of the course was only asked only twice over the life of the previous Study Design – in 2020 and 2022. It is an area of VCE Economics that consistently troubles students and past examination performances reveal that students fail to demonstrate an adequate understanding of this part of the course, with average results regularly falling below 50%. While the average score on the 2020 exam was a relatively high 58%, only 18% of students achieved full marks. That question required students to 'explain how an increase in demand for a product might result in a change in relative prices, and explain how this would influence resource allocation and living standards'. The 2022 version (Q4c), required students to use a D/S diagram to illustrate and analyse how one form of government intervention might lead to a change in relative prices and the allocation of resources. The best performing students were those who were able to clarify how the change in relative prices ultimately sends important signals to producers/consumers, and then explain how this causes resources to move from the production of one good to another. It is important that the explanations provided by students are not inconsistent with the information conveyed in the diagrams that are drawn/presented in the exam – which was a common error in 2022. It is also important that students use the diagram in a meaningful way to illustrate how resources are reallocated and avoid an overemphasis on explaining the dynamics of adjustment from one equilibrium to another.

Sample answer: The chart shows that between 2020 and 2022, the production of goods [in G7 economies] accelerated faster than the production of services which follows the change in consumption patterns during COVID-19, away from the demand for services and towards the demand for goods, as people were limited in their ability to engage in the social interaction often required when consuming services. With the demand for goods outstripping the demand for services, it leads to the price of goods increasing at a faster rate than the price of services, which therefore means that the relative price of goods increases and the relative price of services decreases. This will have acted as a signal to producers that greater profit opportunities exist in the production of goods relative to services, which will have resulted in producers allocating more of their resources (such as labour and capital) towards the production of goods compared to the production of services. To the extent that the market has responded to the changing preferences of consumers, it can be argued that allocative efficiency will be achieved because resources are being reallocated to produce the products that are demanded by consumers, which enhances living standards. In other words, resources are being (re)allocated across the economy in such a way that the net benefits for society are maximised.

**Note 1:** With respect to the impact on allocative efficiency, students can be rewarded with full marks if they focus instead on the relative decrease in the production of services during COVID-19 as being evidence of a reduction in allocative efficiency to the extent that resources are prevented from being allocated towards the production of services that consumers would ideally prefer to purchase (but are prevented from doing so due to COVID related restrictions).

**Note 2:** It is expected that some students will attempt to argue that growth in the production of goods relative to services will be a response to lower prices of goods relative to the prices of services over the relevant time period (i.e. the relative price of goods fell). While this type of argument could be relevant in the absence of COVID-19, it is less relevant in the recent context. However, full marks can be awarded for this approach provided that the link to resource allocation and allocative efficiency that follows is accurate and well-reasoned.

**Note 3:** Full marks should not be awarded in the event that a student misinterprets the chart by assuming that the index refers to a price index and then simply reading off the chart to highlight that the price of goods has increased relative to the price of services. A maximum of 5 marks out of 6 can be awarded for this approach.

Note 4: Square bracketed section is not required for full marks.

- b. Explain how the closure of businesses during COVID-19 can reduce the competitiveness in markets for goods and services and describe why this might reduce efficiency of resource allocation.

  4 marks
  - 0.5 marks for demonstrating an understanding of competitiveness
  - 1.5 marks for an accurate explanation of how the closure of businesses can reduce competitiveness
  - 0.5 marks for demonstrating an understanding of any type of efficiency
  - 1.5 marks or an accurate description for why reduced competitiveness can reduce a type of efficiency

Advice 1: This question focuses on two key knowledge points contained in the new 2023 Study Design, with the first relating to 'the conditions for a free and perfectly competitive market'. Students should recognise that the current question requires them to leverage off one of the key conditions underpinning a (perfectly) competitive market (i.e. a large number of sellers). For example, 'the exit of producers from a market (i.e. fewer sellers) makes the market less competitive because...'. The second relevant key knowledge point is 'the role of free and competitive markets in promoting an efficient allocation of resources'. Students should recognise that less competitive markets are likely to have an unfavourable impact on efficiency (and prices) over time. While the Unit 3 and 4 Study Design no longer makes specific reference to monopolistic competition, oligopoly or monopoly, it could be useful to make reference to these market structures when explaining how less competitive markets will impact on efficiency of resource allocation.

Advice 2: Generally, when students are asked to comment on 'efficiency of resource allocation' or 'efficiency in the allocation of resources', it is most common to focus on 'allocative efficiency'. This is particularly the case when the question relates to market failures. However, students can focus on any of the four types of efficiency referred to in the Study Design: allocative, productive/technical, dynamic and inter-temporal efficiency. In the context of the current question, students are not directed to focus on any specific type of efficiency (unlike in part a.), which therefore provides them with some flexibility. Given the obvious relationship between competition/competitiveness and costs, it is expected that students will focus on productive/technical efficiency. However, students are also free to explore the link to allocative or dynamic efficiency (inter-temporal is less valid).

Sample answer: The closure of businesses during COVID-19 will reduce the number of sellers in the market, which means that fewer businesses will be competing against one another for market share, and this will result in an increase in the level of market concentration and a reduction in competitiveness. This becomes increasingly problematic once the effects of COVID-19 pass and markets return to normal, as the remaining suppliers will be in a better position to exercise some degree of market power (e.g. raise prices with less fear of losing market share). With fewer businesses in the market chasing market share, this can result in fewer businesses paying close attention to costs [e.g. being less active in sourcing cheaper or higher quality inputs as a means of reducing average costs of production and prices] and less incentive to seek out productivity improvements [e.g. via greater investment in capital]. This is likely to reduce productive [technical] efficiency over time as production volumes in markets are more likely to be achieved at higher cost.

Note: Square bracketed section is not required for full marks.

- c. Examine why unregulated markets will not achieve the most efficient allocation of resources for a nation like Australia.

  3 marks
  - 1 mark for demonstrating an understanding of 'the most efficient allocation of resources'
  - 2 marks for examining why unregulated markets fail to achieve the efficient allocation of resources

Note: A reference to at least one market failure would be expected but is not essential to achieve full marks.

Advice 1: The Study Design (U3 AOS 1) requires students to demonstrate an understanding of the reasons for market failure: public goods, externalities, asymmetric information and common access resources. In addition, a key skill in the new Study Design includes the requirement for students to 'evaluate the role of free and competitive markets in achieving an efficient allocation of resources'. Exams over the life of the current Study Design have not specifically required students to 'evaluate the role of markets'. However, students have been required to demonstrate some understanding of 'market failures' in all but one of the exams over the life of the current Study Design (with no such question in the 2019 exam). Most recently, question 4b of the 2022 exam required students to 'explain one reason why the excess consumption of sugar may cause market failure'. The question was poorly handled, with only 18% of students achieving full marks and a low average 1.4/4. A number of students failed to recognise that excess sugar consumption represents a failure of free/unregulated market to achieve the most efficient allocation of resources. However, more importantly, too many students were unable to establish a relevant connection to a recognised market failure (e.g.. negative externalities, asymmetric information or 'de-merit goods')

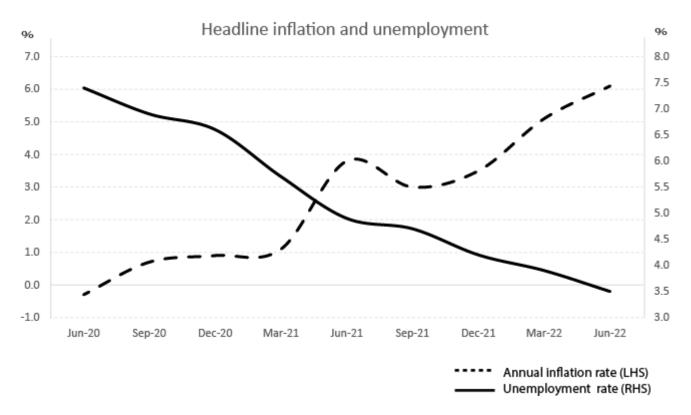
Advice 2: Question 3b of the 2021 exam focused specifically on 'common access resources', with specific reference to the 'market for fish'. Only 33% of students were able to achieve the full 3 marks, with a key problem being an unpreparedness to refer to the key characteristics of non-excludability and depletability. When attempting to demonstrate an understanding of both common access resources and public goods, students should always attempt to make meaningful reference to these important characteristics, remembering that public goods are both nonexcludable and non-depletable (non-rival). This proved to be problematic for some students in the 2017 exam when being asked to distinguish public goods from common access resources. In relation to the other two exams testing this part of the course, the 2020 exam included a 4 mark question that asked students to 'describe one strength and one weakness associated with the use of the market to allocate resources'. While the average score of 2.4/4 (60%) was reasonable, only 32% of students achieved full marks. A common problem when describing a strength was that students simply described how markets work to allocate resources. In relation to weaknesses, the best students were able to make a direct link to market failures. The 2018 exam required students to explain how either externalities or asymmetric information results in a market failure. For externalities, students should always clarify whether they are referring to positive externalities (in production or consumption) or negative externalities (in production or consumption) and to refer to third party (or social) costs or benefits when examining how the presence of externalities leads to a sub-optimal allocation of resources. For asymmetric information, students should attempt to highlight how the information asymmetry results in errant decision making that also leads to sub-optimal allocation of resources.

**Advice 3:** Past examinations reveal that students find asymmetric information the most difficult example of market failure to explain. So if choice is provided in the examination, such as in this question, it is recommended that only

high performing students choose to examine asymmetric information as their example for why or how unregulated markets do not achieve the most efficient allocation of resources.

Sample answer: Markets left unregulated by governments will result in undesirable outcomes for society, which are commonly referred to as market failures. In other words, markets will result in an allocation of resources that is suboptimal such that resources are allocated to the production of goods and services that does not maximise living standards/welfare of Australians. Unregulated markets will tend to over allocate resources to the production of some goods and services that are not in society's best interests [e.g. demerit goods such as illicit drugs or goods with negative externalities in production/consumption]. This occurs because of the influence of the profit motive which drives producers to allocate resources to the production of goods or services, some of which are not in our collective best interests. Similarly, unregulated markets will tend to under allocate resources to the production of those goods and services that are in society's best interests [e.g. public goods or those with positive externalities in production/consumption], which relates to the inability of producers to extract (full) payment and make a viable profit.

#### Question 2 (31 marks)



- With reference to the chart above, assess the extent to which full employment and price stability were achieved in Australia between 2020 and 2022.
  - 1 mark for demonstrating an understanding of the goal of full employment
  - 1 mark for demonstrating an understanding of the goal of price stability
  - 1 mark for an accurate and logical assessment of whether full employment was achieved
  - 1 mark for an accurate and logical assessment of whether price stability was achieved
  - 1 mark for accurate use of the data from the chart for support response

**Advice 1:** Students should always be careful analysing graphs or charts with double Y axes such as that presented in this question. There have been examples of students in past examinations making the silly mistake of reading off the wrong axis. For example, some students will make the mistake of saying that the unemployment rate has fallen to below 0% or the inflation rate has risen to 7.5%.

**Advice 2:** The new 2023 Study Design has included a new key skill: 'evaluate the extent to which the economy has achieved the domestic macroeconomic goals over the past two years'. Despite this skill not being present in the former

Study Design, it was indeed tested on past exams. Students were presented with charts/graphs containing the movement of key macroeconomic variables over a number of years. They were then asked to assess the extent to which Australia achieved specific macroeconomic goals based on the information contained in the charts. For example, in the 2017 exam, Q4a presented a chart showing the quarterly and annual growth in the CPI, and students were asked to assess the extent to which the goal of low inflation (price stability) was achieved. In the 2018 exam, Q4a presented students with charts relating to the unemployment and underemployment rates, as well as the rate of GDP growth and they were asked to assess the extent to which the full employment and strong and sustainable economic growth goals were achieved. Overall, these should have been relatively easy questions, requiring students to demonstrate an understanding of the relevant goal(s) and then simply compare the relevant data/statistics contained in the chart(s) to the key statistic that underpins the achievement of the goal(s) – 2-3% growth in the CPI on average over time in the case of price stability, approximately 3 ½% for strong and sustainable economic growth, and approximately 5% for the rate of unemployment (now revised down to 4.25%). Surprisingly, a number of students were unable to perform well in these questions, with only 26% of students achieving full marks in 2018 and 36% achieving full marks in 2017. Given that a similar question has not surfaced on an exam since then, it would not be surprising to see one appear on the 2023 exam given the presence of the new key skill.

Advice 3: In the current climate, it would be advantageous for students to demonstrate an understanding of contemporary thinking related to the full employment goal. The Reserve Bank of Australia (RBA) and Treasury released research in 2021 that suggested the full employment rate of unemployment, or the Non-Accelerating Inflation Rate of Unemployment (NAIRU), is likely to reside at approximately 4.25%. Given that unemployment has remained around 3.5% it has prompted many commentators/economists to suggest that the new NAIRU is even below 4%. For the purposes of the VCE Economics exam, the precise level of NAIRU is less important that what is meant by NAIRU, what it implies about the economy, and the implications it might have for the setting of government policies.

Sample answer: Full employment represents the government's goal to achieve maximum employment (growth) in the economy such that unemployment [or the unemployment rate] is at its lowest possible level before inflationary pressures become excessive. This is often referred to as the non-accelerating inflation rate of unemployment or NAIRU, which is now considered to be approximately 4.25%. Given that the unemployment rate has come down from as high as 6% in June 2020 towards the NAIRU rate in late 2021, and continued to fall to 3.5% into 2022, it suggests that full employment was achieved (or even overachieved in 2022) and that further falls in the unemployment rate are much less likely [which has proven to be the case in 2023, with the unemployment rate falling briefly to 3.4% in late 2022 before hovering around 3.5% since].

Price stability is the goal to achieve a rate of [headline] inflation between 2 to 3% on average over time. Over the period in question, the rate of inflation was either below the target range (between June 2020 and March 2021 when it was below 2%) or above the target range (between June 2021 and June 2022 when it reached above 6%) but never remaining within the target range over this period, which indicates that price stability has not been achieved. [This was reflected by RBA actions over the relevant period, with the RBA persisting with a highly expansionary monetary policy stance leading into 2022 (partly to help nudge inflation into the bottom end of the target range) before switching its attention to the need to reduce inflation (via a tightening of monetary policy) from early to mid-2022.]

**Note 1:** With respect to full employment, students can also achieve full marks if they attempt to argue that full employment was not been achieved during the middle of 2022 given that the unemployment rate fell below the NAIRU rate such that the target has been overshot to the detriment of the economy (i.e. it causes excessive inflation).

**Note 2**: With respect to price stability, students could potentially be awarded marks if they argue that price stability was achieved over the period because the average rate of inflation was between 2 - 3%. However, awarding full marks is not recommended because the approach is too 'mathematical', focusing on a time frame that is too narrow and having no appreciation for contemporary factors (including changes to monetary policy) that help to form an assessment of whether price stability has been achieved.

**Note 3**: Square bracketed section is not required for full marks.

b. Explain how the movement in inflation over 2022 may have reduced Australia's international competitiveness and decreased Australian living standards.

4 marks

- 2 marks for an accurate explanation of the link between higher inflation and reduced international competitiveness
- 2 marks for an accurate explanation of the link between higher inflation (or lower international competitiveness) and living standards

**Note 1:** In the event that students err by referring to the impact that a *lower* rate of inflation has on international competitiveness and living standards, a maximum of 1 mark in total should be awarded.

**Advice 1:** The new Study Design requires students to understand the 'consequences of not achieving the goal of price stability' (i.e. the consequences of excessive inflation), including the impact on international competitiveness as well as the impact on living standards. When asked to link changes in the inflation rate to Australia's international competitiveness students should be prepared to refer to relative rates of inflation. This is particularly relevant in the current context to the extent that Australia's inflation rate was lower than the inflation rates experienced in other parts of the world (e.g. the USA and parts of Europe).

**Advice 2:** When linking higher inflation to living standards, it is logical (in the context of the question) to link the negative impact on international competitiveness to a negative impact on living standards. However, it is equally valid to link higher inflation to a reduction in living standards directly, without leveraging off the impact on international competitiveness. For example, students might refer to the negative impact that inflation has on purchasing power directly, leading to a reduction in material living standards.

**Sample answer:** The increase in inflation over 2022 [to 6.1% for the year ended June 2022] reduces Australia's international competitiveness to the extent that Australian rates of inflation exceed those of our trading partners. This occurs because the prices of goods and services produced by Australia's tradables sector (i.e. exporters and import competing businesses) will rise by more than those produced by offshore competitors, reducing the ability of Australian producers to increase market share in the global marketplace [and/or increase the ability of foreign businesses to attract market share from Australian producers].

This reduction in Australia's international competitiveness will negatively impact on net exports, reducing [growth in] aggregate demand (AD) and real GDP and national income. Given that living standards largely depend on our ability to earn an income and purchase goods and services, any decline in incomes earned across the economy (e.g. by stakeholders in export and import competing businesses) will typically lead to reduced access to goods and services and a decrease in material standards of living for Australians on average.

Note 2: Square bracketed section is not required for full marks.

 Explain how a reduction in Australia's international competitiveness can contribute to an increase in Australia's net foreign debt (NFD).

2 marks

- 1 mark for a superficial explanation (e.g. a decrease in international competitiveness increases the current account deficit which causes capital inflow in the form of foreign debt)
- 1 mark for a more comprehensive explanation (e.g. see sample answer)

**Advice 1:** Students should always remember that NFD + NFE = NFLs and that any CAD experienced by Australia will be financed by a combination of NFD and NFE (or looked at in another way: any CAD must lead to a surplus in the CAFA via capital inflow in the form of debt or equity.)

**Advice 2**: Students should attempt to avoid the common practice of confusing NFD with Net Government Debt (NGD) or confusing stocks and flows (see advice provided in next question).

Sample answer: This is because a reduction in international competitiveness causes growth in imports to rise relative to growth in exports, reducing net exports and causing the Balance on Goods and Services (BOGS) surplus to fall [or the BOGS deficit to increase]. A fall in the BOGS surplus will negatively influence the current account (CA) balance, potentially causing the CA to return to deficit. Given that a CA deficit (CAD) effectively requires financing from abroad (i.e. the CAD results in a CAFA surplus), it increases capital inflow in the form of debt (or equity), which raises Australia's NFD [and/or Net Foreign Equity].

#### d. Distinguish net foreign debt (NFD) from net foreign equities (NFE).

3 marks

- 1 mark for demonstrating an understanding of NFD
- 1 mark for demonstrating an understanding of NFE
- 1 mark for establishing a clear point of difference between the two terms/concepts

Advice 1: The new Study Design continues to require students to understand the composition and cause of net foreign debt and net foreign equities, which implies that students should be in a position to distinguish NFE from NFD. Students continue to make errors in examinations when attempting to explain either of these examples of net foreign liabilities (NFLs). For example, it is common for students to confuse stock variables (such as NFE and NFD) with flow variables (such as CAD and budget deficits) and confuse NFD with the CAD. Even more common is the confusion that students tend to make between NFD and Net Government Debt (NGD), or even having trouble distinguishing gross debt from net debt. Importantly, students should always remember that NFD + NFE = NFLs and that any CAD experienced by Australia will be financed by a combination of NFD and NFE (or looked at in another way: any CAD must lead to a surplus in the CAFA via capital inflow in the form of debt or equity from overseas.)

Advice 2: Students cannot ignore command terms such as 'distinguish' or 'explain the difference' and they should be prepared to talk about a clear distinguishing feature or point of difference between the terms or concepts in question. It is too common for students to make the mistake of defining the terms in isolation and expecting examiners to infer the difference. For example, Q1b of the 2022 exam required students to distinguish between demand inflation and cost inflation. Too many students simply defined the terms in isolation without attempting to actively distinguish one from the other. Similarly, Q2b of the 2021 exam required students to 'explain the difference between the role of automatic stabilisers and discretionary stabilisers in influencing aggregate demand and stabilising the business cycle', with many students simply describing how each of the two stabilisers influence AD and the business cycle without making any attempt to highlight a clear difference in how this is achieved. Q4a of the 2019 exam also required students to distinguish between trade liberalisation and barriers to trade, with many students once again simply defining the terms in isolation.

**Sample answer:** NFD refers to the total value of debt Australia owes to the rest of the world less the amount of debt owed to Australia by the rest of the world, whereas NFE refers to the total value of [non-debt] Australian assets (e.g. shares) owned by foreigners less the total value of foreign assets owned by Australians. A key difference between these two types of net foreign liabilities is that NFD is serviced via interest payments/receipts [through the Net Primary Income (NPI) section of the current account] whereas NFE is serviced via dividend payments/receipts [through the NPI section of the current account].

**Note:** Students are free to refer to any meaningful point of difference between the two types of liabilities, such as NFE being negative at the current time whereas NFD is close to \$1 trillion, or NFD being a more problematic or risky component of net foreign liabilities given its size relative to NFE or given that debt is typically a riskier form of financing for any entity.

e. Describe a similarity and a difference between the labour force participation rate and the labour force underutilisation rate.

4 marks

- 1 mark for demonstrating an understanding of the LFPR
- 1 mark for demonstrating an understanding of the LFUR
- 1 mark for establishing a similarity between the two terms/concepts
- 1 mark for establishing a clear point of difference between the two terms/concepts

Advice: The new 2023 Study Design continues to require students to understand the participation rate, the unemployment rate and the labour force underutilisation rate as distinct measures of Australia's labour force. As noted in the advice provided in part d. above, when asked to explain the difference between two terms/concepts, students should be prepared to demonstrate an understanding of each of the key terms and then to establish at least one clear point of difference between those terms. The same advice applies in relation to the current question, with the additional requirement to establish at least one clear similarity between those terms. While distinguish/explain the difference command terms have been used on recent exams (e.g. 2022, 2021 and 2019 – see Advice 2 in part d. above), there has not been a question over the life of the previous Study Design requiring students to describe a similarity and a difference between two terms or concepts. It is wise to be prepared for this possibility.

Sample answer: The labour force participation rate represents the size of the labour force (employed plus unemployed) as a proportion/percentage of the working age population, whereas the labour force underutilisation rate represents the proportion/percentage of the labour force who are unemployed and underemployed. A similarity between the two measures is that they are both derived from labour market statistics compiled by the ABS and therefore provide an indication of labour market conditions that exist in the economy. A key difference between them is that the LFPR is designed to provide an indication of the size of the actual labour supply in Australia compared to the potential labour supply, while the LFUR is designed to provide an indication of any spare capacity in the labour market [or that portion of our labour supply that are not fully engaged in the labour market or in employment].

**Note:** Students are free to make reference to any meaningful similarity and difference. For example, in relation to a similarity, students might refer to the fact that growth in the labour supply due to immigration for example will tend to increase both the LFPR and the LFUR, while in relation to a difference they might simply refer to the starkly different rates that typically exist at any point in time (e.g. approximately 67% for the LFPR and approximately 10% for the LFUR).

f. Describe how growth in the labour force participation rate might cause the unemployment rate to rise.

2 marks

- 1 mark for a superficial description (e.g. because a higher LFPR means more people are looking for work and become unemployed)
- 2 marks for a comprehensive description (e.g. as shown in the sample answer)

Advice: The new 2023 Study Design still requires students to understand various labour force statistics, including the participation rate, the unemployment rate [and the labour force underutilisation rate]. It also requires students to 'apply economic concepts to analyse economic relationships', such as the relationship between the participation rate and the unemployment rate. Generally, students should be prepared to explain the relationship between these two 'rates' in both directions. In other words, how a change in the participation rate influences the unemployment rate and how a change in the unemployment rate influences the participation rate. For the current question, there is no need to examine the latter relationship (i.e. how a rise in the unemployment rate might influence the labor force participation rate to fall). Given the wording of the question (and the low mark allocation), there is no requirement for students to discuss the potential reduction in the rate of unemployment that might occur over time following an increase in the participation rate.

**Sample answer:** An increase in the labour force participation rate will usually tend to increase the unemployment rate [in the short term] because an increase in the LFPR will typically be a consequence of more people looking for work [e.g. following an increase in immigration] which increases the size of the labour force relative to the working age

population. While these people are in the job search phase, they are technically classified as unemployed (until they eventually secure employment) and leads to an increase in the unemployment rate as measured by the total number of unemployed as a proportion of the labour force.

g. Explain how the movement in the unemployment rate since 2020-21 has helped to exert downward pressure on the cyclical budget deficit.

3 marks

- 1 mark for demonstrating an understanding of what is meant by a cyclical budget deficit
- 2 marks for a sound explanation for how the lower rate of unemployment and/or economic recovery has improved the cyclical deficit

Advice 1: The new 2023 Study Design (U4 AOS 1) requires students to demonstrate an understanding of the effects of automatic and discretionary changes in the budget on the budget outcome (as well as the effect of automatic and discretionary changes in influencing aggregate demand and stabilising the business cycle). As noted in the 2023 CPAP Economics Exam C, it is quite common for students to lose valuable marks in the examination by misinterpreting questions that relate to the cyclical (and structural) components of the budget. Students should be aware that the cyclical components of the budget refer to automatic stabilisers and the structural components of the budget refer to discretionary stabilisers. Importantly, students need to remember that automatic/discretionary stabilisers can be examined from two angles. First, the impact that they can have on the budget outcome (which is the focus of the current question) and second, the impact that they can have on the economy (e.g. the impact on aggregate demand and the business cycle). It is not uncommon for students to write a brilliant response, demonstrating a clear understanding of how automatic/discretionary stabilisers impact on the economy (e.g. AD and economic growth), when the question is actually asking students to explain how these stabilisers impact on the budget outcome.

**Advice 2:** The movement in the unemployment rate over time can be considered a proxy for movements in the business cycle or movements in the rate of economic growth, provided that one assumes that the change in the unemployment rate is driven primarily by changes in AD or cyclical unemployment. In the context of the current question, students should simply assume that, since 2020-21, the reduction in the unemployment rate (to as low as 3.4% for example) represents a reduction in cyclical unemployment (although this is technically not required when linking a lower rate of unemployment to an improvement in the budget outcome).

Sample answer: The reduction in the rate of unemployment since 2020-21 (e.g. to as low as 3.4% in late 2022) reflects a relatively stronger rate of economic growth and an economy in the recovery phase of the business cycle. The lower rate of unemployment will, in itself, lead to an automatic reduction in government expenditure on income support [e.g. JobSeeker], which reduces the size of government expenditure relative to government revenue, thereby reducing the size of the cyclical budget deficit (i.e. the part of the budget outcome that changes automatically when economic activity changes). In addition, the stronger rate of growth that typically accompanies a lower rate of unemployment will also help to boost incomes and generate an increase in income tax revenue for the government, which boosts the size of government revenue relative to government expenditure and further reduces the size of the cyclical deficit.

**Note:** Students can still achieve full marks if they focus solely on how the lower rate of unemployment reduces government expenditure and leads to a reduction in the cyclical deficit (i.e. they make no reference to the impact on the revenue side of the budget).

h. Describe a weakness associated with monetary policy in terms of its ability to reduce both inflation and unemployment since 2022 and explain how budgetary policy could be employed to overcome this weakness.

2 marks

- 2 marks for a description of a weakness of monetary policy (MP) in terms of its ability to reduce inflation
- 2 marks for explaining how budgetary policy (BP) can be used to overcome the weakness (focus on a strength of BP regarding tackling inflation)
- 2 marks for a description of a weakness of MP in terms of its ability to reduce unemployment
- 2 marks for how BP can be used to overcome the weakness (focus on a strength of BP regarding reducing unemployment)

**Note:** When assessing student responses relating to the weaknesses associated with monetary policy, full marks cannot be achieved if a theoretical approach is employed – i.e. the response is not tailored to the economic conditions prevailing in the economy since 2022 (see Advice 2 below). A maximum of 2 marks out of the possible 4 marks allocated to this part of the question is recommended.

Advice 1: This question relates to both the key knowledge (to understand the strengths and weaknesses of using monetary and budgetary policies) and key skill (analyse the strengths and weaknesses of aggregate demand policies in achieving the domestic macroeconomic goals and living standards) listed in the Study Design. evaluation/analysis of the effectiveness of policy (both monetary policy and budgetary policy) is an area of the course that students find difficult to perform. In relation to budgetary policy, Q2d required students to 'evaluate the use of budgetary policy in achieving the Australian Government's goal of full employment'. Only 18% of students achieved full marks and the average score was a low 1.9/4 (48%). Q2c of the 2021 exam required students to describe a strength and weakness associated with its use to achieve strong and sustainable economic growth, with students achieving a low average of 55%. In relation to monetary policy, the 2021 and 2020 exams required students to explain weaknesses associated with monetary policy (2021, Q1d with a low average of 55%) and evaluate the effectiveness of monetary policy (2020, Q2d with a low average of 42%). The most common mistakes made by students when discussing/evaluating strengths and weaknesses are, first, to simply describe how the policy is used over the relevant period, rather than canvass those issues or factors that make the policy particularly potent or particularly weak in achieving the particular objective in question. Second, it is too common for students to list or outline a theoretical strength/weakness without tailoring it to the question at hand or the macroeconomic goal in question (See Advice 2).

Advice 2: For the current question, it would be tempting for students to simply provide a theoretical weakness of monetary policy, such as its blunt nature, instead of responding to the contemporary nature of the question. For example, students might refer to the blunt nature of monetary policy, arguing that it cannot target particular sectors, which limits its ability to control inflation and reduce unemployment. Broadly, this sounds reasonable. However, students need to tailor their response to the economic conditions prevailing in the economy since 2022. Given that inflation has been mostly (but not exclusively) driven by supply side events, and cyclical unemployment is largely absent, these conditions expose monetary policy's limitations in terms of its inability to both reduce cost inflationary pressure, and its inability to reduce any other types of unemployment apart from cyclical unemployment (e.g. structural unemployment). In this respect, it highlights the comparative strength of budgetary policy that stems from its multidimensional nature and ability to be more targeted and flexible. See the Note above in relation to effect on marking allocation.

Sample answer: With respect to inflation, monetary policy's bluntness and lack of flexibility has constrained its ability to reduce the rate of growth in the CPI given that inflation has been driven primarily by cost inflationary pressures (e.g. higher cost of oil, fuel, energy, transport, etc). To fight inflation, the RBA can only increase interest rates, which is only effective at reducing demand inflationary pressures in the economy. Monetary policy cannot therefore target the underlying cost pressures that have been the driving forces behind the high rates of inflation in Australia [e.g. it cannot reduce fuel prices]. It is therefore forced to rely on its ability to offset the cost inflationary pressures by reducing aggregate demand (AD) and demand inflationary pressures [as well as inflationary expectations]. This means that the tightening of monetary policy that has been occurring over 2022-23 has come at the real risk of reducing AD by so much that real GDP growth declines to low levels (or even becomes negative), unemployment starts to rise by too much and living standards become compromised [in the short to medium term] as incomes fall.

Budgetary policy could be used to overcome this weakness by implementing specific initiatives that target the source of the cost pressures. For instance, the government's ability to introduce [temporary or permanent] changes to

business taxes and subsidies can help to alleviate cost pressures for businesses and exert downward pressure on cost inflation. The temporary halving of fuel excise in late March 2022 [despite its introduction partly for political reasons] and further energy price relief measures in the 2034-24 Budget were designed to ease cost of living pressures for Australian households by reducing the cost inflationary impacts of higher fuel and energy prices. [This highlights a clear strength of budgetary policy relative to monetary policy in terms of its flexibility and ability to target particular sectors/industries/problems that require attention in the economy.]

With respect to full employment, monetary policy's bluntness via its sole reliance on interest rates once again prevents it from reducing unemployment. This is particularly the case when unemployment is close to or at the full employment level (or NAIRU), which is the case over 2022-23. This is because when unemployment is at the full employment level, or at NAIRU, by definition it means that cyclical unemployment is zero and that any remaining unemployment is made up of the other types of unemployment – structural, hard core, frictional and seasonal. Monetary policy and its manipulation of interest rates [to influence AD] is extremely limited in its ability to reduce these types of unemployment, unlike budgetary policy, which is more multifaceted or multidimensional and therefore better able to target other types of unemployment. For example, it can target those unemployed for a prolonged period of time due to a lack of skills [long term/structural unemployment]. When the economy is already at full employment, any further reductions in interest rates (via loosening monetary policy) will have a limited impact on reducing unemployment and instead cause inflation to accelerate. However, the government can introduce specific budgetary policy initiatives that are designed to reduce structural unemployment, such as expenditure on training/education programmes for the long term unemployed, which not only helps to reduce unemployment but also helps to reduce the unemployment rate at which NAIRU exists.

#### Question 3 (21 marks)

Russia's war of aggression against Ukraine continues to overshadow the world economy. Despite recent signs of improvement, recovery over the next two years is expected to be moderate. The outlook remains fragile and downside risks predominate. High uncertainty generated by the war could take a heavy toll on activity.

Source: OECD Global Economic Outlook, March 2023

a. Examine how a slower rate of economic growth overseas is likely to influence both Australia's exchange rate and the achievement of a strong and sustainable rate of economic growth.

5 marks

- 1 mark for demonstrating an understanding of what is meant by a strong and sustainable rate of economic growth
- 2 marks for a sound explanation of how a slower rate of overseas economic growth contributes to a lower exchange rate
- 2 marks for a sound explanation of how a slower rate of economic growth contributes to a slower rate of domestic economic growth and negatively impacts on the achievement of the goal

**Note 1:** Full marks cannot be awarded to students who examine the relationship between a lower exchange rate and a stronger rate of economic growth. It is recommended that students receive a maximum of 1 out of 2 marks for this part of the question if this relationship is explored.

**Note 2:** Students can be rewarded if they attempt to explain how slower rates of growth overseas might help to achieve strong and <u>sustainable</u> economic growth to the extent that they focus on how slower global growth can result in our current rates of growth being more sustainable into the future (e.g. helping to minimise inflationary/environmental/external pressures). However, full marks should not be awarded for this approach, and it is recommended that students receive a maximum of 1 out of 2 marks for this part of the question.

**Advice:** The Study Design requires students to demonstrate an understanding of various aggregate demand and aggregate supply factors that influence the achievement of the key macroeconomic goals. For questions phrased in this way it is important that students don't make the common mistake of examining the relationship between the wrong variables. Students need to examine <u>two</u> relationships. First, how slower global growth influences Australia's exchange rate and second, how slower global growth influences the achievement of strong and sustainable economic growth. In relation to the second relationship, it is not uncommon for students to make the mistake of examining how the lower exchange rate (that stems from lower global growth) might help to assist with a stronger rate of economic

growth. While the explanation of the relationship between the lower exchange rate and economic growth might be sound, it is an example of the student not answering the question and full marks cannot be awarded.

Sample answer: The slower rate of global growth, particularly if experienced by Australia's major trading partners [particularly China] will contribute to an exchange rate depreciation in Australia. This is because the slower growth in global demand will lead to a reduced demand for Australian exports, which ultimately reduces demand for the AUD on foreign currency markets and therefore reduces the price of the AUD. The slower global growth will negatively impact on the ability to achieve the goal of strong and sustainable rate of growth in Australia, which is one considered to be high enough to create jobs, incomes and boost living standards without being excessive to the extent that it leads to excessive inflation and/or environmental and/or external pressures. This is because the reduced demand for exports leads to a decline in the demand for and production of net exports, negatively impacting on aggregate demand and real GDP. This is likely to reduce the rate of growth in real GDP (i.e. economic growth) below what is considered to be strong enough to provide an acceptable boost to employment, incomes and living standards – which is a growth rate of approximately 3.5%.

# b. Explain why slower rates of growth overseas can reduce the terms of trade and decrease Australia's current account surplus.

4 marks

- 0.5 marks for demonstrating an understanding of the terms of trade
- 0.5 marks for demonstrating an understanding of the current account surplus
- 1.5 marks for a sound explanation of how a slower rate of growth overseas can reduce the terms of trade
- 1.5 marks for a sound explanation of how a slower rate of growth overseas can decrease the current account surplus

**Note 1:** It is expected that some students will attempt to link the lower exchange rate (as determined in their response to part a. above) to an increase in the current account surplus. This approach cannot receive full marks because students will be ignoring the first-round effects of slower global growth in reducing net export demand and consequently any BOMT/CA surplus.

Advice 1: The Study Design requires students to demonstrate an understanding of the terms of trade, both its meaning and how it is measured, as well as both the causes and effects of movements in the terms of trade. As noted in CPAP 2023 Exam C, examination questions related to the terms of trade, either definition or the causes/effects, regularly cause students problems. Students will typically confuse the terms of trade with the trade weighted index (TWI); the terms of trade with the balance of trade (or BOMT) and/or inappropriately define the terms of trade as the value of exports over the value of imports (or even 'exports over imports'). For this question, students should appreciate that the first part of the question relates to a cause of a change in the terms of trade, with slower growth overseas resulting in the prices received for exports falling relative to the prices paid for imports. It does not refer to exports falling relative to imports; or the value of exports falling relative to the value of imports; or worse the price of imports falling relative to the price of exports – all of which are examples of common mistakes made by students in the context of a question such as this.

**Advice 2**: Questions related to the current account balance are often poorly handled in examinations. First, students should avoid confusing a current account surplus with a budget surplus or a current account surplus with a CAFA surplus. Second, students should attempt to demonstrate some understanding of the sub-accounts within the current account and refer to the relevant sub-account which is primarily responsible for the decrease in the overall current account surplus. For example, in the context of the current question, slower rates of growth overseas will typically lead to a reduction in the demand for Australian exports (e.g. commodities that fuel overseas growth) which negatively impacts on the BOMT and/or the BOGS (which then reduces the current account surplus).

**Advice 3:** It is expected that students will attempt to link the slower growth overseas with a reduction in the current account surplus – which is the intent of the question. However, many students will naturally attempt to link the resulting decline in the terms of trade with a reduction in the current account surplus. Unlike part a., students can achieve full marks for this approach given that slower global growth will also tend to reduce any current account surplus via a reduction in global commodity prices and the resulting reduction in Australia's terms of trade, which then reduces export values relative to import values.

Sample answer: Slower rates of economic growth overseas contribute to a reduction in the terms of trade because the demand for global commodities like iron ore and coal (which are key inputs in production for most economies) will fall, which leads to a reduction in the prices received by Australian commodity exporters. This necessarily reduces Australia's terms of trade because the prices received for exports falls relative to the prices paid for imports. The slower growth overseas will naturally reduce the demand for many of Australia's exports, such as exports of tourism and education, as lower incomes abroad result in fewer foreigners holidaying in Australia [or foreigners deciding against sending their children to study in Australia] which in turn leads to a reduction in the Net Services surplus within the current account, which contributes to a reduction in the overall current account surplus within the balance of payments. [The reduction in the terms of trade that stems from a declining growth rate overseas will also directly reduce the BOMT within the current account because the overall value of exports will fall as a result of lower prices received for any given volume of exports. This further reduces the size of the current account surplus.]

**Note 2:** Square bracketed section is not required for full marks.

- c. Explain how a large increase in job vacancies in Australia and a decline in economic growth overseas might influence the setting of aggregate demand policies.

  5 marks
  - 0.5 marks for identifying that an increase in job vacancies is likely to cause AD policies to become less
    expansionary
  - 0.5 marks for identifying that a reduction in global growth is likely to cause AD policies to remain expansionary (or not become less expansionary)
  - 2 marks for a logical and meaningful explanation for why an increase in job vacancies cause AD policies to become less expansionary
  - 2 marks for a logical and meaningful explanation for why a projected reduction in global growth is likely to cause AD policies to remain expansionary (or not become less expansionary)

**Note 1:** There is no requirement for students to make any determination as to which of the two influences will be more pervasive. In other words, students are only expected to explain that higher job vacancies will influence policy makers to reduce the expansionary stance and that declining overseas growth will influence policy makers not to reduce the expansionary stance.

Advice 1: A key skill in the new 2023 Study Design is the requirement for students to 'analyse the effect of current factors on the setting of aggregate demand policies'. Students should therefore be aware of the various factors that may have contributed to the delivery of expansionary monetary (and budgetary) policies over 2020-21 and the reversal over 2022-3, as capacity constraints became apparent, unemployment fell to (below) 'full employment' levels and inflation increased above the RBA's target range. Question 1e of the 2022 exam required students to 'explain how movements in Australia's inflation rate and the unemployment rate may have influenced the stance of monetary policy'. This question was relatively straightforward when compared to the 2019 and 2018 versions as both variables pointed to a less expansionary monetary policy setting. However, less than a third of students (31%) achieved the full 4 marks, with many students misreading the question and exploring the transmission channels of monetary policy i.e. they focused on how the less expansionary stance actually helps to reduce AD and inflationary pressures and increase the unemployment rate.

Advice 2: The 2019 and 2018 exams contained examples of questions that were not well answered by students. With respect to the 2019 question, it was the most poorly handled question on the paper, with an average score of 38% (2.3/6). Students were asked to explain how a fall in the rate of unemployment and weaker than expected growth in wages would influence the setting of aggregate demand policies. Many students did not appreciate that the question was about the influence on the 'setting of AD policies' (e.g. how and why the scenario might encourage both monetary and budgetary policy to become more expansionary) and instead focused solely on how expansionary (AD) policies would encourage an increase in economic growth, growth in wages and a further reduction in the rate of unemployment towards the new lower NAIRU. In other words, insufficient time was spent on explaining/analysing how the combination of a lower rate of unemployment and weaker than expected wages growth can imply that AD is insufficient and that expansionary AD policies may have been an appropriate response. Too many students were unable to reconcile the combination of lower unemployment rates and slow wages growth, therefore not recognising the relevance of underemployment/casualisation of the labour force and the existence of spare capacity in labour markets despite lower unemployment rates.

**Sample answer:** An increase in job vacancies in Australia reflects a tighter labour market and the increasing prevalence of labour shortages/capacity constraints across the economy. This is expected to add to inflationary pressures as the excess demand in labour markets cause wages (the price of labour) to rise which adds to production costs and prices [cost inflationary pressures], as well as adds to growth in aggregate demand [demand inflationary pressures]. This is likely to result in budgetary and monetary policies becoming less expansionary or more restrictive, with the government becoming less willing to continue with structural budget deficits and the RBA more willing to consider further tightenings of monetary policy via additional increases in the target cash rate [above the 4.1% existing at the current time – July 2023].

However, the declining rate of economic growth overseas will tend to have the opposite influence on policy settings. This is because slower overseas growth is expected to reduce both aggregate demand [via a reduction in net export demand] and the growth in real GDP, which will help to reduce [demand] inflationary pressures within Australia. In this environment, the government will be more likely to continue delivering structural budget deficits (e.g.delivering further tax concessions) and the RBA will be less likely to further tighten monetary policy [by as much as otherwise] because of fears that adopting a more restrictive stance will potentially cause economic growth to decline too much and trigger a recession.

**Note 2:** Square bracketed section is not required for full marks.

d. Explain how the implementation of one recent aggregate supply policy initiative is expected to assist with the achievement of a strong and sustainable rate of economic growth for Australia.

4 marks

- 1 mark for an outline of a recent aggregate supply initiative
- 2 marks for a logical and meaningful explanation of how the initiative helps to increase aggregate supply (or productive capacity) and achieve a higher rate of economic growth
- 1 mark for a link to lower prices and more sustainable growth

**Note 1:** Students who focus solely on the way an aggregate supply policy initiative, such as increased investment in infrastructure, impacts on aggregate demand (via Investment) and the achievement of a stronger rate of economic growth should be rewarded with a maximum of 1 mark.

**Note 2:** Students are not required to spend much time demonstrating an understanding of strong and sustainable <u>rate</u> of economic growth given that this was largely the focus of part a. However, students still need to link the initiative to the <u>strong</u> and <u>sustainable</u> component of the goal in order to achieve full marks.

**Advice 1:** As noted in the 2023 CPAP Economics Exam C, students need to be prepared to answer questions on the operation of aggregate supply policies, the types of aggregate supply policies, and how aggregate supply policies are designed to influence aggregate supply/productive capacity and assist with the achievement of Australia's domestic macroeconomic goals. There are a host of aggregate supply policies to choose from, and students are not restricted to the list of supply side initiatives specifically listed in the Study Design (i.e. spending on training and education, research and development grants, subsidies, and investment in infrastructure, tax reform and skilled immigration). Generally, the easiest approach is to focus on supply side initiatives announced in recent budgets.

Advice 2: Questions related to the implementation and/or impact of aggregate supply policies have featured in Section B of every exam over the life of the former Study Design. This includes the 2022 exam (Q3b,c and d) and 2021 exam (Q 2d and 3b). Students continue to make the same types of errors each year, including the propensity to spend too much time describing the initiative(s) and insufficient time on an explanation/description of how the initiative(s) actually influence(s) the target variables in the question (e.g. inflation/living standards in the 2022 exam and strong and sustainable growth in the 2021 exam). Importantly, for a question such as this, given that the target variable is 'strong and sustainable growth', the best responses will be those that highlight how the aggregate supply initiatives help to boost both the rate of economic growth (i.e. focusing on the <u>strong</u> component of the goal) as well as the <u>sustainable</u> component of the goal (i.e. focusing on how the growth is non-inflationary).

**Sample answer:** A recent example of government investment in infrastructure includes the additional spending [of \$17.9B] committed to road, rail and community infrastructure projects across Australia in the 2022-23 Budget. The

investment should help to upgrade key freight routes which will better connect Australian producers (e.g. farmers and miners) to markets, including export markets, via better highways or rail for example. The upgraded infrastructure should increase productivity levels over time, as the cost and speed of transportation services will improve [reflecting an improvement in the quality of physical capital], boosting productive efficiency and enabling businesses to produce more goods and services over any given time period (i.e. increase in aggregate supply/productive capacity). This ultimately reduces average costs of production and prices, boosting (international) competitiveness and generating an increase in AD and real GDP, which helps to achieve a stronger and more sustainable (non-inflationary) rate of economic growth.

**Note 3:** Square bracketed section is not required for full marks.

e. Outline why the achievement of the goal of strong and sustainable economic growth increases the ability of government to provide essential services.

3 marks

- 1 mark for linking a strong rate of economic growth with increased government revenue
- 1 mark for linking increased government revenue with increased capacity to spend money on goods and services
- 1 mark for linking the increased spending to spending on 'essential services'

**Note:** To achieve full marks students need to demonstrate some understanding of what is meant by essential services, or at least provide some examples of essential services. This means that it is insufficient to simply provide a link between increased capacity to spend and greater expenditure on government services more generally.

Advice: The Study Design requires students to demonstrate an understanding of the reasons for pursuing a strong and sustainable rate of economic growth including, lowering of the UE rate, growth in real income and increased ability of government to provide essential services. An exam question has not addressed the link between the goal and the ability to provide essential services over the life of the Study Design, but It shouldn't prove to be too problematic for students. The better performing students will immediately see the connection between the achievement of the goal and the improvement in the government's budget position, which of course puts it in a better position to provide essential services, such as defence, health, and education.

**Sample answer:** The achievement of the goal [as described earlier] implies that the rate of economic growth is relatively high [e.g. approximately 3.5%] which will reflect strong growth in national income and expenditure, as both business profits and income from wages/salaries/bonuses will be growing relatively strongly. Given that the bulk of government tax receipts are levied on either incomes earned (e.g. company tax and personal income tax), or expenditure on goods and services (e.g. the GST), it means that government revenue will increase in line with growth in incomes and expenditure across the economy. This provides the government with an increased ability to spend on essential services, including defence, health, and education, without adding to pressure on both the budget deficit and government debt.