

2023 VCE Economics external assessment report

General comments

Students performed reasonably well in the examination, particularly in Section B, where students were able to respond to most of the questions in a meaningful way. However, in Section A, many of the 15 multiple-choice questions were not well handled, suggesting that students need to spend more time practising the skills required to effectively answer these types of questions.

In particular, students had difficulties with Questions 2, 3, 5, 6, 7, 8 and 11, suggesting that teachers and students should also carefully revise the following key knowledge areas as part of examination preparation:

- the consequences of a high rate of inflation (Question 2)
- the difference between government current expenditure, government capital expenditure and transfer payments
- factors influencing aggregate supply (Question 5)
- the meaning and calculation of the labour force underutilisation rate (Question 6)
- the recording of transactions in the balance of payments (Question 7)
- the causes of cyclical unemployment (Question 8)
- cyclical factors influencing the current account balance (Question 11).

Most students both attempted all questions within Section B and were able to structure responses well, address all components of a question accurately and make productive use of the extra space at the end of the booklet. Students are reminded that it is acceptable to write below the lines provided before using the extra writing space at the back of the booklet, if there are only a few words to add.

Students need to provide responses that directly address the specific question being asked, incorporate accurate interpretation of task words, include appropriate knowledge and demonstrate the skills required within the question. Inclusion of material that is irrelevant or beyond the scope of the question being asked will not add value to a response. For example, in Question 1a., all that was required was identification of the stage of the business cycle for the Australian economy since July 2023, while also making reference to 'at least one economic indicator'. Responses describing all stages of an economy's business cycle and/or the effects of being in a specific stage of the business cycle wasted valuable writing time and space. Similarly, in Question 3b., students were required to analyse how Australia's recent unemployment rate and inflation rate influenced the stance of aggregate demand policies. Many students went beyond the scope of the question by exploring the following types of areas/issues in some detail:

- how the Reserve Bank of Australia (RBA) raises the cash rate and interest rates in the economy
- how the increase in interest rates helps to restrain Aggregate Demand (AD) via the transmission channels
- how the government's recent budget outcomes will influence AD or Aggregate Supply (AS) and the achievement of the economic goals.

The time taken in adding these details could have been used more productively in answering other aspects of the examination.

It is important to read each question thoroughly and consider the intent before beginning any response. A number of students misinterpreted questions, and/or did not address all parts of a question, resulting in

inaccurate responses. For example, Question 4b. required students to analyse how one non-price factor will cause a leftward movement along the demand curve for new houses. Many students misinterpreted this and instead answered the following question: 'analyse how one non-price factor will cause a leftward shift of the demand curve for new houses'.

When interpreting questions, students must directly address the specific question in its entirety. There were numerous instances where some or all aspects of a question were not addressed by students, which prevented them from achieving full marks. For example:

- Question 2c. required students to make 'reference to the chart on page 10' when explaining how the depreciation of the Australian dollar is likely to have affected the achievement of one domestic macroeconomic goal and living standards. Many students made no reference to the chart despite the explicit requirement.
- Question 4c. required students to 'make reference to the asset prices and wealth channel of monetary policy' before explaining 'why the fall in house prices might have a negative effect on AD and the achievement of the domestic macroeconomic goal of full employment'. Many students did not refer to the role of the asset prices/wealth channel in causing the fall in house prices, and instead commenced their response by explaining how lower house prices can have a negative impact on AD and full employment. In many cases, students also did not extend their response beyond the link to unemployment and therefore demonstrate some understanding of the goal of full employment.

Other examples where students did not respond to the whole question included the following:

- Question 1a. specifically required students to make 'reference to at least one economic indicator'
- Question 3a. required students to make 'reference to the table above'
- Question 4b. required students to construct a 'fully labelled' demand and supply diagram.

Overall, students prepared high-quality responses to questions covering the following key knowledge areas and skills:

- types of market failure, including public goods, externalities, asymmetric information and common access resources (Question 4c.)
- the business cycle and its causes (Questions 1a. and 1b.)
- the meaning of the goal of strong and sustainable economic growth (Question 1c.)
- the consequences of not achieving the goal of strong and sustainable economic growth and its effect on living standards, including environmental degradation, external pressures, high inflation if growth is too high, and high unemployment if growth is too low (Question 1c.)
- the meaning of the goal of full employment (Question 4d.)
- the role of discretionary stabilisers (structural component of the budget) in influencing aggregate demand and stabilising the business cycle (Question 3c.)
- the strengths and weaknesses of using budgetary policy to affect aggregate demand and influence the achievement of the domestic macroeconomic goals and living standards (Question 3d.)
- the effect of skilled immigration policy on population, productivity and participation and the subsequent effect on productive capacity, aggregate supply, international competitiveness, the achievement of domestic macroeconomic goals, and living standards (Question 5b.)
- explaining and interpreting trends and patterns in economic data and other information (Questions 2a. and 2c.)
- predicting the impact of changes in aggregate demand policies on the achievement of the domestic macroeconomic goals and living standards (Question 3c.).

The following skills and knowledge areas should be addressed by teachers as many students demonstrated a lack of depth in their responses to the questions listed:

- construct and interpret demand and supply diagrams (Question 4c.)
- the difference between the headline and underlying (core) rate of inflation (Question 1d.)

- non-price factors likely to affect supply and the position of the supply curve, including changes in the costs of production, number of suppliers, technology, productivity and climatic conditions (Questions 4a. and 4b.)
- the effect of movements in the terms of trade and the exchange rate, and changes in international competitiveness on the domestic macroeconomic goals and living standards (Question 2c.)
- the relationship between the budget outcome and the level of public debt (Question 3a.)
- the stance of budgetary policy: expansionary or contractionary (Question 3b.)
- the stance of monetary policy: expansionary (accommodative), contractionary (restrictive) or neutral (Question 3b.)
- transmission mechanism of monetary policy and its effect on the level of aggregate demand, including the four channels of savings and investment, cash-flow, exchange rate, and asset prices and wealth (Question 4d.)
- the use of aggregate supply policies to complement aggregate demand policies in promoting non-inflationary economic growth over time (Question 5a.)
- one market-based environmental policy and its short-term and long-term effects on aggregate supply, intertemporal efficiency and living standards (Question 5c.)
- using economic data and information to analyse economic issues and form conclusions (Question 3a.)
- analysing the effect of current factors on the setting of aggregate demand policies and living standards (Question 3b.).

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

- the differences between the headline and underlying rates of inflation (Question 1d.)
- how tariff reductions or trade liberalisation influences the allocation of resources (Question 2a.)
- how an exchange rate depreciation affects living standards (Question 2c.)
- the relationship between the term of trade and the exchange rate (Question 2b.)
- The relationship between changes in interest rates, capital inflow/outflow and the exchange rate (Question 2b.)
- the relationship between the budget outcome and public debt, and the difference between net government debt and net foreign debt (Question 3a.)
- how current factors (e.g. unemployment rates and inflation rates) influence the stance of AD policies (Question 3b.)
- what factors will cause a movement along the demand curve (Question 4b.)
- how the asset prices and wealth channel of monetary policy influences AD (Question 4d.)
- the complementary nature of AD and AS policies in achieving non-inflationary economic growth (Question 5a.)
- how a market-based environmental policy uses the power of the market or the price mechanism to achieve a more intertemporally efficient allocation of resources (Question 5c.).

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. Grey shading indicates the correct response.

Question	Correct answer	% A	% B	% C	% D	Comments
1	B or C	2	77	21	1	
2	A	47	5	29	19	An inflation rate of 7.8% is excessive and erodes the purchasing power of money and is likely to distort investment as well as reduce the international competitiveness of a country's tradeables sector – all of which rule out B, C and D as the answer. However, inflation is likely to accelerate (rather than delay) consumption to the extent that consumers are keen to avoid price rises.
3	B	33	40	15	12	The payment of salaries to public servants is classified as government current (consumption) expenditure given that the benefits provided do not extend beyond the current budget period (e.g. one year). Unemployment benefits is a government transfer payment (neither G1 nor G2); Options C and D relate to Government Investment (G2) spending.
4	B	14	68	7	11	
5	B	56	23	16	5	B is the answer because productivity is still increasing (despite a slower growth rate) which increases aggregate supply. Option A is less valid because higher interest rates can have negative supply side effects via an increase in the costs of production (debt servicing costs). Increases in retirement (Option C) and less available capital resources (Option D) are likely to reduce aggregate supply as the quantity of labour and capital resources falls.
6	D	3	7	46	43	The total underemployed equals 15m (10m UE + 5m UnderE) and the labour force is 80m (10m UE + 70m E). The underutilisation rate equals $[15m/80m] \times 100 = 18.75\%$ which is approximately 19%.
7	C	34	12	47	7	Dividends received represent an inflow of funds (credit) that represents the servicing costs (for foreigners) who have sold shares to Australian investors. These flows are recorded in the current account as a credit. (If the receipt of funds was related to the sale of the shares by Australian investors then this would have been recorded in the CAFA.)

Question	Correct answer	% A	% B	% C	% D	Comments
8	D	28	14	13	45	Negative interest rates incentivises borrowing and credit based consumption or investment. A lower structural deficit (Option A) is more likely to reduce AD and increase (structural) UE. A decrease in iron ore prices and slower growth in China (Options B and C) will tend to have a negative impact on both national income and AD, increasing pressure on unemployment.
9	A	78	13	5	4	
10	A	70	10	6	14	
11	B	8	28	18	45	A high rate of growth in Australia typically leads to an increase in import spending relative to export receipts, reducing the BOGS and decreasing the CA balance for reasons related to changes in economic growth (or the business/economic cycle). A high rate of growth in China (Option A) improves the CA balance. The remaining two options (C and D) are examples of structural factors that can worsen the CA balance.
12	C	28	11	51	11	
13	D	16	7	15	62	
14	C	9	4	83	4	
15	B	6	71	8	15	

Section B

Question 1a.

Marks	0	1	2	Average
%	16	35	49	1.4

To achieve full marks, students were required to identify an appropriate business cycle stage and include at least one piece of economic data, post–July 2023, as evidence that the Australian economy rests in that particular stage. It was possible to achieve 2 marks by referring to either a contractionary phase/downturn or an expansionary phase/recovery as long as the economic indicator data referenced provided actual evidence of the economy being in the stage identified.

Many students confused the contractionary phase of the economic cycle with a contractionary monetary and/or budgetary policy stance, and therefore did not directly address the question. Others made the mistake of identifying a stage of the business cycle (e.g. a contraction or a downturn) followed with a reference to an economic statistic/indicator (e.g. the most recent rate of economic growth) without making any attempt to link the statistic/indicator to the stage of the business cycle.

Some students cited an economic indicator that contradicted their argument regarding the stage of the business cycle of the economy. For example, some students argued that the economy was in a contractionary phase and then referred to the high rate of inflation as justification for this, instead of arguing that, although inflation is relatively high, it has slowed in recent months as the rate of economic growth has begun to fall.

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

Since July 2023, the Australian economy has evidently been in the contractionary/economic downturn phase of the business cycle, with continuing falling rates of economic growth, with 2.1% GDP growth rate year ended for June 2023, and forecasted at 1.8% for the second half of the year, with this below trend growth the economy is in a downturn phase. This contraction phase is also evident in the falling consumer and business confidence indexes, which reduces the level of consumption, investment, aggregate demand and thus output/GDP.

Question 1b.

Marks	0	1	2	3	4	Average
%	12	16	22	24	26	2.4

To achieve full marks, students were required to identify one AD factor and one AS factor, then show the effect of each on economic growth and the business cycle since 2023 in Australia. The AD and AS factors selected were required to be relevant to the actual 2023 setting. Consequently, full marks could not be awarded for responses that were purely hypothetical.

Many students referred to costs of production (COP) as an AS factor, simply stating that high inflation contributed to an increase in the COP. It should be noted that higher COP leads to higher (cost) inflation, but higher inflation does not necessarily lead to higher COP. The focus was required to be on an AS factor that contributes to the rise in COP (e.g. the war in Ukraine and the effects on energy prices). Alternatively, students could have referred to higher COP and shown how this contributed to both a decline in economic activity/growth and a downturn in the cycle.

Many students attempted to answer this question in a purely theoretical way, without any attempt to tailor their response to the economic conditions during 2023. For example, some students referenced the high

value of the exchange rate as causing further contraction in the business cycle when in fact the value of the exchange rate fell over 2023 (also alluded to in the chart for Question 2a.). Other students incorrectly referenced lower interest rates and high levels of consumer confidence as contributing to an expansion in the business cycle, when the reverse was in fact true – i.e. interest rates rose, and consumer confidence was very low during 2023.

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

AD Factor: Consumer Confidence

Consumer confidence refers to the level of optimism that households have regarding their future financial situation, employment prospects and the future state of the economy. In 2023, consumer confidence has remained at very low levels, which meant that consumers had a greater propensity to save rather than spend, which worked to reduce household consumption levels, lowering consumption, AD and thus leading to firms to respond to rising stock levels with decreased production volumes, reducing GDP and contributing to the downturn phase that the economy experienced in 2023.

AS Factor: Productivity

Explanation: Productivity refers to the level of output produced from a given quantity of inputs. Over 2023, labour productivity levels on average remained very low, whereby there were minimal increases in the output produced per hour of labour worked. This led to increased costs per unit of output for firms, reducing their ability and/or willingness to supply (AS reduced). Thus, as firms were less willing to make products available to the market, the level of output/GDP growth was reduced, contributing to the downturn phase that the economy entered in 2023. This is evident in the fall in GDP growth from 2.4% in March 2023 to 2.1% by June 2023.

Question 1c.

Marks	0	1	2	3	4	Average
%	7	17	26	24	26	2.5

To achieve full marks, students were required to demonstrate an implicit understanding of the goal of strong and sustainable economic growth (SSEG); a stand-alone definition was not specifically required. Following that, two consequences of not achieving the goal required identification, followed by elaboration about the nature of each consequence in terms of either the positive and/or negative impacts of each. Students were expected to focus on consequences as outlined within the key knowledge areas in the study design – consequences of not achieving the goal of strong and sustainable economic growth and its effect on living standards, including environmental degradation, external pressures, high inflation if growth is too high, and high unemployment if growth is too low. Other consequences not listed in the study design, such as the impact on income inequality, poverty, crime, government policies etc. were accepted provided a logical explanation was given. A focus on the consequences of growth being too low and/or too high was acceptable.

In attempting to explain the consequences of excessive growth, a number of students simply focused on excessive inflation (above the 2–3% target range) and its associated consequences (e.g. erosion of purchasing power). Instead, they first needed to establish the link between an excessive rate of economic growth and the (excessive) rate of inflation.

A number of students erred by asserting that a growth rate that is too low will lead to a decrease in international competitiveness. This is an example of students getting the direction of causality incorrect and not appreciating that economic growth rates that are too low (e.g. as a result of lower competitiveness and net export demand) will most likely be associated with (or lead to) a lower rate of inflation, which actually contributes to an increase in international competitiveness.

The following is a possible response.

The goal of strong and sustainable economic growth is to achieve the highest growth rate possible, consistent with strong employment growth, before running into excessive environmental, external and inflationary pressures. It is achieved at a real GDP growth rate of 3-3.5% p.a. If growth is below the target and not strong enough, there would be reduced derived demand for labour, as with lower levels of output there's reduced need by firms to use labour resources to facilitate their production, thus leading to high levels of cyclical unemployment, which leads to greater social unrest, homelessness and crime rates, reducing non-material living standards. If growth is too high, such that it has become unsustainable, the excessive growth would thus lead to (if the economy was operating at/close to full capacity) capacity constraints and shortages. As aggregate supply begins to fall to keep pace with the growth in AD, these shortages in product and factor markets would place upward pressure on prices, thus exacerbating inflationary pressures, which erodes the purchasing power of workers with fixed wages, reducing their access to goods/services, worsening material living standards.

Question 1d.

Marks	0	1	2	Average
%	33	24	42	1.1

To achieve full marks, students were required to demonstrate understanding of both the headline and underlying rates of inflation, and elaborate one reason why two measures of inflation may differ. It was expected that students would refer to either the role of volatile prices (such as petrol and fruit and vegetables) in accounting for differences, or the RBA's practice of extracting the top 15% and bottom 15% of price changes when calculating its underlying (trimmed mean) measure.

While there were many excellent responses, many students confused the 'difference between headline and underlying inflation' with the 'difference between headline and underlying budget balance'. Others were unclear as to what is removed from the Consumer Price Index (CPI) to arrive at the underlying rate. For example, there were references to prices of seasonal goods being removed, or 'outliers' being removed, and/or references to the removal of price changes stemming from the supply side rather than the demand side.

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

The headline rate of inflation includes the price movements of all goods and services included in the CPI, whereby if there were one off increases in the prices of energy such as fuel in the economy, this would, ceteris paribus, cause the headline inflation rate to increase. However, the underlying inflation rate ultimately excludes volatile/temporary price changes, including the one off energy prices increases. Thus, the underlying rate of inflation would remove the price increase from its calculation, and thus the underlying rate, ceteris paribus, would not change, leading to the headline rate of inflation being higher than the underlying rate.

Question 2a.

Marks	0	1	2	3	4	Average
%	9	20	27	23	22	2.3

To achieve full marks, an understanding of what tariffs are and identifying that tariffs have been falling were required, before an explanation of the implications of the changes in tariffs in Australia on motor vehicles since 1990 on resource allocation and living standards. The best responses demonstrated an understanding that falling tariffs had been a feature of trade liberalisation (tapping into key knowledge from Unit 4 AOS 2),

making it easier to explain how lower tariffs have resulted in a reallocation of resources and how this has influenced living standards in both the short and long term.

In focusing on efficiency, students could explain the way resources were reallocated from one area to another once tariffs are steadily removed over time, and/or focus on the impact that tariff reductions have on 'efficiency in the allocation of resources'. For example, students could have potentially earned full marks through an explanation of how tariff reductions result in more efficient allocation of the nation's resources in a technical and/or allocative sense, with resources flowing to those areas where Australia has a competitive/comparative advantage (such as tourism, education and mining).

While there were many excellent responses, with students examining the short- and long-term effects on resource allocation and living standards, many students simply focused on the fall in the price of motor vehicles and linked this directly to growth in living standards (e.g. due to cheaper vehicles). These students did not explain how living standards may have improved as a consequence of a more efficient and internationally competitive economy, where resources are reallocated to those areas where Australia has a comparative advantage.

Some students approached the question from a purely theoretical point of view and explained how trade liberalisation, and/or tariff reductions, leads to a reallocation of the nation's resources, the achievement of allocative efficiency and an improvement in living standards in the long run. However, they did not attempt to tailor the response and address the specific question being asked, which clearly referred to the (passenger) motor vehicle industry and the declining tariffs since 1990.

With respect to the impact on living standards, high-scoring responses usually focused on the transitional adjustment costs associated with trade liberalisation, such as increased structural unemployment in the short-term to medium-term, and its link to lower material and non-material living standards. For example, arguing that an increase in structural unemployment results in more people moving from relatively high factor incomes (wages/salaries) to lower transfer incomes (Centrelink benefits/JobSeeker payments), resulting in reduced access to goods and services as well as the mental health issues related to unemployment (e.g. depression and stress).

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

The reduction in tariffs evident, with the fall from 40% in 1990, to 5% by 2023, is part of trade liberalisation, as the reduction in tariffs (taxes on imports) ultimately reduces barriers to free trade between countries, in this case for passenger motor vehicles. Indeed, this reduction in tariffs would have exposed the local passenger motor vehicle producers to greater overseas competition. However, the local inefficient firms would have been forced to downsize or close down, as they lose market share to the more efficient overseas motor vehicle producers who could offer lower prices. This led to the local firms making more workers redundant. Nevertheless, these unemployed resources would then have been re-deployed to areas where Australia has a comparative cost advantage, whereby efficient (domestic) firms were then able to prosper, such as those in agriculture or mining. This re-allocation of resources from the inefficient local motor vehicle industry to the more efficient sectors of the economy would maximise allocative efficiency, as more efficient firms who were responding to the needs of consumers could produce more, maximising the satisfaction of the needs/wants of society. With the greater number of resources allocated to efficient industries allowing goods/services to be maximised in their production, thereby satisfying the most needs/wants, maximising living standards. Additionally, the reduced tariffs enabling cheaper imported passenger motor vehicles to cater the country increased consumers 'purchasing power', improving material living standards. Ultimately, by promoting specialisation, Australia's expanded most efficient firms are able to increase their operations and thus would generate even greater output, which requires more labour resources, reducing in unemployment and thus reducing social unrest, homelessness, crime rates, and improving non-material living standards.

Question 2b.

Marks	0	1	2	Average
%	30	29	41	1.1

To achieve full marks, students were required to outline a relevant factor accounting for the downward trend in the Australian dollar (AUD) and then link this factor to the movement in the exchange rate. A clear statement linking the factor to its effect on demand and/or supply of the AUD in the foreign exchange (FOREX) market, and the resultant depreciation in the AUD, was required.

It was expected that students would refer to the factors that could have potentially contributed to the decline in the exchange rate since 2022. Most students accurately outlined one of the following factors:

- relatively lower interest rates in Australia (e.g. the slower rate of increase in the cash rate compared to the United States federal funds rate)
- the decline in commodity prices/terms of trade over 2023
- speculation that the value of the AUD would decline relative to the United States Dollar (USD) (e.g. global insecurity and the drive towards the USD)
- a relatively higher rate of inflation in Australia (compared to the United States of America (USA) and Japan for example).

Regarding the role played by relative interest rate changes, many students accurately identified lower 'relative' interest rates in Australia as a factor. However, they often struggled to outline how this leads to a lower AUD. For example, many students incorrectly referred to an increase in (foreign) investment, or rise in capital inflow, that might flow from lower relative interest rates. This suggests that these students confused Investment as a component of AD, and its relationship to interest rates, with foreign investment and its relationship to interest rates (e.g. foreigners lending to Australian entities).

Many students correctly identified 'terms of trade' as a relevant factor influencing the value of the AUD. However, they attempted to argue that a high(er) Terms of Trade (TOT) causes a depreciation because the price of X has risen (worsening competitiveness). This highlights a clear misunderstanding of the TOT and its implications. For future reference, students should always be prepared to outline that a lower TOT is likely to contribute to a depreciation of the exchange rate and a higher TOT should contribute to an appreciation of the exchange rate.

Some students outlined purely theoretical factors not relevant to the 2023 context, preventing achievement of full marks. For example, they argued that interest rates fell in Australia, when in reality these actually increased in absolute terms but fell relative to USA interest rates. In other cases, students incorrectly referred to a drop in Australia's credit rating being a contributing factor, which was untrue over 2022–23.

Some students referred to the chart by describing the movement of the AUD. This was not required in this 2-mark question given that the 'downward trend' is referred to in the question. However, the same students often failed to make reference to the chart in part c., which was specifically required in the question.

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

The downwards trend in the value of the AUD against the USD since January 2022 was likely caused by Australia's falling relative interest rates compared to the USA. Although the RBA tightened monetary policy, USA's central bank tightened monetary policy more aggressively, which thus led to a greater number of Australian investors being incentivised to deposit their savings in America, as there were relatively higher rates of return on offer in the US. This greater capital outflow increased the supply of the AUD in foreign exchange markets, contributing to the depreciation.

Question 2c.

Marks	0	1	2	3	4	Average
%	15	19	20	27	20	2.2

To achieve full marks, students were required to cite data from the chart as illustration that the Australian dollar had depreciated against the USD. Then explain the effect of a depreciation of the AUD on one macroeconomic goal (named) and living standards.

It was expected that students would focus on the impact of a depreciation on demand for net exports, AD and economic growth. They would then link this to the achievement of one of strong and sustainable economic growth, full employment or price stability (as well as living standards).

The better responses made clear why the value of net exports would increase following a depreciation (i.e. via the lower price of exports in foreign currency terms and higher price of imports in domestic currency terms), then explained the impact of this on the achievement of both one macroeconomic goal and living standards.

A number of students argued that the depreciation will reduce the value of net exports before explaining how this impairs the achievement of SSEG or FE. While this is possible, particularly in the short term as the price effect can dominate the volume effect (sometimes referred to as the J-curve effect), this fact needed to be noted by the student within their response to be awarded full marks.

Some students successfully linked an exchange rate depreciation to growth in AD and the goal of SSEG or full employment (FE), but did not extend their response by explaining the impact on living standards.

Regarding students who selected price stability as the goal, the best responses successfully argued that depreciation makes it more difficult to achieve this goal as it contributes to inflation increasing from the target of 2–3% (via the demand and/or supply side impact). These responses then accurately showed how depreciation would still increase living standards (e.g. via growth in aggregate demand, real Gross Domestic Product (GDP), employment and incomes) despite the excessive growth in inflation. Those who focused on the negative impact that higher inflation has on living standards were also rewarded.

Other students noted that the depreciation leads to a reduction in living standards because of the higher costs of imports but made no attempt to balance this against the benefits for living standards stemming from growth in net exports (e.g. higher incomes, growth in employment and lower unemployment).

Some students focused on the reasons for a fall in the demand for the AUD (following on from part a.) and how this negatively impacts on AD and economic growth, rather than on the effects of a fall in the AUD itself (e.g. focusing on the impact of the lower TOT over 2023). This meant that they incorrectly argued that a depreciation would have a negative impact on both AD and economic growth (as well as reduce the rate of inflation).

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

The depreciation of the AUD should help us to achieve the goal of full employment, the minimum possible rate of unemployment which is about 4.25% that includes no cyclical unemployment and below which inflationary pressures begin to emerge (i.e., the non-accelerating inflation rate of unemployment or NAIRU). This is because a lower AUD increases the international competitiveness of Australia's exports, such as tourism, beef, barley, etc. as foreigners have greater purchasing power in Australia. Concurrently, import spending should fall as Australians have less purchasing power overseas, increasing demand for products from import competing firms. This leads to a rise in net exports ($X - M$) which should increase AD and production volumes, especially in the tradeable sector. This increases the derived demand for labour, allowing us to achieve strong employment growth and helping to reduce the rate of unemployment. It should be noted that we are currently below the target, with unemployment around 3.7%, so further reductions in unemployment may lead to an overachievement of the goal. This should boost incomes and

purchasing power along with better access to goods and services, improving material living standards. Non-material living standards should also improve as employed individuals have a better sense of self-worth and less financial stress, improving their quality of life.

Question 3a.

Marks	0	1	2	3	Average
%	20	22	22	36	1.8

In view of incorrect labelling within the table (e.g. the 2022–3 and 2023–4 figures were estimates rather than actuals), students were free to focus on the lower budget deficit (or return to surplus) between 2021–22 and 2022–23, or the return to larger estimated deficits from 2023–24. In the event that students referred to the actual budget deficit of \$22.1 billion for 2022–23, instead of the \$4.2 billion from the table, they were also rewarded.

To achieve full marks, students needed to make accurate and relevant reference to the table and demonstrate an understanding of a budget deficit/surplus. They then needed to make the link between the budget deficit and an accumulation of government debt via borrowing and/or link the surplus to a reduction in government debt via the repayment of debt. The highest-scoring responses were those that referred to the movement in the budget outcome over the period and made a logical connection to the level of public debt.

Many students did not attain full marks due to asserting that a deficit is related to high public debt and a surplus is related to lower public debt, without explaining why a deficit leads to an increase in public debt and why a surplus leads to a decrease in public debt. Some students misread the table by assuming that the 'Per cent of GDP' row represented public debt as a percentage of GDP. This made it difficult to achieve full marks.

Some students linked the budget outcomes to net foreign debt rather than the level of public debt and/or argued that deficits mean that the government must sell bonds to overseas investors. Students are reminded that deficits are financed by bond sales to investors (lenders), only some of which are likely to be foreigners.

Examples of other errors or misconceptions found in responses included:

- students talking about implications of the budget outcomes for the stance of budgetary policy; for example, writing that the 2022–23 Budget was contractionary and the 2023–24 was expansionary
- students claiming that the decline in the estimated deficit in 2026–27 will reduce the level of public debt, when they should have said that it would reduce the 'rate of growth in public debt' (i.e. the level of public debt still increases in response to a smaller deficit but it increases at a slower rate)
- some students wrongly asserting that, in the presence of a deficit, the government will need to borrow money to reduce the deficit and enter into a surplus, and not indicating that the borrowing is required to finance the given deficit.
- some students confused the budget deficit with the current account deficit and wrote about the balance of payments implications (e.g. a deficit must be financed by a CAFA surplus via an increase in Net Foreign Debt).

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

The underlying budget surplus of \$4.2 billion for 2022-23 has indicated that the government's total revenue received exceeded its total outlays paid. It could use these excess funds to repay outstanding government debt, which would thus reduce the accumulated stock of public debt. However, the budget deficits after 2022-2023, with a deficit of \$13.9 billion for 2023-24, indicates that the government's total outlays paid would then exceed its total receipts received. The government would need to finance their budget deficits through issuing government bonds, to overseas or domestic investors. This borrowing from bond purchases thus increases the level of public debt, as the total value of debt on issue (public debt) increases with a budget deficit.

Question 3b.

Marks	0	1	2	3	4	5	6	Average
%	14	15	20	19	16	10	7	2.7

This question was not handled well by the majority of students. To achieve full marks, students were required to identify relevant changes in both the unemployment rate and the inflation rate, and then show how each of these affected both the stance of monetary policy and the stance of budgetary policy. The highest-scoring responses included both the most recent unemployment and inflation statistics, and also cited the current cash (interest) rate and the underlying budget balance for either 2022–23 or 2023–24.

While students were expected to analyse how the very low rate of unemployment and high rate of inflation contributed to the delivery of a more restrictive/contractionary monetary policy stance (e.g. via an increase in the target cash rate to 4.10%), they had flexibility to focus on either the 2022–23 Budget or the 2023–24 Budget. Students could potentially have achieved full marks through arguing that the stance became more expansionary or contractionary. Alternatively, they could have focused on the impact that a low unemployment rate and high inflation rate had on the stance of recent budgets (e.g. the government delivering cost of living relief for households in the 2023–24 Budget). Overall, some flexibility was afforded to students when assessing responses to this question and assessors focused on the argument made or justification provided.

Most students were able to identify the relatively high rate of inflation in Australia (albeit falling) and the relatively low rate of unemployment and the implications this had for a stance of monetary policy. They recognised that the RBA was focused primarily on restraining growth in AD in order to reduce inflation back into the target range, without the need to be concerned about the potential impact on unemployment given that the rate of unemployment was below NAIRU and contributing to further inflationary pressures. However, many students did not draw the implications of low unemployment and high inflation for the budgetary policy stance. Many students focused on the movement in the budget outcome (e.g. referring to the table in part a.) and linked this to a more or less expansionary stance, without reference to the implications of low unemployment and high inflation. The highest-scoring responses were able to link the low unemployment rate and high inflation rate to a change in budgetary policy settings (e.g. the movement in the cyclical or structural components of the budget) before making relevant comment about the implications this had for the stance of budgetary policy.

High-scoring responses often noted the 2022–23 Budget. In such cases, students focused on the cyclical component of the budget and successfully argued that low unemployment and high inflation increased personal income tax collections as a combination of more people being employed and earning a factor income with the effects of ‘bracket creep’/‘fiscal drag’. High-scoring responses tended to show that government outlays on JobSeeker payments fell as more people secured paid employment – the combined effect of rising tax collections (leakages from the five circular flow model of incomes) and falling government outlays (injections) resulting in a higher surplus and a ‘contractionary stance’.

Other high-scoring responses focused on the structural component of the budget, recognising that although the 2023–24 Budget includes an expected deficit of \$13.9 billion and is notionally expansionary, the government’s focus was directed at providing cost of living pressure relief through discretionary measures such as the \$40 per fortnight increase in JobSeeker payments and \$3 billion in energy bill relief (given rising electricity and gas prices) to small business and vulnerable households. They noted that the government was conscious about not providing too much in the way of stimulus to aggregate demand in an economy grappling with the twin problems of high inflation and overfull employment, with the latter arguably contributing to the former.

Many students were able to successfully analyse the monetary policy response in a contemporary setting, but only referred to the budgetary policy response in a theoretical setting (e.g. saying that the government would or could deliver a contractionary policy stance by handing down a budget surplus and/or increasing

revenue relative to expenditure). A number of students erred by launching into an explanation of how the policies have been implemented over recent years, without an attempt to analyse the relevance/implications of the very low unemployment rate and relatively high inflation rate during 2023.

Examples of other common errors or misconceptions found in responses included the following.

- A focus on monetary policy or budgetary policy more generally when analysis of the impact on the stances of both AD policies was required.
- Stand-alone and/or lengthy definitions of the goals of price stability and full employment.
- Inclusion of an explanation about how the RBA enacts a restrictive/contractionary monetary policy stance, e.g. making reference to policy interest rate corridor and/or Open Market Operations (OMOs).
- Many students provided lengthy explanations for how the restrictive monetary policy stance reduces AD and inflation via the various transmission channels and/or provided lengthy explanations for how specific budget measures work to influence AD, unemployment and inflation.

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

In 2023, Australia's unemployment rate remained at record low levels, hovering at around 3.5%, whereby it was 3.6% for September 2023. This occurred alongside very high rates of inflation, although there has been a downward trend, with the inflation rate falling from 7% in March 2023, to 5.4% by September 2023 (although still considerably high). Together, these indicators suggested that the labour market was very tight, with many labour shortages, causing higher wages growth and high inflation (which as contributed to by other factors). As such, in this environment, the stance of AD policies have been contractionary. This is evident for MP, which saw four target rate cash rate increases in 2023, whereby it increased above the neutral cash rate zone by March 2023 (3.6%) to be high enough to exert a contractionary effect on the economy. It was implemented to do so, because it needed to reduce AD and demand inflation, such that the inflation rate would return to target with the RBA's key medium term objective of 'stability of the currency', to achieve a rate of growth in the CPI of between 2-3%, on average, over time. Moreover, it needed to restrain AD and economic activity to reduce the demand for labour, in order to loosen the labour market and ensure that wages growth did not become excessive, which would further increase inflation. Regarding, budgetary policy, the low unemployment automatically led to higher PAYG income tax revenue collected, as more people earned higher taxable wages, with the high inflation also creating bracket creep and again increases tax revenue. This led to greater leakages from the economy by the government relative to injections, as less people become eligible for unemployment benefits and reduced welfare outlays automatically. This increase in receipts received relative to outlays paid would have improved the cyclical component of the budget and made it more restrictive than otherwise as leakages are greater than injections, restraining AD and helping MP to dampen inflationary pressures. However, importantly, the stance of BP could have been influenced by the high inflation to be expansionary, due to the cost of living relief measures that the government would've provided, to support households in 2023, which would then have increased injections relative to leakages through the implementation of discretionary stabilisers, which would've stimulated the economy and AD.

Question 3c.

Marks	0	1	2	3	4	Average
%	25	10	16	23	26	2.2

To achieve full marks, students were required to identify and describe an appropriate discretionary stabiliser from the most recent 2023–24 Budget and then accurately predict and show how this could impact on economic growth and living standards. Students were given flexibility to interpret a 'discretionary stabiliser' as being any budgetary policy measure or initiative. This includes the use of any change to the structure of the budget, including supply side measures (e.g. tax concessions for investment, R&D allowances, subsidies), which could help to stimulate AD in the short term before delivering supply side benefits over time.

They were not required to link the initiative/stabiliser to any attempt to ‘stabilise’ the business cycle. However, this approach was equally deserving of full marks if explained well.

While students were free to explore any change to the structure of the budget (either an AD or AS focus), most students selected initiatives that were designed to stimulate AD (e.g. electricity bill relief or the \$40 per fortnight increase in Jobseeker). They successfully linked the initiative to an increase in a component of AD (e.g. consumption) before predicting the impact this would have for AD, economic growth and living standards.

Many students referred to discretionary stabilisers from previous budgets, such as the low- and middle-income tax offset or the temporary cut in excise on fuel. This prevented achievement of full marks despite the validity of the prediction as the 2023–24 budget was specified within the question. Others either simply invented a discretionary stabiliser, or selected a stabiliser inappropriate in the context of the question, such as the increase in excise on tobacco, thus making it difficult to achieve full marks. Students must read questions carefully and remain engaged with current policy developments as they evolve over their year of study.

Others confused monetary and budgetary policies and selected an increase or decrease in interest rates as the discretionary stabiliser, also making it impossible to score full marks. A high number of students did not attempt this question, indicating that added emphasis should be given to teaching this aspect of key knowledge. Discretionary stabilisers are a key aspect of budgetary policy, and students are expected to know contemporary examples of discretionary stabilisers (from the past two years).

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

The accelerated depreciation allowance in the form of the extension of the instant asset write-off scheme enabled firms to deduct the full cost of eligible depreciable assets, of any value, in the year they're installed. This would have encouraged firms to undertake more capital investment in machinery and motor vehicles, etc. than they would've without the discretionary stabiliser. Thus, this boosted the level of investment, which increased injections relative to leakages, stimulating greater levels of AD. Firms would have then responded to the increased sales and spending with increased production volumes, thus boosting output, GDP and increasing the rate of economic growth. The greater levels of real GDP would, ceteris paribus, lead to a greater real GDP per capita, thus increasing average Australian's access to goods and services, boosting material living standards. The increased economic growth would have also increased derived demand for labour, reducing unemployment and improving self-esteem and increasing non-material living standards, thereby increasing overall living standards.

Question 3d.

Marks	0	1	2	3	Average
%	18	24	30	28	1.7

To achieve full marks, students were required to describe one relevant weakness of using budgetary policy (BP) linked to a reduced capacity to slow or constrain growth in AD and the rate of inflation. Many students were able to identify a relevant weakness, such as the implementation lag (e.g. the delays created by the passage of budget bills through parliament) or political bias (e.g. the government focusing less on the economy and more on votes). However, students often continued in a theoretical way without any attempt to tailor the identified weakness to the facts as outlined in the question. Students were required to examine how the identified weakness constrained government ability to reduce AD and decrease the rate of inflation.

The highest-scoring responses successfully argued that the chosen weakness (e.g. implementation lags due to the budget process and delays in parliament) limited the ability of the budget (or budgetary policy) to fight inflation by restraining growth in AD. Some of these included reference to the Stage 3 tax cuts, due to come into effect in 2023–24, as an example of a BP weakness in slowing AD and inflation. They argued, for

example, that the tax cuts would lead to excessive growth in AD and inflation, and that the government's refusal to rule out a repeal of the cuts was motivated purely by political considerations (fearing voter backlash).

Other common errors included:

- the identification of a weakness (e.g. political bias) without further examination of its implications
- confusion of budgetary policy weaknesses with monetary policy weaknesses
- examining the weakness in relation to AD without reference to the implications for inflation.

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

One weakness of BP would be that it is subject to a high level of political bias. As policy deviations often become heavily politicised, policies may be implemented to gain greater votes rather than do what is best in the national economic interest, which may be to reduce AD and lower inflation. One example would be the labour government's current refusal to delay or postpone the planned stage three tax cuts, as this would be seen as a politically unpopular deviation. However, economists generally agree that these tax cuts would increase consumption, AD and further exacerbate already high levels of inflation. Thus, the labour government's refusal to end them in fear of voter fallout, constrains its ability to slow growth in AD and inflation, although this would promote greater health of the economy.

Question 4a.

Marks	0	1	2	3	4	Average
%	13	15	23	18	31	2.4

To achieve full marks, students were required to identify two relevant non-price factors and explain how each factor may have directly contributed to a fall in house prices. The following factors were commonly cited: decreases in disposable income, higher interest rates, slower population growth, falls in building costs as supply disruptions started to dissipate, lower levels of consumer confidence and changes in the price of a substitute (e.g. apartments).

This question was generally well handled by students, with most being able to identify a relevant factor before explaining how this reduced house prices via a fall in the demand for houses or an increase in the supply of houses.

Common errors included:

- confusing macro and micro effects by referring to declines in AD or rises in AS when describing demand or supply factors as contributing to the fall in house prices
- confusing parts a. and b. of Question 4 by erroneously focusing in part a. on factors that cause an increase in the price of (new) houses.

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

House prices may have fallen partly due to higher interest rates. An increase in interest rates would increase the cost of credit, and reduce the affordability of borrowing, which makes households much less willing to take out home loans and thus purchase houses, as mortgage rates would have increased. This reduces the ability and/or willingness of consumers to purchase houses at each and every price level, thus shifting the demand curve to the left, creating a surplus that exerts downward pressure on housing prices. The fall could also have been caused by an increase in the capital productivity of certain tools used in the building of houses, whereby more output is produced from each hour of capital used in building houses, the cost per unit of output of houses reduces. Thus, the production of houses is more profitable, which leads to producers of houses to increase their willingness and/or ability to supply houses at each and every price, shifting the supply curve to the right and creating a surplus of houses, which exerts downward pressure on the price of houses.

Question 4b.

Marks	0	1	2	3	4	Average
%	13	43	10	11	22	1.9

To achieve full marks, students were required to identify one relevant non-price factor that causes the supply curve to shift left and explain how this leads to both a higher price and a corresponding decrease in the quantity demanded (i.e. a contraction of demand/leftward movement along the demand curve). Students were expected to support this explanation via construction of a fully labelled demand and supply diagram. Students were expected to correctly label y and x axes, construct both a downward sloping demand curve and an upward sloping supply curve, before shifting the supply curve to the left and indicating a higher price and lower quantity.

This question was generally not handled well by most students. Many students misinterpreted the question and analysed a non-price factor causing a leftward shift of the demand curve. This resulted in the demand curve shifting left and exploring the dynamics of adjustment from the old equilibrium to the new equilibrium. As a result these students were unable to effectively analyse 'the leftward movement along the demand curve' (i.e. the contraction along the demand curve) that would be caused by a shift to the left of the supply curve.

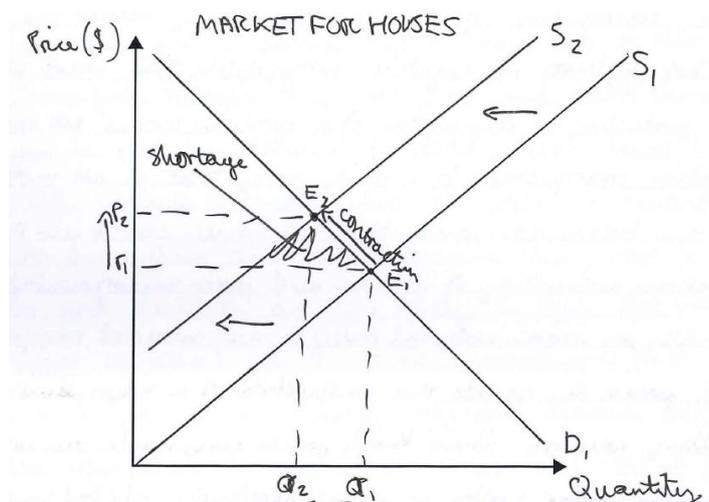
The highest-scoring responses correctly interpreted the question and focused on a non-price factor that shifted the supply curve to the left. They were consequently able to analyse how the higher price for new houses caused a reduction in demand for houses, represented by a contraction along the demand curve or 'the leftward movement along the demand curve' referred to within the question. Some astute students picked up on the clues contained in the stimulus material in part a. of the question and recognised that this is a non-price supply factor resulting in a shift of the whole supply curve to the left and higher house prices.

Common errors when constructing demand and supply diagrams included:

- shifting the demand curve to the left
- drawing AD and AS curves
- mislabelling the x and y axes (e.g. referring to prices or inflation on the y -axis and real GDP on the x -axis)
- confusing the x and y axes (e.g. price on the x -axis and quantity on the y -axis)
- drawing upward sloping demand curves and downward sloping supply curves
- not shifting the supply curve to the left and instead simply indicating a point up along the demand curve.

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

An increase in the cost of construction materials for houses, such as bricks, ultimately increases the overall cost of production for new houses as a key input has become more expensive. This decreases the ability and/or willingness of producers to supply houses at each and every price level, reflected by a shift to the left of the supply curve (S to S_1). This creates a shortage at the original price, which leads to existing houses suppliers to raise the price of houses to exploit excess demand and maximise profits. The higher price leads to a contraction along the demand curve (leftward movement), as the markets converges to a new higher equilibrium price (PE_1 to PE_2), and a new lower equilibrium quantity traded (QE_1 to QE_2).



Question 4c.

Marks	0	1	2	3	Average
%	29	18	33	20	1.5

This question was not handled well by the majority of students. To achieve full marks, students were expected to demonstrate an understanding of a relevant market failure and then link the building of new houses to a failure of an unregulated market to achieve an efficient allocation of resources. Students were expected to focus on negative externalities (e.g. new housing developments and the impact on local amenity, character of neighbourhood, or the standard social costs connected to overuse of resources such as timber, other building materials, energy etc.). However, they were free to explain other types of market failures, in particular, positive externalities (e.g. external benefits associated with higher density living, enhanced street appeal, greater housing affordability), asymmetric information (e.g. new home buyers being duped into contracts on the basis of false or misleading information) or even common access resources (e.g. development that encroaches on natural environment and contributes to resource depletion).

Students who selected public goods as a market failure found it challenging to link the market failure to the construction of new housing. Interestingly, a few students selected ‘abuse of market power’ as a market failure, which was a relevant and acceptable response despite this not being listed in the current study design as market failure. For example, some argued that, to the extent that new housing construction is undertaken by large/dominant construction companies, there is the possibility that they are charging exorbitant prices (making excessive profits) by virtue of the ability to abuse their position of market dominance, leading to an under allocation of resources devoted to construction of new housing. This approach had potential of achieving full marks.

Some students confused market shortages or surpluses with market failures. For example, arguing that the construction of too many houses could lead to an excess supply of houses, or that the construction of too few houses will lead to shortages, represented a failure of the market to achieve equilibrium. Students should be reminded that market disequilibrium is typically a feature of properly functioning markets and it does not represent market failure. Instead, a focus was required on problems potentially occurring in markets that lead to inefficient outcomes that need some form of government intervention. For future reference, the safest approach is to focus on the market failures listed in the study design.

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

Market failure occurs when the normal, free operation of the market forces of demand and supply lead to an inefficient allocation of resources that doesn't maximise living standards. The construction of new

housing may lead to market failure in the form of negative externalities in production, whereby the production of new houses imposes a cost on a third party not involved in the original transaction, which would take form in noise pollution for those who live close to the construction site. As the market does not take into account the external costs, and only the private costs, in an unregulated market there would likely be an overallocation of resources towards the construction of new houses compared to the socially optimal allocation, reducing allocative efficiency.

Question 4d.

Marks	0	1	2	3	4	Average
%	27	17	19	23	14	1.8

To achieve full marks, students needed to make accurate reference to the asset prices and wealth channel in terms of it stemming from a tighter Monetary Policy (MP) (or higher interest rates) and then link falling asset prices and wealth to a reduction in AD (via lower consumption in particular), a higher unemployment rate and the achievement of full employment.

With respect to the impact on full employment (FE), some flexibility was afforded. Full marks were possible for arguing that FE is more likely to be achieved (e.g. arguing that a rise in unemployment in the 2023 context helped with the achievement of FE in light of the UE rate being ‘too low’ such that experienced over full employment) or less likely to be achieved (e.g. approaching the question from a theoretical position or arguing that further rises in interest rates are inconsistent with the achievement of FE goal to the extent that fewer people who want a job are able to attain one in a short period of time).

This question was generally not handled well by most students. With many ignoring the need to link a fall in house prices to the tightening of MP or the rise in interest rates and therefore not achieving full marks.

Many students also attempted to explain the channel via the decrease in the construction of houses. For example, that lower house prices discourage further investment in houses therefore decreasing AD via a reduction in housing construction. This approach was too micro focused, instead students were required to explore the link via the reduction in AD (e.g. consumption demand) occurring as a consequence of homeowners/mortgage holders feeling less wealthy and less inclined to spend money on goods and services.

Many students attempted to explain the channel via the fall in consumer confidence as house prices fall, instead of focusing on the impact stemming from the decline in the value of property (i.e. a decrease in their ‘wealth on paper’), which then discourages spending on goods and services. For example, mortgage holders are less likely to tap into the (declining) equity in their home via further borrowing from their bank in order to finance consumption. While the negative impact on consumer confidence is not irrelevant in the context of declining house prices, a broader or more all-encompassing explanation was required.

Some students were able to explain the link to employment/unemployment, but they failed to extend their response by examining the impact on the achievement of ‘the domestic macroeconomic goal of full employment’. This prevented them from achieving full marks.

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

A tightening of the TCR, leading to a higher TCR flowing onto higher interest rates which thus activates the asset prices/wealth channel, would lead to a reduced demand for various types of assets including houses, as the cost of borrowing increases as does the cost to service home loans. This reduced demand for houses reduces their prices of houses, which thus reduces the average wealth of households, as household wealth is largely tied to property value. The reduced price/value of houses ultimately reduces the paper wealth of property owners, as well as their real wealth, if/when they will sell their property as a lower price for a capital loss. This thus reduces the rate of spending for property owners, which reduces consumption, and thus reduces the level of AD. This leads firms to respond to the reduced sales and rising stock levels with reduced production volumes, thus reducing output and derived demand for labour.

This increases unemployment (cyclical) which jeopardises the achievement of full employment, which is to achieve the lowest rate of unemployment possible, with no cyclical unemployment, before unsustainable inflation occurs (i.e. NAIRU). This is achieved at an unemployment rate of 4-4.5%.

Question 5a.

Marks	0	1	2	3	Average
%	31	24	27	18	1.3

This question was not generally handled well by most of the students. To achieve full marks, students were expected to demonstrate an understanding of 'non-inflationary economic growth' while explaining how AS and AD policies can be complementary in promoting non-inflationary economic growth. Many students misinterpreted the question and provided an explanation of how AS policies are implemented to achieve a stronger rate of economic growth alongside lower growth in prices. They did not refer to the complementary nature of the policies and made no reference to the role of AD policies. The highest-scoring responses identified that implementation of AS policies complemented expansionary monetary or budgetary policy because the inflationary effects of expansionary AD policies was countered by the disinflationary effects of AS policies, which together helped to promote a stronger rate of economic growth without an acceleration of inflation (i.e. non-inflationary economic growth).

Some students simply described how AS policies help to expand AS, while AD policies might be simultaneously attempting to restrain growth in AD, which can help to achieve higher rates of economic growth with a large downward impact on prices. While this approach is not without merit, it misses the point of the question, which required the focus to be on the promotion of non-inflationary economic growth.

Many correctly noted that aggregate supply policies increase the supply potential of the economy and permit higher rates of non-inflationary economic growth but made no reference to aggregate demand policies. They simply stated that an increase in aggregate supply (from the implementation of aggregate supply policies) simultaneously increases output while exerting downward pressure on prices, and how lower prices act to stimulate aggregate demand for the increased output. While this is correct, the absence of any discussion of the complementary role of aggregate demand policies meant that these students could not access the full range of marks.

While the use of AD/AS diagrams is no longer specified as key knowledge in the study design and this was not required for full marks, a number of students added value by including an AD/AS diagram to illustrate their response, shifting both the AD and AS curves to the right to illustrate the growth in real GDP (x-axis) occurring alongside low growth in prices (y-axis).

Several students erred by adopting a micro focus to this question, addressing the balance between demand and supply for a good when attempting to explain non-inflationary growth. Full marks could not be awarded for this approach.

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

Aggregate supply policies are government initiatives designed to improve supply side conditions and reduce business costs for firms, to ultimately enhance productive capacity and living standards over time. They complement AD policies, which work in the short term to stimulate AD and spending, by ultimately enhancing and increasing the maximum possible level of output/production that can be produced using all available resources (i.e., productive capacity). Training and education spending ultimately improves the quality of human capital, and increases labour productivity such that more output can be produced from each hour of labour worked. Thus, these AS policies work in the longer term, and enable AD policies to stimulate spending, whereby greater levels of AD can be matched with increases in output, without running into excessive demand inflationary pressures from capacity constraints or shortages, due to the

expanded productive capacity of the economy. Thus, enabling non-inflationary economic growth over time to be achieved.

Question 5b.

Marks	0	1	2	3	4	Average
%	5	17	27	28	23	2.5

To achieve full marks, students were required to demonstrate an understanding of skilled immigration, productivity and international competitiveness while establishing a link between skilled immigration (e.g. reference to improved quality of human capital/labour) and productivity (e.g. reference to output/inputs). They also needed to explain the link between productivity and international competitiveness.

Many students were able to link increased skilled migration to an increase in the quantity of human capital (or labour supply) and then explain how this reduces pressure on wages and costs of production, before going on to link this to lower prices and an increase in international competitiveness. While this is indeed an avenue by which an increase in migration helps to boost international competitiveness, it made no reference to the important role played by productivity in the context of 'skilled' immigration. Many students provided insufficient detail and made broad references to skilled migration lifting labour productivity and boosting international competitiveness via a reduction in prices or an increase in the quality of goods and services produced in Australia. To achieve full marks, students needed to establish clear and meaningful links between the key terms in the question.

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

An increase in skilled migration means that the inflow of skilled foreign workers into Australia has increased. Their entry is primarily based on their ability to fill a gap in the economy which is created by a skills shortage, their selection and allowance into Australia would have been based on their exceptional skills and knowledge. To the extent that their performed role would otherwise be left unfilled, or by someone with an inferior work skill set, their increased entry boosts the quality of human capital and increases labour productivity, increasing output produced per hour of labour worked. This boosts the overall productivity of the economy, while reducing the costs per unit of output, which thus increases the ability for firms to offer their products at lower prices. This increases the ability of Australia's tradables sector to compete/match with foreign firms producing the same goods/services, in terms of lower or the same prices, and the same/higher quality, boosting international competitiveness.

Question 5c.

Marks	0	1	2	3	4	5	Average
%	11	7	19	27	22	14	2.9

To achieve full marks, students were required to describe one relevant market-based environmental policy before linking this policy to an improvement in intertemporal efficiency (referring to how resources are reallocated in the economy) and material and/or non-material living standards. Regarding the impact on living standards, while the highest-scoring responses focused on both the short run impact (e.g. negative) and the long run impact (e.g. positive), full marks were attainable with a focus on either the short run or long run impact.

Students were expected to refer to one of the following policy examples:

- emissions trading scheme
- renewable energy credits (RECs)
- carbon taxes

- carbon offsets
- subsidisation of renewable energy sources
- tax concessions for the purchase of electric vehicles
- general pollution/congestion charges.

The highest-scoring responses made valid reference to the role played by relative prices in the reallocation of resources, and also made meaningful reference to both short term and long-term impact. For example, they pointed to the higher relative price of dirtier forms of production (e.g. traditional means of electricity generation) causing short term pain for households and businesses (e.g. via higher energy prices), then explained that the lower relative price of cleaner forms of production attracted resources into its production. They explained how this resulted in a more intertemporally efficient allocation of resources, as fewer resources are devoted to production that negatively impacts on future generations (and/or more resources are used in ways that protect future production and future generations), and in living standards being protected in the long run (e.g. via mitigation of climate change and protection of future productive capacity).

A common error was ignoring any reference to the power of markets (i.e. the price mechanism) to reallocate resources away from the production/consumption of less environmentally friendly forms of production/consumption (those using dirty energy) and towards ones that are cleaner or more renewable. This was an important part of the question that was required to be addressed given the reference to 'market based' environmental policy in the question.

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

The carbon offsets scheme involves voluntary participation by firms, who earn Australian carbon credit units (ACCUs), for the removal of one tonne of carbon dioxide. This creates a market for carbon emissions, whereby firms have an incentive to undertake greater investment in sustainable business practices and to earn ACCUs and sell them back to the government or to other firms for greater revenue. This creates an incentive for firms to adopt the use of more energy efficient materials and substitution to renewable sources of energy. This leads to a reduced current use of fossil fuels by current firms, which leads to more non-renewable energy sources for future generations to use in their production processes, which thus improves the balance of resource use between current and future generations, improving inter-temporal efficiency. Although in the short run, firms may experience increased costs from their intentional adjustment to renewable energy which may cause them increase prices. In the short run, this may reduce material living standards as consumers purchasing power will be eroded. However, in the long run with lower levels of greenhouse gases in the atmosphere, the consequences of climate change will be lower with reduced severity of weather events. This preserves the quantity of natural resources and growth in AS and hence output, improving material standards of living in the long run. In both the short and long run, more sustainable business practices reduces pollutants, improving air quality and thus non-material living standards.