VCE ECONOMICS ¾

CPAP Practice examination No 2 2021

SUGGESTED RESPONSES, MARKING SCHEME AND ADVICE

Answers to MC questions

1	A	**B**	C	D
2	A	B	C	**D**
3	A	B	**C**	D
4	A	**B**	C	D
5	A	B	**C**	D
6	A	B	C	**D**
7	**A**	B	C	D
8	A	B	**C**	D
9	**A**	B	C	D
10	A	B	**C**	D
11	A	**B**	C	D
12	**A**	B	C	D
13	A	**B**	C	D
14	**A**	B	C	D
15	A	**B**	C	D

Question 1

Which of the following statements is true in relation to the difference between government current and capital expenditure?

A. Payments for defence equipment (e.g. tanks) is an example of current expenditure whilst payments to defence personnel (e.g. wages of soldiers) is an example of capital expenditure

B. *Capital expenditure typically creates benefits beyond the current budget period compared to current expenditure*

C. Spending on infrastructure is an example of current expenditure and the purchase of consumables by a hospital (e.g. rubber gloves and syringes) is an example of capital expenditure

D. Total government spending on health and welfare outlined in the budget includes only current expenditure

The inclusion of capital versus current expenditure is one of the key knowledge points in the current Study Design. The distinction between the two types of expenditure is important in the context of budgetary policy (or businesses and households more generally) because it helps the government to determine the ongoing value related to its budget expenditures. Excessive current expenditure relative to capital expenditure will typically have negative implications for longer term living standards, and governments are always concerned about achieving the right balance between the two types of expenditures. **Option B is the best response** *because it contains the only accurate statement – capital expenditure such as the purchase of x-ray machines for a hospital will continue to benefit the hospital (or the government) into the future (beyond the current budget period) unlike current expenditure, such as the purchase of face masks which confer short term benefits (typically within the current budget period). All other statements are incorrect.*

Question 2
Assume that a hypothetical economy has the following labour market statistics

Total population	120 million
Working age population	100 million
Total employed	60 million
Job vacancies	1 million
Unemployed persons	20 million
Underemployed persons	20 million
Labour force	80 million

Which of the following statements is correct?

A. The unemployment rate is 20%, the labour force underutilisation rate is 20% and the labour force participation rate is 80%

B. The unemployment rate is 25%, the labour force underutilisation rate is 20% and the labour force participation rate is 60%

C. The unemployment rate is 33%, the labour force underutilisation rate is 50% and the labour force participation rate is 60%

D. *The unemployment rate is 25%, the labour force underutilisation rate is 50% and the labour force participation rate is 80%*

The Study Design specifically requires students to demonstrate the skill of calculating relevant economic indicators using real or hypothetical data. Student responses to multiple choice questions over the past few years have highlighted the difficulty that students have experienced demonstrating this key skill. For example, Question 7 of the 2017 exam required students to calculate the rate of inflation from hypothetical CPI numbers and only 40% chose the correct response. Again, in the 2018 exam, students were asked virtually the same question and still 34% failed to select the correct response. In the 2019 exam, Question 13 required students to calculate the unemployment rate from the following data:

Total population	100 million
Total employed	70 million
Unemployed persons	10 million
Underemployed persons	2 million

*The options were A: 10% B: 12%, C: 12.5% and D: 15%. Only 37% of students correctly selected C, with most students selecting A (41%). Those selecting A would have made the simple mistake of dividing the 10 million unemployed persons by total population (100 million) to arrive at 10%, forgetting (or not being aware) that the unemployment rate is determined by dividing the number of unemployed persons by the labour force (which is made up of total employed plus unemployed) (i.e. 10m/80m = 12.5%). The current question is more complex given that students are required to perform more than one calculation. However, if students are aware of how each of the relevant labour market indicators are determined (i.e. the unemployment rate, the labour force underutilisation rate and the labour force participation rate) then the calculations required to determine the correct response shouldn't be too difficult. **Option D is the correct response** because the unemployment rate is calculated as the unemployed as a proportion of the labour force (20/80 x 100 = 25%), the labour force underutilisation rate is calculated as the unemployed + underemployed as a proportion of the labour force ((20+ 20)/80 x 100 = 50%) and the labour force participation rate is calculated as the labour force as a proportion of the working age population (80/100 x 100 = 80%). All other options include one or more of the relevant statistics being inaccurate.*

Question 3
A rise in the trade weighted index is likely to occur if

A. There is a decrease in efficiency within the tradables sector of the Australian economy
B. There is a fall in commodity prices
C. *A more expansionary monetary policy stance is delivered in most other countries*
D. Inflation rates decrease in Japan, the USA and China

*The Study Design requires students to have an understanding of the factors affecting the value of Australia's exchange rate, including relative interest rates, demand for exports and imports, capital flows, the terms of trade and relative rates of inflation. Questions related to exchange rate movements have featured regularly in past exams, and students often confuse causes and effects of changes in the exchange rate, as well confusing the exchange rate measure used in this question (i.e. the trade weighted index) with the balance on trade and the terms of trade. **Option C is the best response** because a more expansionary monetary policy setting overseas will reduce foreign interest rates relative to Australian interest rates (i.e. increases Australian interest rates relative to foreign interest rates) which will attract capital inflow as foreigners chase higher returns in Australia, which leads to an increased demand for the Australian dollar in foreign exchange markets and a corresponding increase in the price or value of the Australian dollar as measured by the trade weighted index. Option A is incorrect because lower levels of efficiency should raise production costs and inflation, reducing Australia's international competitiveness and decreasing both the demand for and value of the Australian dollar (TWI). Option B is incorrect because lower commodity prices lead to a fall in the value of commodity exports (i.e. lower prices for any given quantity of exports) which also leads to a decrease in both the demand for and value of the Australian dollar. Option D is incorrect because lower rates of inflation experienced overseas necessarily means that Australia's relative rate of inflation increases, once again reducing Australia's international competitiveness and decreasing both the demand for and value of the Australian dollar.*

Question 4
In terms of the circular flow model of income in an open contemporary macroeconomy, a decrease in national savings is likely to:

A. Decrease injections relative to leakages and reduce economic growth in the short-term
B. *Decrease leakages relative to injections and increase economic growth in the short-term*
C. Decrease leakages relative to injections and decrease economic growth in the short-term
D. Decrease leakages relative to injections and increase economic growth in the long-term

*The Study Design specifically requires students to demonstrate an understanding of the circular flow model of income. It is unlikely that students will be required to draw the complete model in Section B of the exam given that this would be quite time consuming. Instead, students should expect to interpret the model in some way and/or use it to illustrate how certain factors might impact on AD or real GDP. For example, students might be asked to explain how the further loosening of monetary policy in November 2020 might have influenced AD, making reference to the circular flow model of income. Alternatively, students might be asked to outline how the 2020-21 appreciation of the Australian dollar impacted on AD and real GDP, making reference to the circular flow model of income. For the current question, students are effectively required to distinguish leakages from injections, as well as appreciate the different short-term and long-term impact following a decrease in national savings. Lower savings results in reduced leakages from the model (as more is now spent on Consumption and aggregate demand). Accordingly, in the short-term it positively impacts on aggregate demand and economic growth, which of course makes **option B the best response**. Option A is incorrect because it refers to injections decreasing relative to leakages in the short-term. Option C is incorrect because it refers to a decrease in economic growth in the short-term. Option D is incorrect because it refers to an increase in economic growth in the long-term, when the reverse is true (i.e. lower savings today ultimately results in higher interest rates, which discourages investment and therefore leads to lower aggregate demand in the future.)*

Question 5
If the government provides a further increase in welfare payments (e.g. increased JobSeeker allowance) this is likely to have which of the following effects on both the budget outcome and aggregate demand?

A. an increase in the budget deficit and an increase in Government Consumption demand (G1)
B. an increase in the budget deficit and an increase in Government Investment demand (G2)
C. *an increase in the budget deficit and an increase in Consumption demand (C)*
D. a decrease in the budget deficit and an increase in Government Consumption demand (G1)

Option C is the best response *because an increase in welfare payments results in an increase in Government expenditure (i.e. transfer payments) which, ceteris paribus, will increase the size of the budget deficit and result in more Consumption demand once the welfare recipients spend this additional transfer income. Those who chose options A or B are likely to be making the common mistake of including transfer payments in either G1 or G2 when determining the impact on aggregate demand. It is important to remember that an increase in transfer payments (such as welfare) does indeed represent government expenditure, but it does not represent additional demand for goods and services in the economy (i.e. it does not enter aggregate demand) until the recipients actually spend the money on goods and services (i.e. Consumption).*

Question 6
Which of the following is most likely to reflect an increase in non-material living standards?

A. An increase in both real GDP per capita and real incomes per capita
B. An increase mental illness associated with ongoing lockdowns during the COVID-19 pandemic
C. An increase in crime rates
D. *An increase in the success of programs designed to vaccinate the population against the coronavirus*

*The Study Design requires students to know the difference between material and non-material living standards as well as those factors that might influence living standards, including access to goods and services, environmental quality, physical and mental health, life expectancy, crime rates and literacy rates. **Option D is the best response** because successful vaccination will directly improve health outcomes of Australians and therefore improve quality of life that is unrelated to the consumption of goods and services.   Option A is an invalid response because it will directly reflect an increase in material living standards rather than non-material (although there will be some associated indirect improvement in non-material living standards given the link between higher employment/incomes/consumption/material possessions and non-material factors, including mental health). Options B and C are incorrect because an increase in mental illness and crime rates will impact negatively upon non-material living standards.*

Question 7
If an Australian mining company purchases $1 billion of mining equipment and finances the purchase by selling shares in the company to foreign investors, the transaction will have which of the following effects in Australia's balance of payments?

A. *Increase the Current Account Deficit, increase the Capital and Financial Account Surplus, and increase net foreign equities*
B. Increase the Current Account Deficit, increase the Capital and Financial Account Surplus, and increase net foreign debt
C. Increase the Current Account Deficit, decrease the Capital and Financial Account Surplus, and increase net foreign debt
D. Decrease the Current Account Deficit, increase the Capital and Financial Account Surplus, and decrease net foreign debt

*The Study Design requires students to demonstrate an understanding of the relationship between the current account and the capital and financial account (CAFA) in addition to understanding the composition and cause of net foreign debt and net foreign equities. Students often find this area of the course challenging, with students often confusing net foreign debt with net government debt, net foreign debt with net foreign equities (or net foreign liabilities), the current account balance with the current account deficit, or confusing stocks and flows (e.g. arguing that Australia needs to repay a current account deficit when it is the stock of (foreign) debt that needs to be repaid). For the current question, **option A is the best response** because all of the key variables move in the right direction. The $1 billion purchase of equipment leads to an increase in imports, a reduction in the Balance on Merchandise Trade and a resulting increase in the CAD which, of course, must be offset by an increase in the CAFA surplus (to ensure that the balance of payments equals zero) that occurs when the funds (from the sale of shares) enter the country. This raises the stock of foreign ownership of Australian assets (i.e. foreign equity) and leads to an equivalent increase in net foreign equities. All other options B -D have at least one of the variables moving in the wrong direction.*

Question 8
If it is assumed that the government must deliver a budget outcome equal to zero on an annual basis, then

A. The government must reduce discretionary government expenditure during a boom phase of the business cycle
B. The government must reduce revenue (e.g. raise tax rates) during a business cycle contraction
C. *Budgetary policy would be less effective at stabilising the business cycle*
D. None of the above are accurate

*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 C is the best response** because if the government is determined 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. For example, during a boom, the budget automatically tends towards surplus as tax revenue automatically rises and (welfare/income support) expenditure falls. If the government was required to avoid the surplus and achieve budget balance, it would then necessitate a (discretionary) reduction in taxation and/or a (discretionary) rise in government expenditure, the combined effect of which is to stimulate AD further and intensify the boom. Of course, the reverse applies during a recession or downturn (i.e. the budget will be unable to go into (structural) deficit to support growth when the economy experiences a downturn). Option A is incorrect because during a boom, automatic stabilisers will push the budget towards a surplus, which would then require the government to introduce discretionary spending initiatives that force the surplus back towards balance (zero). Option B is incorrect because during a business cycle contraction, automatic stabilisers will push the budget towards a deficit so the government would need to increase revenue (e.g. raise taxes) to ensure the budget remains balanced.*

Question 9
Consider the following hypothetical Consumer Price Index (CPI) data.

Quarter	CPI
June2021	100.0
Sep 2021	110.0
Dec 2021	120.0
Mar 2022	125.1
June 2022	119.7
Sep 2022	125.0
Dec 2022	132.0

Which of the following statements is correct?

A. *The annualised rate of inflation for the September quarter 2021 is 40% and the annual rate of inflation for the year to end December 2022 is 10%*
B. The annualised rate of inflation for the September quarter 2021 is 10% and the annual rate of inflation for the year to end December 2022 is 10%
C. The annualised rate of inflation for the September quarter 2021 is 40% and the annual rate of inflation for the year to end December 2022 is 12%
D. The annualised rate of inflation for the September quarter 2021 is 10% and the annual rate of inflation for the year to end December 2022 is 12%

Option A is the best response *because the quarterly rate of inflation for the September quarter is 10% [i.e. ((110-100)/100) X 100 = 10%] which represents an annualised figure of 40% (4 X 10%). In addition, the annual rate of inflation for the year to end December 2022 is 10% [i.e. (132-120 = 12 and then (12/120) X 100 = 10%]. All other options, B – D involve at least*

one of the two relevant variables being incorrect. Students should note that this question is similar to a combination of past questions that were poorly handled by students. Question 7 from the 2017 exam, which was the most poorly handled multiple-choice question on the paper. In that question, students were 'effectively' asked (see Note below) to determine the increase in the CPI (i.e. determine the inflation rate) from a given set of CPI numbers. The question is pasted to the right. A surprising 56% of students chose B, making the mistake of focusing on the difference between the CPI number for year 3 and that for year

Consider the following hypothetical Consumer Price Index (CPI) data.

Year	CPI
1	100
2	110
3	121

The increase in the annual rate of inflation from Year 2 to Year 3 is
A. 10%
B. 11%
C. 20%
D. 21%

*2 - which is 11, and then making the mistake of assuming that this was the rate of inflation (i.e. 11%). Instead, students needed to divide the 11 by the CPI number at the start of the relevant period (year 2 = 110), to arrive at a neat CPI increase (or rate of inflation) of 10%. Only 40% of students selected the correct option as B. [**Note:** It is indeed possible that a few students were 'thrown' by the question's wording. A 'technical' reading of the question (i.e. the increase in the 'annual rate of inflation') reveals that none of the options, A – D, contain the 'correct' answer (which is 0%, given that the rate of inflation in year 3 was 10% - the same as the rate of inflation in year 2 - meaning that 'the increase' in the rate of inflation was zero). However, it is likely that most students overlooked this anomaly and read*

Time period	CPI
Quarter 1	100
Quarter 2	101
Quarter 3	102
Quarter 4	103

the question as it was intended: i.e. 'The annual rate of inflation from Year 2 to Year 3 is' or 'the increase in the CPI from Year 2 to Year 3 is'.] In relation to the annualised rate of inflation, Question 5 (MC) of the 2016 exam was the most poorly handled MC on the paper. The adjacent table was provided and students needed to determine the annualised rate of inflation for Quarter 2. Only 22% of students chose the correct answer (which was option C of 4% annualised inflation), with 68% of students selecting option A (1% annualised inflation). It highlights that relatively few students were aware that a quarterly 1% growth in the CPI becomes an annualised figure when it is multiplied by 4. In the current question, students are required to make two calculations, one for the annualised rate of inflation and the other for the annual rate of inflation.

Question 10
Which of the following will have an effect on international competitiveness that is different to the other three?

A. The discovery of new mineral deposits in Western Australia
B. A rise in the value of both the US and Chinese exchange rates
C. Growth in inputs (such as hours worked) relative to output (e.g. production)
D. A fall in the underlying rate of inflation

*The Study Design requires students to be aware of the factors that may influence Australia's international competitiveness including productivity, production costs, availability of natural resources, exchange rates and relative rates of inflation, and the effect of these factors on domestic macroeconomic goals and living standards. **Option C is the best response** because growth in inputs relative to output means that productivity has fallen which leads to an increase in average cost of production and inflation, worsening Australia's international competitiveness. All other options reflect an increase in Australia's ability to compete in the global marketplace. With respect to option A, new mineral deposits reflects an increased availability of natural resources, increasing our ability to supply resources on global markets which not only boosts global market share, but also helps Australian producers to exercise a greater degree of market power. With respect to option B, a rise in the value of foreign currencies means that the Australian exchange rate necessarily falls relative to these currencies (i.e. there is a depreciation of the Australian exchange rate) which increases Australia's international competitiveness as the price of exports (and import-competing products) become relatively cheaper in the global marketplace. With respect to option D, a fall in the (underlying) rate of inflation also improves Australia's international competitiveness assuming that overseas rates of inflation do not change (or fall by less).*

Question 11

The 2021 Intergenerational Report revealed that real GDP is projected to grow at 2.6% per year over the next 40 years, compared with 3.0% over the past 40 years. A factor that is not likely to contribute to this change is:

A. Lower fertility rates
B. *Strong growth in immigration*
C. An ageing population
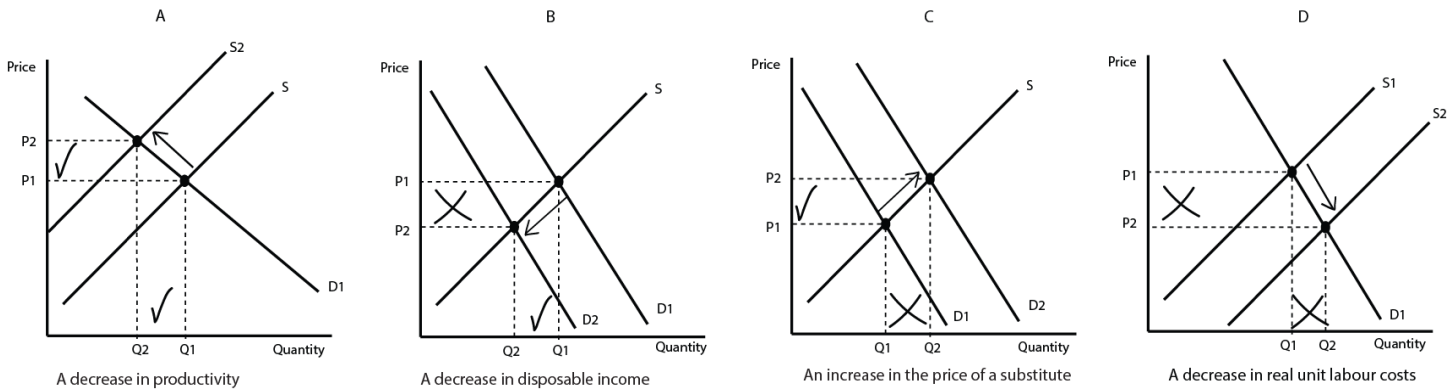D. The ongoing effects of unmitigated climate change

Option B is the best response *because strong growth in immigration is one of the things that will help Australia to achieve a higher rate of economic growth than otherwise given the demand and supply benefits that immigration brings to economic growth. All other options are incorrect because each of these factors/events are indeed likely to contribute to slower rates of growth in real GDP. With respect to option A, lower fertility rates will tend to reduce the rate of population growth which negatively impacts on aggregate supply and real GDP. With respect to option C, an ageing population will tend to reduce the labour force participation rate (reducing growth in the labour supply), which in turn negatively impacts on aggregate supply and real GDP. With respect to option D, the ongoing effects of unmitigated climate change include more severe weather events (e.g. cyclones and floods) and further potential destruction of natural resources, which negatively impacts on the quality of resources/productivity and real GDP growth.*

Question 12

Which of the following will result in a higher equilibrium price and lower equilibrium quantity?

A. *A decrease in productivity*
B. A decrease in disposable income
C. An increase in the price of a substitute
D. A decrease in real unit labour costs

The Study Design requires students to demonstrate an understanding of the difference between shifts of and movements along curves (both demand and supply) as well as the various demand and supply factors that will shift these curves (e.g. changes in productivity shifting the supply curve and changes in disposable income shifting the demand curve). Students will also need to be aware of the impact these changes will have on market outcomes (i.e. equilibrium prices and quantities). VCAA exams often require students to demonstrate this understanding in multiple choice questions. Students often experience difficulty selecting the right response, particularly when the question is asked in abstract terms. Regardless, students are best served by drawing a demand and supply diagram(s) somewhere in the margin of the paper and stepping through the process for what is likely to be happening in the market. In the current context, students should appreciate that a higher equilibrium price and lower equilibrium quantity must occur when the supply curve shifts to the left (as shown in Diagram A below). This therefore requires the identification of the appropriate option (A – D) that achieves this result. Accordingly, ***option A is the best response*** *because a reduction in productivity causes supply to shift to the left, which forces the price higher and quantity demanded lower (i.e. the equilibrium price increases and the equilibrium quantity falls). Option B - D are incorrect because either price falls (option B), quantity rises (option C) or both price falls and quantity rises (option D).*

Graph A — A decrease in productivity

Graph B — A decrease in disposable income

Graph C — An increase in the price of a substitute

Graph D — A decrease in real unit labour costs

Question 13

Welcome and/or tax reform measures, such as lower tax rates, that encourage greater labour force participation is most likely to

A. Increase the rate of unemployment in the short-term and exert upward pressure on wages
B. *Increase the rate of unemployment in the short-term and exert downward pressure on wages*
C. Decrease the rate of unemployment in the short-term and exert downward pressure on wages
D. Decrease the rate of unemployment in the short-term and exert upward pressure on wages

*Students often struggle to unpack the relationship between changes in the participation rate (or size of the labour supply) and the impact on unemployment and wages over time. For example, in Question 4e of the 2018 exam, when responding to how a welfare reform policy might influence the goal of full employment, a number of students correctly connected the reform to an increase in the participation rate, but automatically assumed that this led to a reduction in the unemployment rate. While this may occur in the long run, students ignored the important initial short run impact on the participation rate/labour supply that occurs when these welfare recipients enter the labour force in search of work. This is a common misconception made by students and it equally applies when attempting to explain the supply side/labour market impacts stemming from a change to welfare payments/welfare eligibility and/or changes to income tax rates that influence incentives for people to enter/exit the labour force. Any initiative that adds to the number of people looking for work (as the participation rate rises) will necessarily increase the rate of unemployment in the short term. However, over time, the increased labour supply exerts downward pressure on wages and prices, which ultimately helps to increase the demand for labour and reduce the rate of unemployment. **Option B is therefore the best response** because it correctly refers to a higher unemployment rate in the short run which typically reduces wage pressures as spare capacity in labour markets rises. All other options are incorrect because one or more of the relevant variables move in the wrong direction.*

Question 14

Terms of Trade*
2018/19 average = 100, log scale
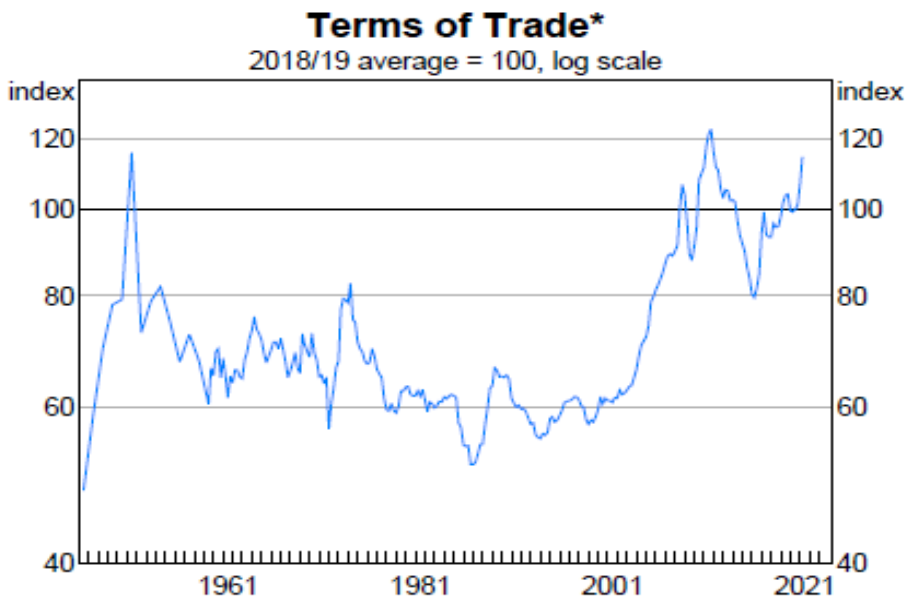
The movement in the terms of trade over the past few years is likely to have:

A. *Contributed to an increase in the current account surplus, assisted with the achievement of full employment and increased living standards*

B. Contributed to an increase in the current account surplus and assisted with the achievement of full employment and decreased living standards

C. Contributed to a decrease in the current account surplus, assisted with the achievement of full employment and increased living standards

D. Contributed to an increase in the current account surplus, negatively impacted on the achievement of full employment and increased living standards

*The Study Design requires students to demonstrate an understanding of the effects of movements in the terms of trade on the current account balance, the domestic macroeconomic goals and living standards. As noted in Question 3d of CPAP Exam 1, questions related to the terms of trade, either in terms of a definition, or the causes/effects, regularly cause students problems in examinations. 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'). This was illustrated by student responses to questions in the past two exams. In Question 4c on the 2019 exam, students found it difficult to explain how an unfavourable movement in the terms of trade affected the goal of strong and sustainable economic growth and living standards. In Question 1b of the 2020 exam, many students were unable to understand the role of the terms of trade in influencing the exchange rate. Further, a number of students erred by arguing that a favourable movement in the terms of trade means that the terms of trade index increases above 100. Students should recognise that a favourable movement does not require the index to be above 100. In relation to the current question, **option A is the best response** because the chart shows growth in the terms of trade over the past few years which reflects that Australian exporters are likely to be receiving a higher price (which has indeed been the case, particularly in relation to iron ore prices). This results in higher export 'values', more export credits in the Balance on Goods and Services within the current account, which makes a contribution to the current account surplus. The higher export incomes/values contribute to higher national income which ultimately flows through to increasing aggregate demand, real GDP, demand for labour, and employment, which helps to reduce the rate of unemployment towards the full employment rate (of approximately 4.5%) and lifts Australian living standards in both material terms (more goods and services consumed) and non-material terms (e.g. mental health benefits associated with more employment). All other options are incorrect because at least one of the relevant variables moves in the wrong direction.*
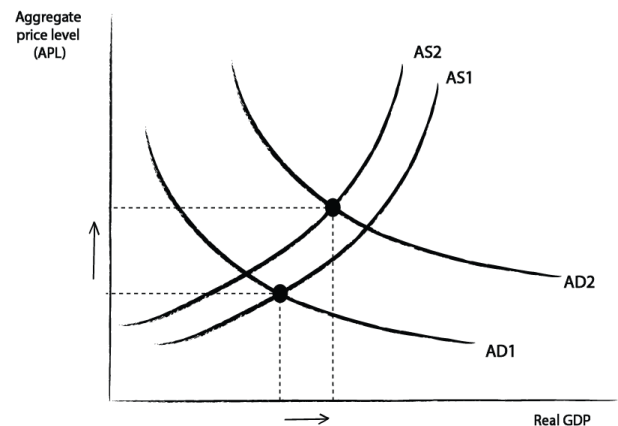
Question 15
In relation to the aggregate demand (AD) and aggregate supply (AS) curves drawn below, which statement is accurate in terms of the likely causes and effects of the movements?
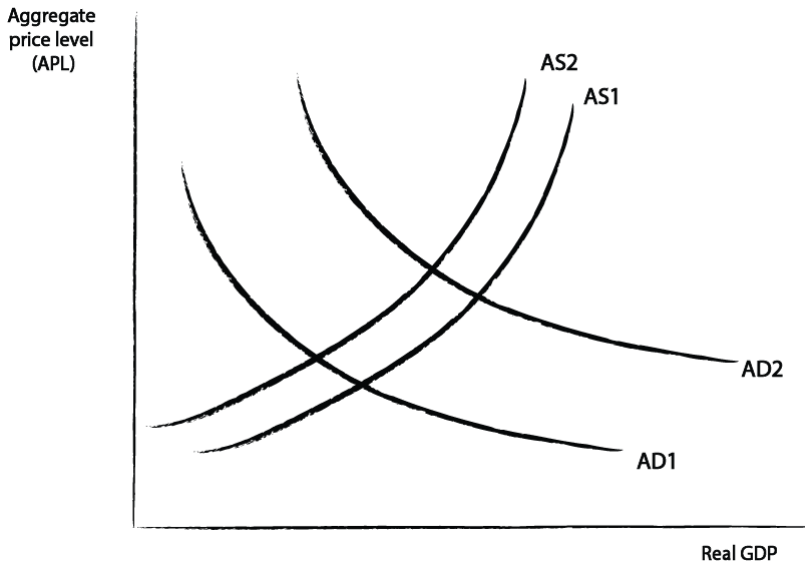
A. Overseas rates of economic growth have increased and productivity has risen resulting in a stronger rate of economic growth and higher inflation
B. *The exchange rate has depreciated causing a higher rate of economic growth and higher inflation*
C. Consumer and business confidence have increased and labour costs have fallen resulting in a stronger rate of economic growth and lower inflation
D. Technological advances and a decrease in the quality of factors of production have resulted in a stronger rate of economic growth and higher inflation


The Study Design requires students to have an understanding of both the aggregate demand curve and the aggregate supply curve as well as a host of factors that can influence aggregate demand and aggregate supply. The best approach to answering this question is to annotate the diagram to include the old and new equilibrium points as well as the projected movements in real GDP and prices, as shown in the adjacent diagram. It should then become clear that economic growth has occurred and inflation has increased. **Option B is the best response** because the depreciation will not only increase Australia's international competitiveness and boost net export demand (lifting AD from AD1 to AD2), it will also have negative supply side effects given that the costs of production will rise (as a lower exchange rate will increase the prices of all capital and intermediate imports). Option A is incorrect because a rise in productivity would cause the aggregate supply curve to shift to the right. Option C is incorrect because falling labour costs would also cause the aggregate supply curve to shift to the right (and it also incorrectly refers to a lower rate of inflation). Option D is incorrect because technological advances and a decrease in the quality of factors of production will have a conflicting effect on aggregate supply and the option provides no explanation for the increase in aggregate demand.

Section B
Question 1 (19 marks)

Labour Underutilisation Rates
Heads-based
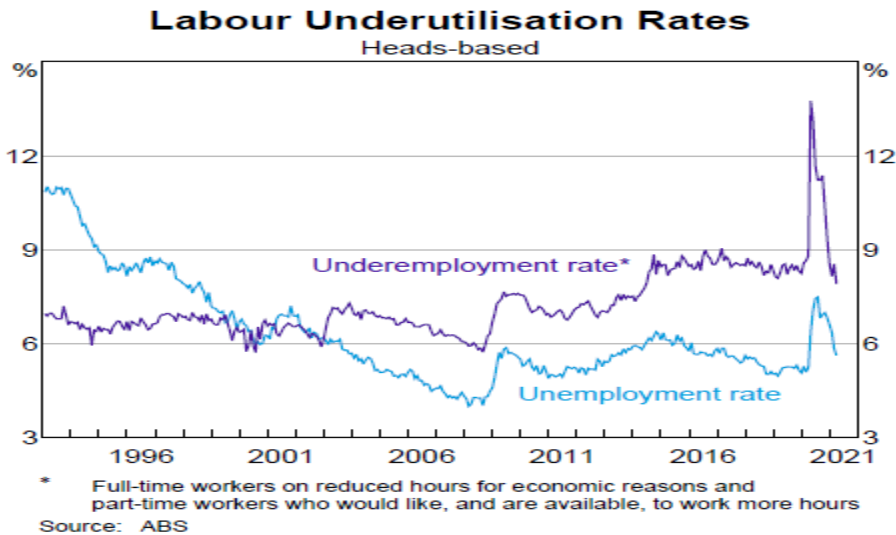
a. **Describe the 'trend' movement in the underemployment rate since 2011.**   **2 marks**

- 1 mark for a description of the trend
- 1 mark for accurate use of the data/statistics from the chart

Advice 1: A key skill in the Study Design is to explain trends, patterns, similarities and differences in economic data and other information. Questions such as this one are sometimes asked on VCAA exams and it is common for students to lose one (or both) marks for failing to make reference to the data/statistics in the chart. Students should reasonably expect to receive one mark for an accurate reference to the trend and then another mark for using the statistics/data in the chart to support the description. It is also not uncommon, under exam conditions, for students to make the mistake of describing the trend in the wrong variable (e.g. the unemployment rate) and/or referring to the wrong time period (e.g. describing the trend from 1992). Students should also not waste time by attempting to describe/outline the causes or effects of the changing trend as this is not required from the question and is often canvassed in later questions. There is also no need to demonstrate an understanding of underemployment for this question.

Advice 2: When describing the trend movement in a variable, such as the underemployment rate in the above chart, it is expected that students will 'look though' (or ignore) the blip appearing over 2020. See note below.

Sample answer: *Since 2011, the underemployment rate has trended up from approximately 7% in 2011 to approximately 8% in 2021.*

Note: Students should be awarded a maximum of 1 mark in the event that they describe the 'movement' in the underemployment rate since 2011 rather than the 'trend' as specified in the question. For example, it is expected that some students will describe the increase in the underemployment rate to more than 13% in 2020 before falling back toward 7% in 2021. As noted in Advice 2 above, students are expected to 'look though' (or ignore) the blip appearing over 2020.

b. **Outline one factor that accounted for the large increase in the underemployment rate over 2020.**

3 marks

- 1 mark for demonstrating an understanding of underemployment or the underemployment rate
- 1 mark for the identification of a relevant factor
- 1 mark for adequately linking the factor to higher underemployment over 2020

Advice 1: This is an example of a question that students may face on the examination where they are expected to have some knowledge of what has been occurring in the economy over the past couple of years. In all past exams, there are numerous questions that required students to have a knowledge of recent economic events and Chief Assessors often remind students to 'continue to develop a thorough knowledge of the economic factors and policies that have influenced the performance of the Australian economy for the past two years', which of course means 2021 and 2020 for students sitting the 2021 examination.

Advice 2: Students are free to focus on any of the relevant AD and AS factors listed in the Study Design, such as consumer and business confidence declining or slower overseas growth, or alternatively they can focus on any event or 'factor' that contributed to the growth in underemployment over 2020, with the effects of the COVID-19 pandemic being the obvious 'factor'. Students are also free to focus on the effects of government policy, such as reference to the effects of the JobKeeper wage subsidy which prevented thousands from becoming unemployed as the subsidy ensured that many employees remained 'employed' despite working minimal (if any) hours.

Sample answer: *The major factor that accounts for the huge growth in the rate of underemployment over 2020 was the economic effects stemming from the COVID-19 pandemic which saw Australia enter a recession. This decreased the demand for labour hours, as many businesses either closed or reduced production levels, which [not only increased the rate of unemployment but also] resulted in thousands of Australia's being offered less hours by their employers [i.e. less than they would have liked], thus increasing underemployment and raising the underemployment rate [which is the number of underemployed as a percentage/proportion of the labour force].*

c. **Explain how each of the following might influence monetary policy settings over 2021-22.**

   i. **A lower labour force underutilisation rate (LFUR)**
   ii. **Continuing community lockdowns due to further COVID-19 outbreaks**

6 marks

- 1 mark for demonstrating an understanding of monetary policy settings (including reference to monetary policy tightening/loosening and/or the changing 'stance' of monetary policy)
- 0.5 marks for demonstrating an understanding of the LFUR
- 0.5 marks for demonstrating an understanding of the relationship between lockdowns and economic activity
- 0.5 marks for stating/identifying that the RBA is likely to consider a tightening of monetary policy/resist further loosening (or adopt a less expansionary stance) in the face of a lower LFUR
- 0.5 marks for stating/identifying that the RBA is likely to consider a loosening of monetary policy/resist a tightening (or adopt a more expansionary stance) in the face of further community lockdowns
- 1.5 marks for a detailed explanation of the link between a lower LFUR and the possible change in monetary policy settings
- 1.5 marks for a detailed explanation of the link between continuing community lockdowns and the possible change in monetary policy settings

Advice 1: A key skill in the Study Design is the requirement for students to analyse the effects of contemporary factors on the setting of aggregate demand policies. Students should therefore be aware of the various factors that may have contributed to (or might contribute to) a change in monetary or budgetary policy settings. Changes to the LFUR and the possibility of further lockdowns are indeed two relevant 'contemporary' factors impacting on policy settings. While a reference to community lockdowns is unlikely to be specifically mentioned in a VCAA question, it is certainly not impossible in the context of contemporary factors likely to be taken into account when the RBA deliberates on monetary policy. In

relation to the LFUR, while the current question focuses on a lower LFUR, students should be prepared to examine the implications of either the higher LFUR over 2020 or the lower LFUR over 2021. A consideration of its relationship to spare capacity in labour markets, wages growth and inflation is important to a determination of the RBA's likely response.

Advice 2: While the 2020 exam contained no question testing this key skill, the 2019 and 2018 contained examples that were not well answered by students. Question 2e from the 2019 exam 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. Many students were unable to reconcile the apparent conflict/inconsistency arising from 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.

Advice 3: Question 2a from the 2018 exam also required students to describe how low wages growth might have influenced the stance and focus of monetary policy over the previous two years. While some students erred by ignoring the need to focus on 'stance' (i.e. monetary policy becoming more expansionary) and focus (i.e. the need to focus on employment given that inflation was inconsequential), many also made the mistake of examining the relationship between low wages growth and the monetary policy setting in the wrong direction. In other words, students were incorrectly describing how the adoption of a more expansionary monetary policy stance could combat low wages, rather than how low wages growth is likely to influence the RBA to adopt a more expansionary stance. Given that this type of question was poorly handled on both the 2018 exam (50% average) and 2019 exam (38% average), it would not be surprising to see a similar question appearing on the 2021 exam, where students will be required, once more, to demonstrate an understanding of the relationship between low wages/labour market tightness and monetary policy settings.

Advice 4: There is no need for students to expand by describing/explaining how the more expansionary monetary policy stance will impact on the macroeconomy (i.e. there is no need to refer to transmission channels) or the achievement of government goals. The inclusion of this information will not be rewarded with marks and robs students the opportunity of making relevant improvements to the quality of other responses.

Sample answer: *A fall in the LFUR means that the total unemployed and underemployed as a proportion of the labour force has fallen. This suggests that the labour market is tightening and/or spare capacity in labour markets is falling, manifesting in labour shortages and creating upward pressure on wages. This in turn tends to increase consumption and aggregate demand, increasing demand inflationary pressures [on top of the cost inflationary pressures arising from higher labour costs.]. In this environment, the RBA is less likely to consider any further loosening of monetary policy [e.g. via further expansion of its quantitative easing program] and more likely to consider tightening monetary policy sooner rather than later [e.g. sooner than 2024], making the monetary policy stance less expansionary. This is particularly the case if the labour market tightness triggers large increases in wages such that it pushes inflation up beyond the RBA's 2-3% target range.*

Further community lockdowns over the course of 2021-22 will have a negative impact on economic activity and reduce inflationary pressures on both the demand and supply side of the economy. To the extent that this further dampens underlying inflationary pressures and results in [headline] inflation falling further below the bottom end of the RBA's target range, it will most likely cause the RBA board to delay any possible tightening of monetary policy and continue with the maintenance of its current expansionary stance. It may even consider a further loosening of monetary policy [e.g. via further quantitative easing] to make the monetary policy stance more expansionary, as it decides to focus more on promoting economic growth and employment [consistent with its charter] and encouraging inflation to climb into the RBA's target range of 2-3%.

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

Net overseas migration has fallen over the past year due to border closures as more people have exited Australia (emigration) than entered Australia (immigration) and the government predicts a further fall over 2021-22.

d. **Explain how the recent decline in net overseas migration (NOM) might influence wages growth and employment.**

4 marks

- 0.5 for identifying that a decrease in NOM should increase wages growth
- 0.5 for identifying that a decrease in NOM should lead to a reduction in employment
- 1.5 marks for a detailed explanation of the link between NOM and wages growth
- 1.5 marks for a detailed explanation of the link between NOM and wages growth

Advice 1: Unit 4 of the Study Design requires students to demonstrate an understanding of the effect of immigration policies on the labour market (and on aggregate supply). The question requires students to focus on the labour market impact in terms of the effect on the price of labour (or specifically wages growth) and employment. There is no need for students to discuss the impact on other variables related to the labour market, such as unemployment or labour market conditions. Nor is there any need to focus on the impact on aggregate supply overall.

Advice 2: Students should carefully interpret questions related to immigration. While the current question refers to (and defines) a decline in net overseas migration, the VCAA exam might refer to a decline in immigration, as was the case in the 2018 exam (Question 3c). In that question, students were asked to explain one likely effect on the labour market and aggregate supply of decreasing the annual immigration intake from 200,000 to 100,000. Only 7% of students were able to achieve the full 4 marks, with the average score a very low 2.1/4 or 53%. Too many students misread the question and argued on the basis that there was a decrease the total volume of immigrants living in Australia and a shrinking of the labour market. It was an easy mistake to make, arguing that the total number of immigrants in the country is falling and therefore glossing over the important fact that there (will) remain an additional 100,000 immigrants entering the country each year.

Sample response: The recent reduction in NOM has effectively reduced the supply of labour in Australian labour markets, which is allegedly creating labour shortages in a number of industries [e.g. construction and manufacturing] and occupations [e.g. carpenters, chefs, veterinarians and electricians]. This exerts upward pressure on the price of labour (e.g. wages) as the bargaining power of employees rises, enabling them to more successfully negotiate higher wages from employers, which should then contribute to an increase in wages growth over time. Given the increased tightness in labour markets caused by the reduction in NOM, unfilled job vacancies will increase, and price of labour should rise, leading to lower demand for labour and employment as businesses are incentivised to substitute capital for labour. This effect on employment is likely to be compounded by the reduced demand for labour that occurs on an aggregate level as aggregate supply decreases and real GDP growth falls.

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

e. **Describe how a recent factor or government policy initiative has contributed to a higher labour force participation rate (LFPR) and outline the implications for productive capacity of the economy.** **4 marks**

- 0.5 marks for identifying a recent factor or government policy
- 0.5 marks for demonstrating an understanding of productive capacity
- 1 mark for demonstrating an understanding of the LFPR
- 1 mark for linking the factor/policy initiative to a higher LFPR
- 1 mark for linking the higher LFPR to an increase in productive capacity

Note 1: Teachers should be flexible when defining 'recent' in the context of the question.

Advice: The Study Design requires students to demonstrate an understanding of the labour force participation rate (LFPR), and it can also be considered one of the aggregate supply factors influencing the rate of unemployment, which is another key knowledge point listed in the Study Design. The most recent occasion on which the LFPR has been examined in Section B of the VCAA exam occurred in 2016, where students were required to explain how a budgetary policy (initiative) might be used to increase the labour force participation rate. On that occasion, relatively few students adequately dealt with the question (average score a relatively low 57%), with many being unable to identify an appropriate budgetary policy initiative (such as increased funding/subsidies for childcare or the raising of the retirement age). The current question provides students with more scope to focus on any factor that may be contributing to a higher participation rate, such as the greater flexibility of labour markets and the availability of more part-time work, the rise of the digital economy making it easier to offer labour services, improved health outcomes for older Australians or even higher household debt levels that may be forcing some people back into the workforce. For the second part of the question, students should be able to make a meaningful connection between a higher LFPR and the economy's capacity to produce goods and services where a link should be made to either the quality of labour (e.g. the possible impact on productivity) or quantity of labour (larger labour supply) which influence the costs of production and the willingness/capacity to supply goods and services.

Sample answer: *The funding increases for childcare that have been delivered in recent budgets, including the 'free childcare' provided in 2020 as a means of assisting families during the coronavirus epidemic, has helped to raise the LFPR. This is because the initiative has made it more financially attractive for stay-at-home parents to return to the workforce, which increases the size of the labour force [as they either become employed or unemployed while in the job search phase) as a proportion of the working age population. This higher labour force essentially means that the labour supply in the economy has increased, which helps to exert downward pressure on the cost of labour [contributing to slow wages growth] and/or increases pressure on labour productivity given that there is more competition for jobs and workers are more likely to increase intensity levels (particularly in low skilled jobs). This has the effect of reducing pressure on both real unit labour costs and the costs of production, which in turn incentivises businesses to raise output, resulting in an improved capacity of the economy to produce goods and services. [This will be reflected in an an outward movement of the nation's production possibility frontier or a shift to the right of the aggregate supply curve.]*

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

Question 2 (9 marks)
a. **Assume that there is a decrease in the availability of substitutes in the market for product A.**
   i.   **Outline why the price elasticity of demand (PED) for product A will fall.**
   ii. **Describe why a decrease in supply will impact differently on the market for product A following a reduction in the PED.   5 marks**

- 0.5 marks for demonstrating an understanding of PED
- 0.5 marks for demonstrating an understanding of substitutes
- 1 mark for linking the decrease in the availability of substitutes to a lower PED
- 0.5 mark for identifying that P will increase when supply decreases
- 0.5 mark for identifying that Q will decrease when supply decreases
- 1 mark for accurately linking the lower PED to a higher P when supply decreases
- 1 mark for accurately linking the lower PED to a lower Q when supply decreases

Note 1: Students can be rewarded for illustrating their response with the use of a D/S diagram. See Advice 3.

Advice 1: The Study Design requires students to demonstrating an understanding of the meaning and significance of price elasticity of demand as well as the factors affecting price elasticity of demand (PED): degree of necessity, availability of substitutes, proportion of income and time. Students typically struggle writing responses to questions testing the meaning and significance of the PED. For example, Question 1c (Part B) of the 2019 exam required students to demonstrate an understanding of price elasticity of demand (in relation to the demand for housing). Only 27% of students managed to score the full 3 marks for that question, with the overwhelming problem being the inability of students to demonstrate a sufficiently clear understanding of (e.g. a definition) of PED. Prior to 2019, elasticities were examined in the 2015 and 2014 exams. Both times students performed relatively poorly. In the 2015 exam, question 2dii required students to outline the

significance for households of a low PED for petrol when the price of petrol fell. This was (equally) the most poorly handled question on the examination, with an average score of 50% (1/2) and with 25% of students scoring 0. With respect to the 2014 version, students were required to outline one factor that influences the price elasticity of supply (average score of 55%). Given that students do not generally acquit themselves that well in responding to elasticity questions, it would not be surprising if a further elasticity question appeared on Part B of the 2021 examination. For the current question students should first appreciate that the availability of substitutes is a factor influencing the price elasticity of demand, and then be prepared to examine the impact on 'the market' (demand/supply as well as price and quantity) in the event that there is a decrease in the availability of substitutes. Students should note that when a question refers to the impact on 'a market' or 'the market', it is necessary to not only examine the possible change in demand and/or supply, but also the final effect on both prices and quantity – it is common for students to focus only on one or other (e.g. price or quantity) when both is ordinarily expected.

Advice 2: For questions such as this, where there is no stipulation to illustrate the response with the use of a demand/supply diagram, there is no reason why students cannot use a diagram to support their response. However, this should not come at the expense of completing an accurate written response and students should not spend too much time ensuring that the diagram is well presented. A diagram such as the adjacent one could add value to the response.

Advice 3: Students might find it useful to answer the question in less abstract terms by assuming that product A is a good with an obvious substitute (e.g. coffee/tea, margarine/butter, apples/pears, etc.). This can sometimes help to better structure the response and provide greater clarity. However, it is not necessary for full marks.

Market for product A
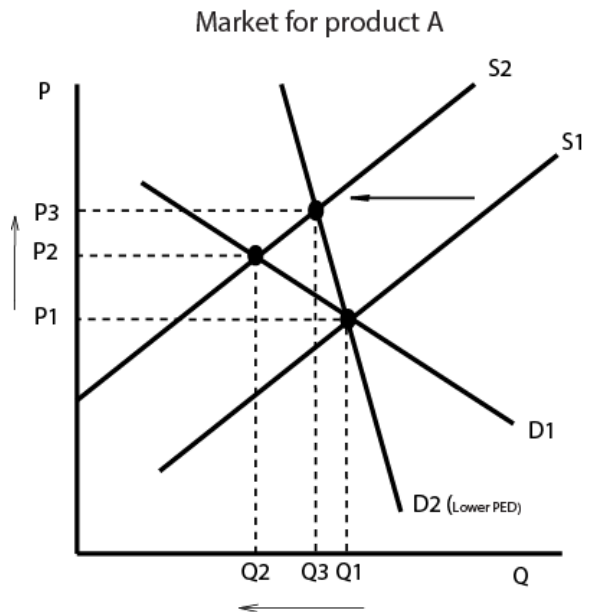
Sample answer: The PED will fall in the market for product A because it means that there are fewer alternative products (i.e. substitutes) on which consumers can rely in the event that the price of product A rises (or less becomes available). This results in consumers becoming much less price responsive over time, such that a rise in price will result in a smaller proportional (or percentage) fall in the demand for product A. [This is represented by the demand curve for product A becoming steeper, as shown in the diagram with the change from D1 to D2]. A decrease in supply [as shown by S1 shifting left to S2] will increase the price and reduce the quantity produced of product A. However, the lower PED will mean that price will rise by more than if the PED was higher [as seen by comparing P2/D1 with the higher P3/D2] because the price will need to rise by a lot more to remove the market shortage that occurs at the original price [e.g. P will only need to increase to P2 when the PED is higher (D1) but it will need to increase to P3 when the PED is lower (D2)]. In relation to the quantity produced in the market, it will fall by less if the PED is lower because consumers will be less deterred by higher prices [which is reflected by comparing Q3 (lower PED/D2) with Q2.

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

b. **Outline one factor that might increase the competitiveness in a market and describe the impact it is likely to have on productive efficiency.**

4 marks

- 1 mark for the appropriate selection of a relevant factor
- 0.5 marks for demonstrating an understanding of competitiveness
- 0.5 marks for demonstrating an understanding of productive efficiency
- 2 marks for a detailed description of how the factor increases productive efficiency

Advice 1: This question focuses on two key knowledge points contained in the Study Design, with the first relating to '*the nature of, and conditions for, a perfectly competitive market'*. Students should recognise that the current question simply requires them to leverage off one of the factors or conditions that underpin a (perfectly) competitive market (such as a large number of buyers and sellers, product homogeneity and ease of entry to/exit from the market). For example, 'the entry of more producers into a market (i.e. a larger number of sellers) makes the market more competitive because…'. The second relevant key knowledge point is *'the effect of competitive markets on the efficiency of resource allocation'.* Students should recognise that more competitive markets (or highly competitive markets) are likely to have a favourable impact on efficiency (and prices) and a less competitive market, such as an oligopoly or monopoly, will tend to have an unfavourable impact on efficiency and prices. 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 relevant reference to these market structures if explaining how less competitive markets will impact on efficiency of resource allocation.

Advice 2: Question 4a from the 2020 exam asked students to 'explain the nature of, and conditions for, a perfectly competitive market', which has essentially been copied from a key knowledge point in the Study Design. While the average score was a relatively high 2.4/3 (i.e. 80%), there were many students (42%) who did not receive full marks for what should have been a relatively accessible question. As noted in the Chief Assessor's Report, *'the simple listing of the conditions or characteristics of perfectly competitive markets was insufficient to achieve full marks'.* Students need to be prepared for a question that specifically requires them to connect the conditions for a perfectly competitive market (e.g. many buyers and sellers and homogenous products) with the nature of the market (e.g. low prices and an absence of market power).

Advice 3: 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 will typically be free to 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 directed to focus on productive/technical efficiency, which should be the obvious one given the relationship between competition and costs.

Sample answer: *The removal of laws that previously made it difficult for businesses to enter a market will increase competitive pressures and have a positive influence on technical efficiency. For example, the removal of laws that previously made it more difficult for businesses to enter industries like banking or aviation will result in greater freedom of entry into the market, which encourages new entrants to the market in the event that they consider profit opportunities exist [e.g. incumbent firms are making super normal profits]. With a greater number of businesses [sellers] in the market chasing market share, this will typically result in more/all businesses paying close attention to costs as a means of keeping prices as low as possible in order to maintain/increase market share. Businesses will therefore have more incentive to seek out productivity improvements [e.g. via greater investment in capital] and/or actively source cheaper or higher quality inputs as a means of reducing average costs of production and prices. This should ultimately improve productive [technical] efficiency as production volumes in the industry are more likely to be achieved at lower cost.*

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

Question 3 (11 marks)

a. Explain why a negative externality is an example of market failure and analyse how the use of indirect taxation helps to correct the market failure and achieve a more efficient allocation of resources. Use a fully labelled demand and supply diagram to illustrate your response.   **7 marks**

- 0.5 marks for demonstrating an understanding of negative externality
- 0.5 marks for demonstrating an understanding of market failure
- 0.5 marks for demonstrating an understanding of an efficient allocation of resources
- 0.5 marks for demonstrating an understanding of indirect taxes
- 1.5 marks for linking negative externality to market failure
- 1.5 marks for linking the use of indirect taxes to the correction of market failure and achievement of efficiency
- 2 marks for accurate use of the diagram to illustrate the response

Advice 1: The Study Design requires students demonstrate an understanding of four different market failures: Public goods, externalities, asymmetric information and common access resources. Since the inception of the new Study Design in 2017, market failures questions have featured in Part B of the exam in 2017, 2018 and 2020 and it is one area of the course where students traditionally experience some difficulty, particularly if the mark allocation is relatively large (e.g. 4 marks or more). In the 2017 exam, students were required to distinguish public goods from common access resources, with a reasonably solid average of 70% (2.1/3) being achieved and, in 2018, students were required to explain how either externalities or asymmetric information results in a market failure (with an average of 67% or 2/3). The 2020 question was somewhat more challenging, where the focus of the question was on how the government could correct a market failure, using a fully labelled demand and supply diagram to illustrate the response. Some students spent too much time explaining the market failure, when only a brief description was required in the context of that question. For the current question, an explanation of the market failure is required (i.e. negative externalities) before analysing how indirect taxes correct the market failure and help to achieve a more allocatively efficient allocation of resources.

Advice 2: In relation to the use of demand and supply diagrams to illustrate a correction of a market failure, students should ensure that they avoid the mistakes by students in the 2020 exam. In particular, including a diagram and making no attempt to illustrate the response with reference to the diagram; including an explanation that was inconsistent with the diagram; spending an excessive amount of time describing the dynamics of adjustment from one equilibrium point to another; or shifting the demand curve to the left when attempting to explain how the imposition of excise tax causes higher prices and lower demand.

Sample answer: A negative externality is an example of a market failure because it involves a cost associated with the production or consumption of a good or service being passed onto third parties (e.g. those not involved in the purchase or sale of a product) or society more generally. A common example is the consumption of cigarettes which involves the production of negative externalities in consumption in the form of passive smoking. After a consumer has purchased cigarettes from suppliers, the act of consuming the product (i.e. smoking the cigarette) can be injurious to third parties who consume secondhand smoke. It represents a market failure because, in the absence of government intervention, a free or unregulated market will result in an over-allocation of resources to the production of goods such as cigarettes. Smokers will not always take into account the cost imposed on third parties, which encourages more smoking (and the production of more cigarettes) than is in the best interests of society.

Indirect tax as a means of correcting market failure
Example: market for cigarettes

Fall in consumption/production of cigarettes
and fewer resources devoted to cigarettesproduction
[a way of internalising the negative externality as
consumers are now forced to pay more for cigarettes]

Indirect taxes are a common tool used by governments to address this type of market failure. By levying a tax on the production of the relevant goods, such as excise tax on tobacco, it causes
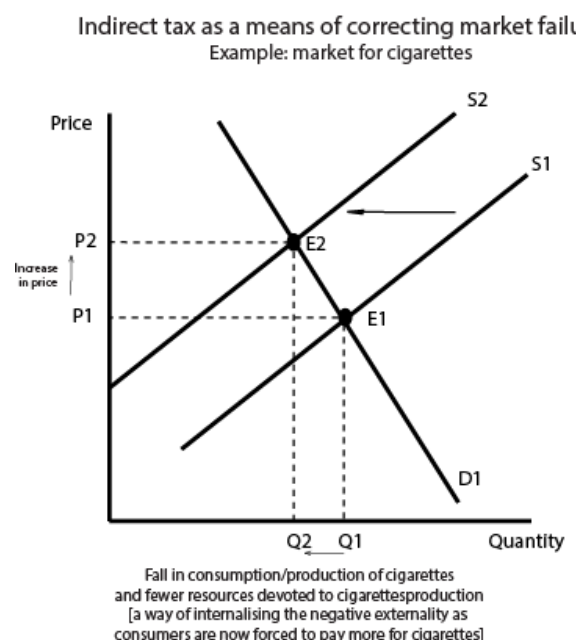
producers to increase the price of tobacco in order to protect profit margins, which is reflected in the shift to the left of the supply curve and the resulting increase in equilibrium price from P1 to P2. This higher price results in a lower consumer demand for cigarettes, which is reflected by the contraction along the demand curve [from E1 to E2] and the production of cigarettes will then occur at the lower and more socially optimal level of production at Q2. The tax will therefore result in fewer resources being allocated to the production of goods with negative externalities [in consumption] and a more allocatively efficient allocation of resources will exist in the economy.

Note 1: Square bracketed section is not required for full marks.

Note 2: There is no need for students to comment on the fact that the low price elasticity of demand for some goods with negative externalities will limit the effectiveness of indirect taxes (e.g. excise in tobacco in the sample answer).

b. **Describe the purpose of one recent government initiative and explain how it may have unintentionally decreased efficiency in the allocation of resources.**

4 marks

- 0.5 marks for identifying a recent initiative (e.g. past 4-5 years)
- 0.5 marks for describing the purpose of the initiative
- 1 mark for identifying an unintended consequence of the initiative
- 2 marks for an accurate description of how the initiative (or part thereof) reduced efficiency in some way

Advice 1: Students are free to focus on any recent and relevant government initiative.

Advice 2: The Unit 3 Study Design requires students to have knowledge of one contemporary example of government intervention in markets that unintentionally leads to a decrease in the efficiency of resource allocation. This is a key knowledge point that can cause students headaches in the examination, particularly given that it is natural to think of government intervention being designed to achieve a more efficient allocation of resources (e.g. to address market failure). In the current context, the wage subsidy (JobKeeper payment) was delivered as part of a package to deliver macroeconomic benefits to the economy. However, it is also an example of a deliberate intervention to protect the price and quantity (of labour) in labour markets and therefore can be used as a contemporary example in relation to this key knowledge point in the Study Design.

Advice 3: There has not been a question on the exam which targets this key knowledge point since 2017. In that exam, the question was basically a repeat of the key knowledge point from the Study Design, which necessarily gave students scope and choice to focus on any example they have covered during the year. Importantly, only 36% of students achieved full marks for that question, with many of the remainder demonstrating an inability to move beyond a discussion of the unintended consequence. It is therefore important that students are prepared to make the concrete link to at least one type of economic efficiency.

Advice 4: Technically, the Study Design requires students to think in terms of government failure in the sense that the government intervention led to a 'net' reduction in economic efficiency. The best responses will be those that attempt to make this argument. For example, in relation to subsidies provided to private vocational colleges (or subsidies provided to industries more generally), economic efficiency would decrease if it could be shown that the benefits of the subsidies are outweighed by the costs in terms of the rorting, waste and/or inefficiencies that became entrenched. Indeed, this point was made by the Chief Assessor in the 2017 Examination Report where it was pointed out that students needed to do more than simply refer to unintended consequences - instead, they were required to make a link to 'reduced efficiency'.

Sample answer: *A recent initiative was the JobKeeper wage subsidy introduced in 2020. It involved the government effectively subsidising 'eligible employers' (e.g. businesses suffering a 30+ percent decline in revenue) by paying their employees $750 each per week [until September 2020 and at a reduced rate thereafter with the program ending in March 2021]. Its purpose was to support income and spending in the economy, as well as to discourage employers from dismissing employees during the 2020 economic downturn. While it certainly helped to assist with the economic recovery, there were several businesses who continued to receive support during the first six months of the program whose turnover (sales levels) actually increased. This was due to a design error in the scheme where businesses only needed to report a 'predicted'*

30% fall in turnover [50% for large companies] in the first month of the program in order to receive the full wage subsidies for the first six months. This meant the profitable businesses that ultimately didn't suffer during the downturn were in receipt of subsidies that were not justified. [Recent taxation statistics have revealed that approximately $5 billion of government expenditure was paid to approximately 160,000 businesses who were not in need of the subsidy.] This was an example of an unintended consequence of the initiative which had a negative impact on efficiency because the excessive subsidies [i.e. the $5 billion given to businesses not in need of the funds] came at an excessive opportunity cost, reducing allocative efficiency, given that the money could have been better used to assist with economic recovery in some other way, such as directing those funds to those with more genuine need for income support [or spending on some other government program that would have better served the economy or society].

Note 1: Square bracketed section is not required for full marks.

Note 2: Students are free to use any recent government initiative, where 'recent' can be loosely interpreted by teachers.

Question 4 (26 marks)
Following the recession of 2020, the government delivered structural changes to its most recent two budgets that were designed to support economic growth and jobs. The government also announced its new medium term fiscal strategy 'to achieve budget balance on average over the course of the economic cycle'.

a. **Explain how a change to the structural component of the budget over the past two years may be assisting RBA efforts to achieve price stability.**

4 marks

- 0.5 marks for demonstrating an understanding of price stability
- 0.5 marks for demonstrating an understanding of the structural component of the budget
- 1 mark for outlining a relevant change to the structural component of the budget (i.e. providing a brief description of a relevant discretionary stabiliser)
- 2 marks for a detailed/comprehensive explanation of how the initiative helped to increase the rate of inflation towards the bottom end of the target range (and helped to achieve price stability)

Advice 1: The Study Design requires students to demonstrate an understanding of the role of the structural component of the budget (i.e. discretionary stabilisers) in influencing aggregate demand (and stabilising the business cycle). While most exam questions refer to discretionary stabilisers or budget initiatives when referring to budgetary policy changes, students should ensure that they are familiar with the possible ways that a question could be phrased. It is expected that some students will be perplexed a little by the way the current question is phrased – not appreciating that a change to the structural component of the budget is the same as saying the implementation of a discretionary budget initiative.

Advice 2: Examinations often test student understanding of discretionary stabilisers in terms of the impact on the budget outcome and/or the impact on the economy. Students generally handle these questions well, but on occasions students confuse the structural component of the budget (i.e. the operation of discretionary stabilisers) with the cyclical component of the budget (i.e. the operation of automatic stabilisers).

Advice 3: It is a common mistake for students to spend an excessive amount of time describing the nature of the budgetary policy initiative in question. For example, in relation to the income tax cuts delivered in the 2021-22 Budget, there is no need to go into excessive detail about the value of the income tax cuts (e.g. $7.8 billion) or how the low- and middle-income tax offsets actually work to deliver a lower income tax liability for low/middle income earners. While some detail about the nature of the initiative is valuable, the focus should be on how the operation of the initiative influences the budget outcome and affects AD and economic growth.

Sample answer: *In the most recent two budgets, the government announced further tax cuts for low and middle-income earners [e.g. via the extension of the low and middle income tax offsets] and the bringing forward of planned tax cuts which lifts disposable incomes of households and therefore incentivises them to spend more on goods and services. This stimulated Consumption demand and aggregate demand above that which would have otherwise occurred, and helped*

AD to recover much faster over 2020-1. The relatively stronger growth in AD helped to soak up some spare capacity in the economy, increasing pressure on prices and causing inflation to climb up towards the bottom end of the target range [from a low of -0.3% for the year to end June 2020] and therefore helping the RBA to achieve its goal of price stability, which is expressed as 2-3% growth in consumer prices on average over time.

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

b. **Describe how the cyclical component of the budget may have influenced the estimated budget outcome for 2020-21.**

4 marks

- 1 mark for identifying that the estimated budget outcome for 2020-21 increased
- 1.5 marks for a description of how the cyclical component increased the budget outcome on the revenue side
- 1.5 marks for a description of how the cyclical component increased the budget outcome on the expenditure side

Advice 1: The 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). 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. First, 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 relates to the nature of the current question) and second, the impact that they can have on the economy, such as the impact on aggregate demand and the business cycle (which was the focus of Question 3c on CPAP 2021 Exam 1). It is not uncommon for students to write a brilliant response, demonstrating a clear understanding of how automatic/discretionary stabilisers impact on the economy, when the question actually asked students to explain how these stabilisers impact on the budget outcome.

Advice 2: The most recent two examinations (2020 and 2019) tested student understanding of the role of automatic stabilisers. On both occasions, students performed relatively poorly. Question 2b of the 2020 exam required students to explain the role of automatic stabilisers in influencing aggregate demand and stabilising the business cycle in 2020, which was very similar to Question 3b of the 2019 exam which required students to describe how a budgetary policy automatic stabiliser operates to influence aggregate demand and economic growth. The average scores achieved were very low (52% in 2020 and 45% in 2019). In both exams, students inappropriately examined the impact that automatic stabilisers have on the budget outcome and therefore erred by making no reference to how the automatic stabilisers help to influence AD and the rate of economic growth. In addition, while a number of students could appropriately select an example of an automatic stabiliser (e.g. the progressive tax system or unemployment benefits) they could not adequately describe how it influences AD and the rate of economic growth. Given the difficulty that students experienced in the 2019 and 2020 exams, it is not unreasonable to expect another question on automatic versus discretionary stabilisers on the 2021 exam.

Advice 3: As noted in the 2020 Chief Assessor's Report, for a question focusing on current economic events, 'students should avoid explaining the role of automatic stabilisers in a theoretical context, including the way that the stabilisers work during the boom or peak phase of the economic cycle'.

Sample answer: *The 2020-21 budget deficit increased [from approximately $85 billion for 2019-20 to an estimated $161 billion for 2020-21) due to the operation of automatic stabilisers (i.e. the cyclical component of the budget). As the economy entered a downturn/recession) in 2020, the slow/negative rate of growth in real GDP automatically resulted in lower income tax revenue, as companies earned less profit [lower company tax revenue] and workers earned less income [lower personal income tax revenue]. In addition, the downturn/recession caused unemployment to rise, which resulted in the increased payment of government income support via unemployment benefits [JobSeeker allowance]. The effect of an automatic reduction in tax revenue, combined with an automatic increase in government expenditure, resulted in the estimated budget deficit increasing [i.e. without the influence of structural changes to the budget].*

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

c. Apart from selling bonds/government securities to the RBA, describe how the government can finance a budget deficit. **3 marks**

- 0.5 marks for demonstrating an understanding of what is meant by financing a budget deficit
- 0.5 marks for demonstrating an understanding of bonds/government securities
- 0.5 marks for identifying that the government could finance the deficit via bond sales to domestic investors
- 0.5 marks for identifying that the government could finance the deficit via bond sales to overseas investors
- 1 mark for demonstrating an understanding of how bond sales actually result in a budget deficit being financed

Advice: Students often misinterpret questions relating to the financing of budget deficits. For example, in the 2018 exam, students were asked to outline two options available to the government when deciding how to finance a budget deficit. The question was not well handled, with an average score of only 53% (2.1/4) and only 25% of students receiving full marks. Many students erred by referring to an increase in taxes or a reduction in expenditure as a means of financing deficits, not recognizing that while these two measures will indeed help to reduce deficits <u>in the future</u>, they are not means of financing an existing deficit. Be sure to avoid this mistake in the event that a similar question appears on the 2021 exam.

Sample answer: The government will finance budget deficits via the issue of Commonwealth Government Securities (CGS) for sale to domestic and/or global investors. This is tantamount to saying that the government will borrow from Australian investors [e.g. households, companies or even state governments] as well as foreign investors [e.g. overseas governments or banks] because the sale of the CGS involves the bond purchasers (i.e. the investors) handing cash over to the government which it then uses to fund the shortfall between its receipts and expenditure [i.e. its budget deficit]. In exchange, the investors become owners of an asset (the CGS) which offers interest on top of the principal amount that must eventually be repaid in the future [i.e. upon maturity of the CGS].

Note 1: Square bracketed section is not required for full marks.

Note 2: When referring to the debt instruments involved, students are free to refer to bonds, Commonwealth Government Securities or Australian Government Securities.

d. Explain the rationale behind the government's adoption of its medium-term fiscal strategy and describe one factor that might make it difficult to reduce the deficit over time.

5 marks

- 1 mark for demonstrating an understanding of the medium-term fiscal strategy
- 2 marks for a thorough explanation of <u>one</u> possible rationale/reason (or brief explanations of <u>two</u> rationales/reasons)
- 2 marks for describing one factor that might make it difficult to return the budget to surplus over time

Advice 1: This type of question has been asked on a few occasions in 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 to budget balance in the context of the current strategy), rather than what motivates it to reduce the size of the deficit over time and achieve balance/surplus (e.g. a desire to improve or maintain Australia's excellent credit rating or reduce the stockpile of government debt which can be burdensome on future taxpayers).

Advice 2: It is worth remembering the effect that COVID-19 and the 2020 recession had on the government's medium-term fiscal strategy. In response to the 'COVID recession', the government focused less on fiscal consolidation and more

on the need to repair the economy. The medium-term fiscal strategy was therefore watered down slightly from: a goal to achieve budget **surplus**, *on average, over the course of the economic cycle*, to a goal to achieve budget **balance**, *on average, over the course of the economic cycle.*

Advice 3: The second part of the question is similar to Question 2a of the 2020 exam which required students to describe two economic reasons why the Australian Government might find it difficult to achieve a budget surplus in the short to medium term (4 marks). The question was not well handled, with an average score of 50% and only 21% of students achieving full marks. As noted in the Chief Assessor's Report, it was expected that students would make reference to factors like the need to implement discretionary stabilisers and/or the influence of automatic stabilisers during the pandemic. However, students were awarded for describing any logical economic reason, such as the existence of natural disasters, rising trade sanctions imposed by China or even slow wages growth. The same applies in relation to the current question, as 'difficulty reducing a deficit' is effectively the same as 'difficulty achieving a budget surplus'.

Advice 4: When responding to questions such as this, students should avoid making common errors such as confusing budget surplus with the current account surplus; arguing that the higher level of Australia's 'NFD' made it difficult for the government to achieve a surplus because the debt needs to be repaid to foreign nations; or confusing budget deficits with government debt.

Sample response: *The adoption of the medium-term fiscal strategy to achieve budget balance on average over the course of the economic cycle is designed to help the government reduce its stockpile of [net] government debt as the economy recovers in the future. This will help to reduce the interest burden on future budgets and also paves the way for the budget to return to surplus in the longer term. This strategy will not only help to maintain Australia's strong credit rating [which reduces interest costs for the government and makes it easier to access future borrowings], but the potential elimination of (net) government debt in the long term will allow the government to store future surpluses in an account with the RBA [or purchase other financial assets] which puts the government in a better position to support the economy during future economic downturns [via the delivery of budget deficits once more]. A factor that could make it difficult for the government to achieve a lower budget deficit is a continuation of very low rates of economic growth (or even negative rates of growth or another recession). This causes automatic stabilisers to come into play, increasing pressure on government expenditure (as welfare or income support payments rise) and reducing pressure on government receipts (as lower incomes across the economy lead to a fall in income and company tax receipts), the combined effect of which is to increase the size of the budget deficit and delay the return to budget balance.*

Note 1: Square bracketed section is not required for full marks.

Note 2: As mentioned in Advice 3, teachers should be flexible when accepting possible reasons that might make it difficult to reduce the deficit over time.

e. **Explain how a recent budgetary policy supply side initiative can help the government to achieve strong and sustainable economic growth.** 4 marks

- 0.5 marks for demonstrating an understanding of the goal of strong and sustainable economic growth
- 0.5 marks for outlining/describing a recent BP supply side initiative
- 2 marks for a comprehensive explanation of how the initiative can contribute to stronger economic growth.
- 1 mark for linking the initiative to more sustainable economic growth

Advice: A similar question was asked in the 2020 exam (Q 3b), where students were asked to explain how investment in infrastructure and spending on training/education might influence aggregate supply and the achievement of strong and sustainable economic growth. The average score was 62% (3.7/6) with only 12% of students achieving the full six marks. A major problem was the inability/unwillingness of students to make the appropriate link to the sustainable aspect of the economic growth goal. In addition, as noted in the Chief Assessor's Report, a number of students spent an inappropriate amount of time explaining how the given AS initiative contributed to a stronger rate of economic growth <u>on the demand side</u>. For example, students spent some or all of their time elaborating on the link between increased skills (or an improvement in human capital), the increased ability to gain employment, the higher resulting income and the resulting increase in consumption and AD. Instead, the focus needed to be on how the improvement in human capital helps to improve supply conditions for business and then how this helps to achieve stronger and more sustainable growth. The current question does not specifically direct students to address how the initiative might influence aggregate supply (which was the case for Q3b 2020) but this is implied by the reference to 'budgetary policy supply side initiative' and the need to link this to more sustainable growth.

Sample answer: *The government's goal for strong and sustainable economic growth is to achieve the highest rate of economic growth, that is consistent with strong employment growth, but one that is not excessive (e.g. one that leads to excessive inflation and/or excessive pressures on the external sector or the environment). The extension of the instant asset write-off in the recent 2021-22 Budget encourages businesses to invest in new capital given that they can more quickly 'write assets off as expenses'. The initiative can assist with the achievement of the government's goal because it works to stimulate private sector investment beyond that which would otherwise have occurred. As the Investment component of AD increases, it not only helps to boost AD and achieve a stronger rate of economic growth today, it is also likely to make growth more sustainable over time (assuming that the investment in capital has been sound and well placed). This occurs because the investment should help to boost the quality of physical capital, lift productivity/technical efficiency and raise the productive capacity of the economy (i.e. boost aggregate supply), which leads to an increase in low inflationary economic growth. [This can be depicted by the AS curve shifting to the right and economic growth being encouraged by lower prices.]*

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

f. Evaluate the effectiveness of budgetary policy over 2020-21 in achieving the goal of full employment.

6 marks

- 1 mark for demonstrating an understanding of the goal of full employment
- 2 marks for explaining how a factor may have reduced the effectiveness of budgetary policy (i.e. a weakness of recent policy use)
- 2 marks for explaining how a factor may have increased the effectiveness of budgetary policy (i.e. a strength of recent policy use)
- 1 mark for an overall judgement based on the discussion of the strength(s) and weakness(es)

Advice 1: In the 2020 exam, the most poorly handled question (Q2d) required students to evaluate the effectiveness of monetary policy in achieving the goal of full employment. The average score was 2.5/6 and only 7% of students were able to achieve the full 6 marks, with 35% of students achieving either 0 or 1. The major mistake made by students was the inability to recognise that an evaluation of the effectiveness of policy required a discussion of the relative strengths and weaknesses. Instead, many students simply described how monetary policy was used throughout 2020. As noted in the 2020 Chief Assessor's Report, the best performing students were able to prioritise their arguments (strengths/weaknesses) to arrive at a reasoned conclusion as to the overall effectiveness of the policy during 2020. With respect to the current question, students should recognise that the focus is on budgetary policy (not monetary policy) and that they should avoid focusing solely on how the government used the budget over 2020-21 to assist with the reduction of the unemployment rate.

Sample answer: *Over 2020-21 the government has employed expansionary budgetary policy stances in an attempt to stimulate economic growth, promote employment and reduce the rate of unemployment towards the full employment level of approximately 4.5%, which is considered the lowest feasible rate of unemployment that can be achieved before inflation becomes excessive [which is typically referred to as the Non-Accelerating Rate of Unemployment, or NAIRU for short].*

A major strength of budgetary policy over this time has been its flexibility in terms of being able to focus on particular sectors, industries or groups in need of fiscal support [unlike monetary policy, which is relatively one dimensional and blunt, relying on interest rates as the only lever to manipulate economic activity]. For example, the government was able to implement both the JobKeeper wage subsidy and the doubling of JobSeeker (i.e. the coronavirus supplement) which targeted specific groups in the economy, such as firms struggling to pay workers during lockdown, workers in vulnerable industries (e.g. those in hospitality and tourism) and the unemployed who were likely to quickly spend all or most of the coronavirus supplement on goods and services [due to higher marginal propensity to consume], thereby helping to provide a relatively quick stimulus to the economy, supporting employment and preventing a steep climb in the rate of unemployment.

A major weakness associated with budgetary policy over 2020-21 is the fact that the expansionary budget deficits have resulted in a large increase in public [government] debt over the next few years [expected to exceed $1 trillion]. This forces the government into a position where it will need to consolidate its finances [fiscal consolidation] in the near future if it is to achieve its medium-term fiscal strategy [to achieve budget balance on average over the economic cycle] which has the potential to inflict 'pain' on the economy over the next five to ten years. This is particularly the case if the economy does not fully recover, and automatic stabilisers do not assist with a return to budget surplus. In this scenario, the government could be forced to implement contractionary policy initiatives (e.g. higher taxes and lower expenditure) in order to repair the budget, which would negatively impact on future rates of growth in real GDP and employment, making it more difficult to achieve full employment.

On balance, budgetary policy has been successful in reducing the unemployment rate towards the full employment level over 2020-21, with the unemployment rate falling over this time to below 5% by the middle of 2021. The specific influence of JobKeeper, by design, prevented the unemployment rate climbing above 8%, which would not have been possible without the influence of budgetary policy [i.e. with monetary policy acting alone to stimulate economic growth and employment].

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