

# 2021 VCE Economics external assessment report

## General comments

The majority of students performed well in Section A and demonstrated the necessary knowledge and skills by selecting the correct option in the multiple-choice questions. However, many had difficulty with Question 10, which required students to select which of the four options listed (a fireworks display, street lighting, healthcare services and free-to-air TV broadcasts) 'is not likely to be considered a public good'. Many students chose 'a fireworks display' or 'free-to-air TV broadcasts', failing to recognise that these two are more likely to be examples of public goods as they are both non-excludable and non-depletable, unlike healthcare services, which are partly non-excludable and partly non-depletable. Students should remember that healthcare services (like education) are examples of a 'good' with positive externalities in consumption. It is technically not a public good because you can exclude many non-payers from enjoying (some of) the benefits and one person's consumption typically prevents another person from enjoying 'all' of those benefits.

In Section B, most students attempted all questions and were able to structure their responses well, addressing the questions' key components and making use of the extra space at the end of the booklet. However, in some cases students included material not relevant to the question, such as referring to how the Reserve Bank of Australia (RBA) manipulates the cash rate for Question 1c. or providing more examples/factors than necessary or required (e.g. Questions 1b., 1c., 2d., 2e., 3a., 3c., 3d., 3e. and 4d.).

Students should read the questions carefully. For example, Question 1b. required more than an explanation of why unemployment fell over the course of 2021. The question required them to explain why the actual unemployment rate towards the end of 2021 was lower than the RBA forecast. It therefore required students to address the extent of the inaccuracy. In relation to Question 3e., many students focused on the consumption of fish (from Question 3d.) and referred to the price elasticity of demand and/or focused on factors affecting the price elasticity of demand when the question specifically required students to explain one factor affecting the price elasticity of supply of fish. In Questions 4b. and 4d., close to 50% of responses were either blank or scored zero, suggesting that students may need to develop a more thorough understanding of key knowledge from Unit 3, Area of Study 3. These include terms of trade, net foreign debt, (factors affecting the) current account balance, and/or the structure of the balance of payments more generally.

Students would also benefit from having a better grasp of the differences between automatic and discretionary stabilisers (Question 2b.), between a budget deficit and a current account deficit (Questions 2a. and 4b.) and between deficits and debt (Question 2a.). Many confused 'strengths' of policies with the 'operation' of policies (Question 1d.).

Questions requiring the following areas of knowledge and skills were answered well by most students:

- the meaning of the goal of full employment
- aggregate demand and aggregate factors that have influenced the unemployment rate in the past two years
- transmission mechanisms of monetary policy and their influence on the level of aggregate demand
- the relationship between the budget outcome and the level of government (public) debt

- how aspects of budgetary policy are designed to influence aggregate supply and the achievement of domestic macroeconomic goals: spending on training and education, research and development grants, and subsidies
- factors likely to affect demand and the position of the demand curve: changes in disposable income, the prices of substitutes and complements, preferences and tastes, interest rates, changes in population and consumer confidence
- factors likely to affect supply and the position of the supply curve: changes in the costs, technological change, productivity growth and climatic conditions
- reasons for market failure: common access resources and (positive) externalities (in consumption)
- the role and effect of indirect taxation, subsidies, government regulations and government advertising as forms of government intervention in the market to address market failure
- explaining trends, patterns, similarities and differences in economic data and other information.

Many responses did not score highly in questions requiring application of the following skills and knowledge areas:

- the strengths of using monetary policy to achieve the Australian Government's domestic macroeconomic goal of full employment
- the role of automatic stabilisers (cyclical component of the budget) in influencing aggregate demand and stabilising the business cycle
- the strengths and weaknesses of using budgetary policy to achieve the government's domestic macroeconomic goal of full employment
- how welfare and tax reform policies are designed to influence aggregate supply and living standards
- factors affecting price elasticity of supply: spare capacity, production period and durability of goods
- the balance of payments and its components
- the relationship between the current account and the capital and financial account
- causes of Australia's current account deficit including cyclical and structural factors
- calculating relevant economic indicators using real or hypothetical data
- analysing economic relationships through the interpretation of data, graphical trends, patterns and other information
- explaining key international economic relationships and how they may affect living standards.

Students are advised to develop a better understanding of the following terms and concepts as many students demonstrated gaps in the following knowledge:

- factors affecting the price elasticity of demand and the price elasticity of supply
- the meaning of 'trade balance' and its relationship with economic growth and living standards
- the difference between the terms of trade and the trade balance
- how movement in the current account balance will impact on the Capital and Financial Account (CAFA)
- the difference between a current account deficit (CAD) and a budget deficit
- the difference between production and productivity
- public debt versus foreign debt
- the difference between structural and cyclical factors influencing the current account balance.

## Specific information

Note: Student responses reproduced in this report have not been corrected for grammar, spelling or factual information.

This report provides sample answers, or an indication of what answers may have been included. Unless otherwise stated, these are not intended to be exemplary or complete responses.

The statistics in this report may be subject to rounding resulting in a total more or less than 100 per cent.

## Section A – Multiple-choice questions

The table below indicates the percentage of students who chose each option.

Question	Correct Answer	% A	% B	% C	% D	Comments
1	A	73	4	21	2	
2	A	93	2	1	4	
3	C	4	6	84	6	
4	B	27	53	5	14	
5	C	4	7	86	3	
6	B	6	57	22	15	
7	C	17	6	66	11	
8	A	79	11	8	3	
9	A	71	8	11	10	
10	C	32	2	48	18	Healthcare services are technically not a public good because non-payers can be excluded from enjoying (some of) the benefits and one person's consumption typically prevents another person from enjoying 'all' of those benefits. In other words, healthcare services are only partly non-excludable and partly non-depletable and therefore don't strictly meet the conditions/requirements for a public good. In comparison, the other options are more likely to be non-excludable and non-depletable.
11	A	70	8	13	9	
12	C	3	30	57	11	
13	B	14	66	10	10	
14	D	3	6	3	89	
15	D	8	9	12	70	

## Section B

### Question 1a.

Marks	0	1	2	Average
%	13	31	57	1.5

Responses that included an accurate definition and at least two of the following points were awarded full marks. Most students scored highly in this question, referring to a number of the key characteristics that help to explain what is meant by full employment, such as:

- an absence of cyclical unemployment
- the Non-Accelerating Inflation Rate of Unemployment (NAIRU)
- the lowest rate of unemployment that can be achieved without excessive wages and prices growth (currently considered to be approximately 4.5%)
- the level of unemployment that exists when the government's economic growth objective is achieved
- when 'most' of those who are willing and able to work are able to do so
- the existence of hard-core, structurally, seasonally or frictionally unemployed even when 'full employment' exists.

The following is an example of a high-scoring response.

*The goal of full employment refers to the lowest rate of unemployment that exists (with no cyclical unemployment) and one that does not fall below the Non-accelerating Inflation Rate of Unemployment or NAIRU. This is said to be the target rate of approx. 4.5% unemployment (or natural unemployment).*

### Question 1b.

Marks	0	1	2	3	4	5	Average
%	23	14	16	19	16	12	2.3

To achieve full marks, students needed to provide an indication of what actually happened to the unemployment rate (i.e. comment on the extent of the inaccuracy) before identifying a relevant aggregate demand and aggregate supply factor and explaining how these factors caused the forecast to be inaccurate. Many students generally didn't perform well on this question. Responses that scored highly explained why the actual unemployment rate towards the end of 2021 was lower than the RBA forecast, specifically identifying one aggregate demand factor and one aggregate supply factor that contributed to this lower rate between February and October 2021 that the RBA had not foreseen. This highlights the need for students to be aware of the key macroeconomic indicators (e.g. inflation, unemployment and economic growth) during the year of study. Students who weren't aware that the unemployment rate was lower than 6% could not score highly because they focused on factors that caused the unemployment rate to increase, when the opposite was required.

Examples of common misconceptions found in responses that did not score well included:

- attempting to explain why the RBA made a relatively high forecast of 6% for unemployment rather than explain why the actual rate of unemployment later in 2021 was lower than the February forecast, which meant that they addressed the need to focus on factors that caused the unemployment rate to be lower.
- not identifying and/or explaining an aggregate demand and an aggregate supply factor and instead focusing on events that potentially made the forecast inaccurate, such as additional government fiscal support measures. While some marks could be awarded for this approach, students needed to link the reason provided to an aggregate demand and/or aggregate supply factor.

The following is an example of a high-scoring response.

*One aggregate demand factor that could explain why the RBA forecast a lower employment rate than what it was in actuality was higher than expected consumer confidence at the end of 2021 than expected. Usually, low consumer confidence means less consumption and in turn low AD, however, having a higher level than expected due to the recent opening up of the economy more widely but also tourism, has led to an increase in consumption and AD. This increased the level of derived demand for labour, and in turn increased employment levels to higher than expected (4.6% unemployment compared to 6% ) One supply factor is the higher than expected exchange rate, where a higher value of the AUD has meant that businesses that rely on imports to produce have a lower cost of production, and they can reduce prices and enjoy higher demand which leads them to hire more people, decreasing unemployment more than expected.*

## Question 1c.

Marks	0	1	2	3	4	5	Average
%	17	7	8	13	21	34	3.2

To achieve full marks, students needed to correctly identify the stance of monetary policy and then provide an accurate description of a relevant transmission mechanism and its impact on AD (referring to a component of AD) before linking the movement in AD to the achievement of full employment (or a reduction in the rate of unemployment).

Most students responded well to this question, recognising the importance of the key terms in the question, which included 'current monetary policy stance', 'aggregate demand (AD)' and 'full employment'. The highest-scoring responses highlighted that the current stance of monetary policy was expansionary/accommodative, then identified one relevant transmission channel of monetary policy and explained how the low interest rate environment helps to stimulate AD (referring to at least one AD component), boost employment growth and contribute to downward pressure on the right of unemployment (assisting with the achievement of the government's full employment goal).

Common errors and misconceptions included:

- identifying one transmission channel but explaining another
- failing to identify the current MP stance in their response
- linking the low(er) interest rates to AD but not examining the impact of these on employment/unemployment
- making reference to aspects of monetary policy unrelated to the question, such as a discussion of open market operations or the impact on other macroeconomic goals.

The following is an example of a high-scoring response.

*Monetary Policy is an aggregate demand policy implemented by the RBA on behalf of but independent to the Aus. government and is concerned with influencing AD countercyclically and the manipulation of the cost and demand for credit (via interest rates). In 2021, the RBA has maintained a highly expansionary stance with a low cash rate of 0.1%, and they have employed unconventional monetary policy such as forward guidance and bond purchases, intended to boost AD by assuring consumers that it won't tighten monetary policy until it's goals of full employment and price stabilities are met. The low cash rate, and low interest rates can boost AD via the cash flow channel. A reduction in interest rates lowers the effective repayment costs for firms and households with existing variable rate loans. For households, less disposable incomes need to be allocated to loan repayments, so they experience a rise in discretionary income, boosting the C component of AD. For firms, the lower interest charge improves their cash flow, allowing them to invest further into capital goods, boosting the Investment ( I ) component of AD. The rise in AD would cause firms to notice strong sales volumes and falling stock levels, hence they increase*

*levels of production. The derived demand for labour would also rise, lowering cyclical unemployment. This reduces unemployment rates toward the 4-4.5% target xxx in achievement of full employment.*

## Question 1d.

Marks	0	1	2	3	4	Average
%	18	15	19	24	25	2.2

To achieve full marks, students needed to explain how two separate weaknesses limit the ability of monetary policy to reduce the rate of unemployment. Many students did not meet all the requirements of this question. Many students listed generic weaknesses associated with the use of monetary policy, such as its bluntness and the relatively long impact lags, without adequately explaining how these weaknesses limit the effectiveness of an expansionary monetary policy stance. Responses that scored highly made it clear how the weaknesses not only constrain the ability of low(er) interest rates to stimulate AD, but also how this impairs the ability of monetary policy to achieve full employment.

When answering questions related to weaknesses of government policies, students need to link the weakness to the non-achievement of the goal or target listed in the question. For example, it was insufficient to simply explain how the long impact lag can be problematic as the delayed effects of lower interest rates could cause the policy to be pro-cyclical rather than counter-cyclical. While this is indeed true, a link back to the (non) achievement of full employment was required for full marks.

The following is an example of a high-scoring response.

*Weakness 1: One weakness of monetary policy is that the RBA does not have direct control over interest rates, and as a result, financial institutions may not pass on all savings consumers could be making from a lowered cash rate. As such consumption and investment may not increase as much as desired, decreasing the amount that AD would increase. This means that the derived demand for labour will not be as high and as a result the goal of full employment (an unemployment rate between 4.5-5% with no cyclical unemployment) will not be as supported as possible.*

*Weakness 2: The RBA cannot force people to spend the increased discretionary income possibly gained from a low cash rate. As such, this can increase savings (a leakage) rather than consumption or investment and not increasing AD. As a result, the derived demand for labour does not increase as much and goal of full employment is not as supported.*

## Question 2a.

Marks	0	1	2	3	Average
%	19	21	23	37	1.8

To achieve full marks, students needed to correctly identify the (estimated) budget outcome for 2021–22 (i.e. an estimated underlying/headline cash deficit) and then link the budget deficit to an accumulation of government (public) debt or the creation of new government debt.

The question was generally answered well with most students achieving at least two of the three marks available. Responses that scored highly identified the estimated budget outcome for 2021–22 (e.g. a budget deficit of \$106.6 billion) and explained how this created the need for the government to borrow money in financial markets (e.g. via the sale of Commonwealth Government securities/bonds), leading to an increase in government debt.

Some students incorrectly focused on the lower deficit (e.g. falling from an actual \$134.2 billion to an estimated \$106.6 billion), arguing that it reduced public debt. This approach prevented students from



receiving the full three marks. Students should remember that public debt will continue to rise in response to a budget deficit even if the deficit is lower (because expenditure is still higher than receipts, which requires borrowing and further rise in debt levels).

Common problems or misconceptions included:

- tackling the issue the wrong way around by examining how COVID-19 caused a high level of debt and then caused the government to adopt a less expansionary stance
- confusing government debt with NFD and even referring to credits minus debits when attempting to describe the budget deficit
- confusing a budget deficit with the current account deficit
- arguing that the government finances a budget by selling bonds to foreign investors (implying that there is no scope for selling bonds to the domestic investors and that all government debt is foreign debt).

The following is an example of a high-scoring response.

*The forecast underlying cost outcome of \$106.6 billion for the end of 2021-22 financial year (smaller deficit than the \$161 billion deficit for 2021-21 implies that the level of government expenses exceeds the level of government revenues as evidenced by the deficit. The level of government debt refers to the total amount owing by the government to domestic and/or foreign lenders as a result of their past borrowings. The existence of a deficit in 2021-22 requires the government to finance this deficit through the sale of government bonds domestically or through the foreign sector (i.e., increasing borrowing) which would increase the level of government debt.*

## Question 2b.

Marks	0	1	2	3	4	5	6	7	8	Average
%	11	7	8	9	10	12	17	17	9	4.4

To achieve full marks, students needed to explain what is meant by automatic stabilisers and discretionary stabilisers (including a relevant example of each) as well as isolate a key point of difference between the two types of stabilisers, before going on to explain how the stabilisers affect AD and the stabilisation of the business cycle.

Relatively few students responded well to this question. The highest-scoring responses correctly interpreted the question and recognised the importance of the command terms in the question, specifically 'explain the difference' and 'use an example'. They were able to isolate a key point of difference between automatic and discretionary stabilisers before demonstrating how each operated during the recent economic downturn to support aggregate demand and stabilise the business cycle.

Common problems and misconceptions included:

- When discussing budget revenue, a number of students argued that reduced income tax collections and/or increased welfare payments result in an increase in disposable income, when they needed to say that it helps to prevent disposable incomes from falling as much (as would have been the case without the operation of automatic stabilisers).
- Students argued that the 'government increased its welfare payments during the recession', which implies that it is a discretionary action on behalf of the government, rather than welfare payments automatically increasing in response to high levels of unemployment.
- Students explained the role of automatic stabilisers in a theoretical context, without linking their operation to the recent economic downturn (or recovery over 2021).
- Some students were able to show how the stabilisers help to increase AD during a downturn but neglected to make the necessary link to how they 'stabilise the business cycle'.
- When describing automatic stabilisers some students referred to tax rates automatically changing in response to changes in economic activity instead of referring to automatic changes to tax receipts.

- Some students described how changes in interest rates help to stabilise AD and the business cycle, failing to recognise that interest rate changes are not a feature of automatic stabilisers within the budget.
- Some students did not make specific reference to a key point of difference between the two types of stabilisers.

The following is an example of a high-scoring response.

*The business cycle refers to the wave-like, cyclical movements of AD and economic activity (national spending and Real GDP) over time, and comprises four phases - troughs, peaks, contractions and expansions. In early 2021, Australia was in expansionary phase following the 2020 recession, but following the lockdowns in NSW and Victoria, the level of AD and economic growth remains weak in Australia. This is where budgetary policy, the government's manipulation of public revenues and expenses to stabilise AD, operates in order to boost AD and economic growth during this slump in the business cycle.*

*The government's use of BP can be categorised into automatic stabilisers and discretionary stabilisers. Both of these have the similar objective of increasing government expenses (injections) and decreasing revenues (leakages) in the circular flow of income and boost AD and act countercyclically in current economic conditions. However, they differ in their operation as automatic stabilisers respond to movements in the business cycle and are in built components of the budget that act countercyclically to stabilise the business cycle. Whereas discretionary stabilisers refer to deliberate additions or changes to budgetary policy that work to increase outlays or decrease revenues to boost AD during a downturn when automatic stabilisers are not adequate in their countercyclical operations.*

*An example of an AS is the operators of Australia's welfare system. In 2020, the unemployment rate rose to a high of 7.5% in June. The rise in the level of unemployed people made them automatically eligible for welfare benefits. This acted to lessen the severity of the fall of disposable incomes, private consumption and hence AD. This thereby automatically acted countercyclically to stabilise the business cycle by preventing growth from falling too far. However, in 2021 as the economic conditions persisted and automatic stabilisers did not adequately boost AD, the government deliberately implemented expansionary budgetary policy such as the low to middle Income earner tax offset, a policy in the 2021-22 budget that allowed low- and middle-income earners to claim a rebate of up to \$1080 when they claim their tax return. This allowed for the growth in disposable and hence the Consumption component of AD. Therefore, this is an example of discretionary policy that acted to stabilise AD and the overall level of economic activity, thereby stabilising the business cycle as a result of deliberate actions taken by the government, whereas automatic stabilisers automatically stabilised the business cycle by lowering the fall in AD and economic activity without direct government action.*

## Question 2c.

Marks	0	1	2	3	4	5	6	Average
%	12	11	13	14	18	18	15	3.3

To achieve full marks, students needed to identify a strength and weakness of budgetary policy and explain how it enhances (limits/constrains) the ability of budgetary policy to assist with the achievement of strong and/or sustainable growth.

Many students did not interpret and answer all of the question accurately. Many listed a generic strength and weakness associated with the use of budgetary policy, without adequately linking them to how they made the policy more or less effective in achieving the goal of strong and sustainable economic growth. On budgetary policy strength, many students identified an appropriate strength, such as a relatively short impact lag, but then simply explained how a policy initiative worked to increase the rate of economic growth. Responses that scored highly clearly articulated how the identified strength actually made budgetary policy particularly potent or effective over the past couple of years. They also made it clear how the weakness potentially constrained



the ability of recent budgetary policy initiatives to support aggregate demand during the recent downturn and therefore assist with the achievement of strong and sustainable economic growth. Some understanding of what is meant by the goal of strong and sustainable economic growth was required for full marks.

Common errors and misconceptions included:

- not demonstrating an adequate understanding of the goal (e.g. simply saying that it involved government attempts to achieve a high rate of economic growth)
- saying that a budgetary policy strength is its ability to target parts of the economy but then not showing how this made it more effective at achieving a stronger (or more sustainable growth) than otherwise
- simply articulating how budgetary policy operates rather than explaining what makes budgetary policy particularly powerful at supporting the goal of strong and sustainable economic growth.

The following is an example of a high-scoring response.

*The goal of strong and sustainable economic growth is the highest rate of economic growth (measured by percentage changes in real GDP) possible without causing inflationary, external, or environmental pressures. This is said to be a target of 3-3.5% growth in real GDP. One strength of BP is its ability to directly increase the incomes of consumers which makes it especially effective at boosting AD during economic downturn. For example, the Jobseeker payments that were increased by \$250 per fortnight in 2020 significantly boosted the disposable incomes of those with a high marginal propensity to spend, which helped to slow the fall in AD and economic growth, thereby assisting in the achievement of a stronger rate of economic growth.*

*One weakness of budgetary policy in 2020, was political pressure that influences decisions making for discretionary stabilisers. Because the government felt pressure to not only respond to the economic situation to protect living standards, but to also remain favourable by the public they created the Job Keeper wage subsidy quickly and as a result, businesses that made higher profits in 2020 still received the subsidy. This meant less money was going to business and in turn households that needed the money and would have definitely spent it on consuming or investing, which would have increased AD more. As such, it hampered the effectiveness in supporting growth and the increased debt that the government took on hinders sustainability as resources were not allocated as efficiently as possible.*

## Question 2d.

Marks	0	1	2	3	4	Average
%	7	12	22	26	32	2.7

To achieve full marks, students needed to explain how the selected policy (spending on education and training, research and development grants or subsidies) might affect both aggregate supply and the achievement of low inflation/price stability. They also needed to demonstrate an understanding of the low inflation goal (i.e. price stability).

Many students were able to identify how the relevant initiative helped to increase the quality and/or quantity of labour but provided an insufficient explanation of how this occurred. In addition, some students bypassed the link to aggregate supply and simply focused on the link to inflation. In some instances, students did not examine the impact on the achievement of the goal, which required some understanding of what is meant by the low inflation (price stability) goal.

Examples of errors and misconceptions included:

- spending too much time providing detail on the nature of the relevant budgetary policy initiative and little time on explaining how the initiative can increase aggregate supply and assist with the achievement of the goal of low inflation
- confusing the concepts of production and productivity

- focusing on an aggregate demand explanation rather than an aggregate supply explanation, such as an increase in research and development grants leading to an increase in private sector investment, boosting aggregate demand (shifting the aggregate demand curve to the right) and resulting in an increase in aggregate supply (an expansion along the aggregate supply curve).

The following is an example of a high-scoring response.

*The goal of low inflation is for the general increases a price level (as measured by percentage changes in the consumer price index) to be 2-3% per year on average over time. In the 2021-22 budget, the government extended and invested a further 1.0 billion in Job trainer, a fund which subsidises or makes free training modules for Jobseekers in areas which Australia has skill shortages. This is intended to boost the quality of human capital, the skills, experience and education of the labour force such that when they enter jobs, they are more productive (i.e. they produce more per hour worked) As such, firms would experience a growth in labour productivity and hence a decrease in per unit costs of production (per unit labour costs). This makes production more profitable and increases the willingness and ability of firms to supply, thereby boosting AS. Additionally, since firms have lower per unit costs of production (lower unit labour costs) they are able to pass these onto consumers as lower prices without severely impacting profit margins. Thus, this reduces cost inflation and lowers general inflation rate. Since Australia's current sustained rise in price levels (underlying rate of 2.1% for September 2021) is below the 2-3% target, thus would hinder the low inflation goal in the short term, but allows for more sustainable economic growth in the future and therefore assists with the achievement of low inflation in the long term.*

## Question 2e.

Marks	0	1	2	3	4	Average
%	13	14	21	25	28	2.4

To achieve full marks, students needed to identify a relevant policy and then describe how the policy might influence aggregate supply and how the policy influences material living standards.

In many cases students were able to appropriately refer to a recent policy initiative. However, it appears that some students used rote-learned responses on how tax reform or welfare reform may have helped to increase aggregate supply without providing clarity on how the relevant reform works actually increases the capacity to supply goods and services in the economy. Specifically, students talked about the ability of the reforms to increase the labour supply (or the participation rate) and increase productivity (and therefore reduce costs of production, etc.) without making it clear how productivity increases. Responses that scored highly referred to greater intensity of effort or willingness to work harder when linking the initiative to aggregate supply and/or referred to growth in the supply of labour – both of which exert downward pressure on labour costs and increase access to resources, which then increases the capacity to supply goods and services. They then made the important link to material living standards by, for example, highlighting how an increase in aggregate supply and the resulting boost to real GDP results in higher incomes on average (as measured by real GDP or real national income per capita) and an increased ability for Australians (on average) to access goods and services.

Examples of errors and misconceptions included:

- linking the taxation or welfare reform directly to growth in material living standards without describing the impact on aggregate supply
- referring to inappropriate examples of 'tax reform' in the context of the question, such as a reduction in the GST
- spending too much time providing detail on the nature of the relevant taxation or welfare reform initiative and little time on explaining how the initiative can influence both aggregate supply and material living standards

- referring to tax changes related to specific markets, such as increases to excise taxes on tobacco products, thus missing the point of the question, which asked for a tax/welfare reform aimed at generating economy-wide benefits.

The following is an example of a high-scoring response.

*In the 2021-22 Budget, the government invested a further 1.7 billion in the childcare subsidy, a welfare Reform Policy that intends to make the costs of childcare cheaper for powers with multiple children. This increases the net incentive of these parents to work by lowering childcare costs. Therefore, this increases the readiness of these parents to seek work, hence increasing the size of the labour force (boosting the participation rate). This would create more slack on the labour market due to the increase in supply of labour, and hence it would reduce the bargaining power of individuals to negotiate higher wages, placing downward pressure on wages. This decreases a significant costs of production for firms, which thereby reduces the per unit costs of production. This makes supply more profitable and hence increases their willingness and ability to supply, boosting AS. Also, firms experience a fall in per unit costs (via a fall in per unit labour costs, assuming outputs grow in a steady rate) and so these can be passed onto consumers as lower prices, decreasing cost inflationary pressures may allow normal wages growth to outstrip the inflation rate, causing a rise in real wages and purchasing power. This then improves access of consumers in purchasing goods and services, improving material living standards.*

### Question 3a.

Marks	0	1	2	Average
%	12	17	72	1.6

To achieve full marks, students needed to identify a relevant factor and then link the factor to the increase in consumption of fish.

The question was generally handled well, with some leniency afforded to students when determining the validity of demand and supply factors in the context of the question. Students with the highest-scoring responses were able to immerse themselves in the scenario and respond by referring to factors that may be responsible for the 'long-term growth' in fish consumption, spanning a period of more than 50 years. For example, they were able to identify factors such as growth in average disposable incomes across the globe over this time (demand) and advances in technology or improved fish-farming techniques (supply).

Examples of errors and misconceptions included:

- simply referring to a lower price of fish, which increases demand
- listing a relevant factor (e.g. changes in tastes or higher price of substitutes) without explaining how it has resulted in greater fish consumption
- simplifying the question by focusing on fish sold in a fish and chip shop in an Australian city and then referring to demand/supply factors that are more relevant in that context (e.g. a lower cost of casual labour helping to reduce costs and prices)
- wasting time by referring to both a demand and a supply factor.

The following is an example of a high-scoring response.

*Over 1961-2017, Australian fishermen may have developed and implemented new fishing technology (such as netting) which improves the productivity of fishing as it allows for a greater level of output (greater volume of fish) for fewer inputs (labour time spent fishing, wages for fishers etc.). As such per unit costs of production fall for fisheries, which increases their level of profitability and hence increases their willingness and ability to supply at all price points (i.e., an increase in the supply of fish). This could cause a new equilibrium in the market of fish with a lower market price and a greater volume purchased or consumed.*

## Question 3b.

Marks	0	1	2	3	Average
%	12	22	33	33	1.9

To achieve full marks, students needed to identify the characteristics of common access resources (e.g. non-excludability and rival in consumption/depletability) as well as make a meaningful reference to the quote before establishing a link between the characteristics and a less-efficient allocation of resources.

Most students recognised the key components of the question. Namely, the need to both identify the characteristics of common access resources and to establish a link between these characteristics and a less-efficient allocation of resources, while making meaningful reference to the quote. Responses that did not score well did not focus on common access resources (and therefore did not identify the characteristics of non-excludability and depletability) and instead explained how resource depletion due to overfishing was an example of a negative externality in production. Responses that scored highly made a link to either intertemporal efficiency or allocative efficiency as they explained why, in the absence of government intervention, the existence of common access resources leads to an overallocation of resources to certain activities or production, leading to resource depletion and a socially suboptimal allocation of resources.

Examples of errors and misconceptions included:

- no meaningful reference to the quote
- no attempt to demonstrate an understanding of the characteristics of common access resources.

*Common access resources refer to resources that are non-excludable (non-paying consumers cannot be excluded from accessing the resource), but depletable (the consumption by one entity necessarily hinders the ability of a subsequent entity to enjoy the same consumption). This causes profit maximising fish firms, who notice the “average annual growth of total food fish consumption at 3.1%”, to seek to maximise their access to the fish resources in open water to dramatically increase their catchment of fish resources in open water through increased commercial netting. Since these firms cannot be excluded from accessing the finite fish resources, this causes an over consumption of fish in open water, as evidenced by the decrease in biologically sustainable fish levels from 9% in 1974 to 65.8% in 2017. This depletion in fish resources causes an imbalance between the satisfaction of current generations with the ability of future generations to enjoy the same level of access to fish resources. This indicates a failure to meet intertemporal efficiency.*

## Question 3c.

Marks	0	1	2	3	Average
%	16	18	35	32	1.8

To achieve full marks, students needed to identify a relevant government intervention and then explain how it addresses market failure associated with common access resources (CAR).

Most students were able to outline a relevant government regulation (e.g. one involving the introduction of licenses and quotas) but did not sufficiently explain how it addresses the market failure associated with CAR. For example, how the introduction of more stringent quotas or licenses work to reduce the supply of fish to markets, raising prices, reducing demand and leading to lower production levels so that fewer resources are allocated to fish production or extraction. This helps to ensure that there is no longer an over-consumption of fish (or some other common access resource) and a suboptimal allocation of resources. In relation to specific initiatives, some students were able to accurately identify subsidies or indirect taxes as a potential intervention to address the market failure, but they could not adequately explain how these could be employed to reduce exploitation of fish stocks (or some other CAR). Responses that did not score well

simply asserted that the government could give subsidies to the fishing industry without explaining how this could potentially reduce overfishing. Responses that scored highly made it clear that the subsidy could be given to those producers who are prepared to reduce the volume of fish taken from the ocean or even to producers of substitutes or those organisations that have a mandate to preserve fishing stocks or promote sustainability more generally.

Examples of errors and misconceptions included:

- listing a relevant government intervention without explaining how it addresses the market failure
- not recognising the important role that the price mechanism can play in addressing market failure (e.g. the use of taxes on the fishing industry, which raises prices, reduces demand, decreases production and results in a reduced exploitation of fishing stocks).

The following is an example of a high-scoring response.

*One government intervention that could be used is government regulation, where the consumption and production of common access resources are monitored and managed by the governments to limit the over consumption of the product. In the case of the fish, this could be in the form of a fishing license that permits only a few businesses to harvest fish and as such limiting current consumption to better balance it against future consumption-improving inter-temporal efficiency, which addresses the market failure by achieving a more efficient allocation of resources.*

### Question 3d.

Marks	0	1	2	Average
%	22	21	57	1.4

To achieve full marks, students needed to demonstrate an understanding of positive externalities in consumption and then provide a relevant example.

Most students were able to explain what is meant by positive externalities in consumption using a relevant example in support. In some cases, the examples were quite unique, but no less relevant, such as the consumption of deodorant providing third-party benefits to those who didn't purchase the deodorant. Students should be careful when attempting to demonstrate an understanding of positive externalities to focus on the benefits that are provided to third parties as a consequence of the actual 'consumption' of the good as opposed to the 'purchase' of the good. For example, it is not correct to argue that the consumption of a hamburger from a fast-food chain is an example of a positive externality in consumption if the producer of the hamburger advertises that a portion of the sale proceeds is donated to a charitable cause that benefits society in some way.

Examples of errors and misconceptions included:

- Many students provided an example of a good or service conferring positive externalities in consumption without making it clear what is meant by positive externalities in consumption.
- Some students accurately identified a good or service that typically provides positive externalities in consumption (such as education and health) but then focused on the private benefits without paying attention to the external or third-party benefits.
- Some students incorrectly focused on positive externalities in production.

The following is an example of a high-scoring response.

*Positive externalities in consumption refer to the positive effects on a third party (not the producer or the purchaser/consumer of a product) that arises out of the consumption of a particular product. One such good is the Covid-19 vaccines, which helps to protect the promote the initial user but also promotes herd immunity when more people consume it, which protects the health of third parties or those who refuse to, or are unable to, take the vaccine (due to health reasons).*



## Question 3e.

Marks	0	1	2	3	Average
%	35	17	18	30	1.4

To achieve full marks, students needed to demonstrate an understanding of price elasticity of supply (PES) of fish and identify a factor that influences the PES of fish. They also needed to link the factor appropriately to the level of PES (high or low).

Many students found it difficult to demonstrate a clear understanding of what is meant by the PES and/or to identify how a relevant factor (e.g. durability/storability/production period) would influence the PES. Responses that scored highly explained how a relevant factor (e.g. storability), or a change in the factor, such as improved storability of fish (e.g. due to advances in refrigeration technology), would result in a higher PES as suppliers would be more responsive to a change in price. Equally, students were able to achieve full marks by identifying a relevant factor, such as storability, and explaining how the perishability of fish makes them less storable, causing the PES of fish to be low.

Examples of errors and misconceptions included:

- inappropriately explaining factors that impact on the price elasticity of demand for fish (e.g. the price or availability of substitutes)
- describing a relevant factor that affects the PES (e.g. durability or storability) but without clarifying how or why an increase/decrease in storability/durability causes the PES to increase/decrease
- inability to demonstrate a sufficient understanding of PES.

The following is an example of a high-scoring response.

*The price elasticity of a product refers to the level of responsiveness of the quantity supplied of a product in response to changes in its price. If there were technology improvements in the storage and preservation of fish (e.g., the invention of a new preservative chemical), this would increase the durability of fish. This would allow firms to store fish resources quickly and safely as inventory following a decrease in its price to minimise losses, and conversely draw from its inventory quickly and safely to increase supply of fish in the market following a price rise in order to maximise profits. Therefore, this new production factor that increases the durability (storability) of fish would allow the level of supply to increase/decrease by a greater proportion than the percentage increase/decrease in price, making the supply of fish more price elastic.*

## Question 4a.

Marks	0	1	2	Average
%	5	22	73	1.7

To achieve full marks, students needed to accurately identify the trend, while integrating use of the statistics/data provided in the graph.

Most students were able to adequately respond to this question by focusing on the relevant timeframe when describing the trend and also making accurate use of the data contained in the chart. Some students, however, read too much into the question and focused on reasons for the upward trend in the current account balance. While this would not prevent the awarding of full marks, it could potentially come at a real (opportunity) cost if it meant that the student was not able to finish the remainder of the paper.



Examples of errors and misconceptions included:

- describing the trend without referring to the statistics presented in the chart
- referring to growth in the CA balance increasing from approximately 0% to 3%, not appreciating that the percentage refers not to growth in the CA balance but to the CA balance as a percentage of nominal GDP
- describing the trend in the trade balance instead of the current account balance
- describing the trend from as far back as 2011.

The following is an example of a high-scoring response.

*As of early 2020, the Current Account Balance stood at a surplus of approx. 0.3% of nominal GDP. Since then, it has increased (trending upwards) to a greater surplus of approx. 3.2% of nominal GDP as of late 2021.*

## Question 4b.

Marks	0	1	2	Average
%	44	17	40	1.0

To achieve full marks, students needed to identify that any CA deficit/surplus must be offset by a CAFA surplus/deficit (given that the BOP must equal zero) and to unpack or explore this relationship in the current setting (past two years).

This question required an understanding of the structure of Australia's balance of payments. In particular, that any current account surplus (CAS) must be offset by a Capital and Financial Account (CAFA) deficit to ensure that the balance of payments equals zero. A number of students, however, simply asserted that an increase in the CAS is likely to have a negative effect on the CAFA balance without clarifying the meaning and extent of the negative effect (i.e. the CAFA will have a deficit balance that offsets the CAS such that the  $BOP = 0$ ). Some students also argued that the higher CAS leads to a decrease in the stock of debt in the CAFA, seemingly confusing stocks and flows and not having a complete understanding of the balance of payments. While a higher CAS should indeed result in lower debt levels (or more specifically a reduction in net foreign liabilities), this was not required for the question.

Examples of errors and misconceptions included:

- confusing a current account surplus with a budget surplus
- confusing a CAFA deficit with (a decrease in) net foreign debt/foreign liabilities.

The following is an example of a high-scoring response.

*The current account balance (is the value of credits minus debits of goods, services, primary and secondary incomes added together), and its surplus over the last two years increasing, means that the capital and financial account deficit will have to had to increase as these accounts in the Balance of Payments always have to equal zero.*

## Question 4c.

Marks	0	1	2	3	4	Average
%	17	17	19	21	26	2.2

To achieve full marks, students needed to demonstrate an understanding of both strong and sustainable economic growth (SSEG) and trade balance. They were then required to identify that the trade balance improved before linking this to an increase in AD (e.g. an increase in net exports) and economic growth.

Finally, they were required to link either the positive trade balance or stronger economic growth to a change in either material or non-material living standards.

Most students were able to appreciate the demands of the question by attempting to demonstrate an understanding of the key terms: SSEG, trade balance and living standards. The highest-scoring responses identified the improving trade balance (with a reference to the data contained in the chart) and then explained how this will reflect an increase in net export demand ( $X-M$ ), and therefore AD, which in turn contributes to an increase in real GDP (economic growth). They then made the link to both the goal of SSEG and an improvement in Australian living standards (as measured by growth in real GDP/income per capita) as Australians on average will have more income and access to more goods and services. Many students, however, misinterpreted the question and simply focused on an improvement in the terms of trade and how this may have affected the goal of SSEG and living standards. While a reference to the terms of trade was not necessarily irrelevant in the context of the question, students needed to make the relevance clear. For example, some students were able to achieve full marks by highlighting that the recent growth in Australia's terms of trade (e.g. due to higher prices received for Australia's iron ore exports) was responsible for growth in the trade balance, which resulted in export values increasing relative to import values, therefore boosting net exports and AD.

Examples of errors and misconceptions included the following.

- Several students erred by explaining the relationship between a higher current account surplus (and even referring to the benefits of a lower net primary income deficit) and SSEG/living standards when the focus should have been on the effects of a higher trade balance (i.e. higher growth in net exports).
- Some students confused the terms of trade with the trade balance by saying that the trade balance represented the prices received for exports relative to the prices paid for imports.

The following is an example of a high-scoring response.

*The trade balance over the past two years have increased from approx. 1.5% at the start of 2019 to approx. 4% at the start of 2021. This increase in the trade balance would support the goal of strong and sustainable economic growth (a GDP growth rate between 3-3.5% per annum without jeopardizing the living standards of future generations) because it indicates that the demand for Australian exports have increased relative to imports, and this increases net exports and AD, this in turn increases economic activity as measured by growth in real GDP and supports the goal of strong and sustainable economic growth. It additionally supports living standards because the increase in real GDP will increase GDP per capita (or income per person), so households will have greater access to goods and services and therefore increased material living standards. This also decreases financial stress, which supports non-material living standards.*

## Question 4d.

Marks	0	1	2	3	Average
%	48	20	13	19	1.0

To achieve full marks, students needed to identify a relevant and accurate structural factor that might impact favourably upon the current account balance (CAB) and then explain how the factor can lead to an improvement in the CAB.

Most students were confused about the requirements of the question. The word 'structural' was important and required students to focus on any 'non-cyclical' factor, or long-term factor, that had the potential to contribute to a higher CAS over time. Reference to factors such as the balance between savings and investment, relative rates of productivity growth, shifts in technology uptake, international competitiveness, changes in resource endowments and shifts in comparative advantage were all examples of relevant factors that can help to achieve a sustained (structural) boost to the current account surplus.

Students needed to provide more information than simply showing how a factor can lead to an increase in credits relative to debits in the current account.

Common errors included the following.

- Some students correctly identified a structural factor (e.g. the savings and investment imbalance) but then referred to how this factor (e.g. further decrease in national savings) would result in a 'deterioration' in the current account balance.
- Some students accurately identified a structural factor but were unable to explain how the factor could help to increase the CAS (or reduce a CAD).
- Some students confused the current account balance with the budget balance.

The following is an example of a high-scoring response.

*Structural factors affecting the Current Account are long term factors outside the business cycle that increase or decrease Australia's Receipts (credits) or payments (debits) in the Current Account. A reduction in Australia's Savings Investment Gap since 2020 following the COVID pandemic has increased the level of savings by Australians and reduced the volume of foreign loans taken out by households and firms. This results in a reduction in loan interest repayments (primary income debits) which thereby improves the structural component of the Current Account Balance.*