

Economics subject report

2021 cohort

February 2022

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Introduction

Despite the challenges brought about by the COVID-19 pandemic, Queensland's education community can look back on 2021 with satisfaction at having implemented the first full assessment cycle in the new Queensland Certificate of Education (QCE) system. That meant delivering three internal assessments and one external assessment in each General subject.

This report analyses that cycle — from endorsing summative internal assessment instruments to confirming internal assessment marks, and designing and marking external assessment. It also gives readers information about:

- applying syllabus objectives in the design and marking of internal and external assessments
- patterns of student achievement.

The report promotes continuous improvement by:

- identifying effective practices in the design and marking of valid, accessible and reliable assessments
- recommending where and how to enhance the design and marking of valid, accessible and reliable assessment instruments
- providing examples of best practice where relevant, possible and appropriate.

Audience and use

This report should be read by school leaders, subject leaders and teachers to:

- inform teaching and learning and assessment preparation
- assist in assessment design practice
- assist in making assessment decisions
- help prepare students for external assessment.

The report is publicly available to promote transparency and accountability. Students, parents, community members and other education stakeholders can learn about the assessment practices and outcomes for General subjects (including alternative sequences (AS) and Senior External Examination (SEE) subjects, where relevant) and General (Extension) subjects.

Report preparation

The report includes analyses of data and other information from endorsement, confirmation and external assessment processes. It also includes advice from the chief confirmer, chief endorser and chief marker, developed in consultation with and support from QCAA subject matter experts.



Subject data summary

Subject completion

The following data includes students who completed the General subject or AS.

For the purposes of this report, while the 2021 summative units for the AS are AS units 1 and 2, this information will be included with the General summative Units 3 & 4.

Note: All data is correct as at 17 December 2021. Where percentages are provided, these are rounded to two decimal places and, therefore, may not add up to 100%.

Number of schools that offered the subject: 100.

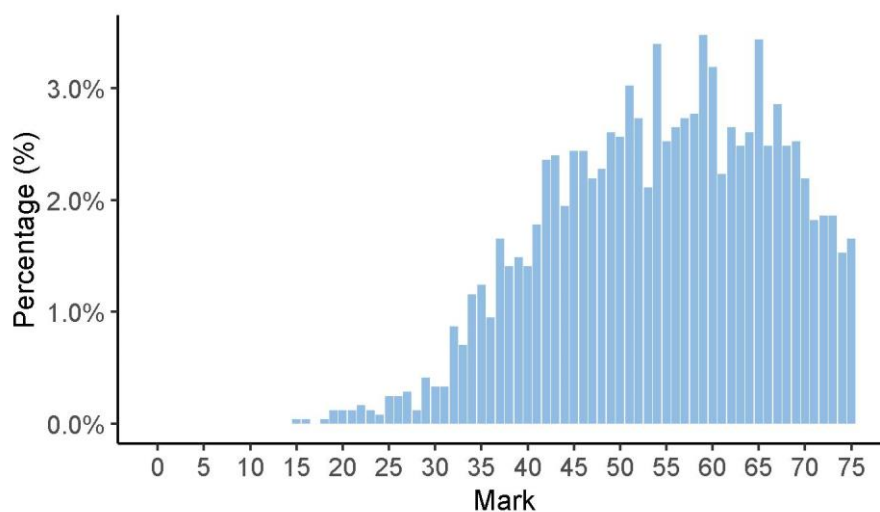
Completion of units	Unit 1	Unit 2	Units 3 and 4
Number of students completed	2680	2587	2407

Units 1 and 2 results

Number of students	Satisfactory	Unsatisfactory
Unit 1	2540	140
Unit 2	2508	79

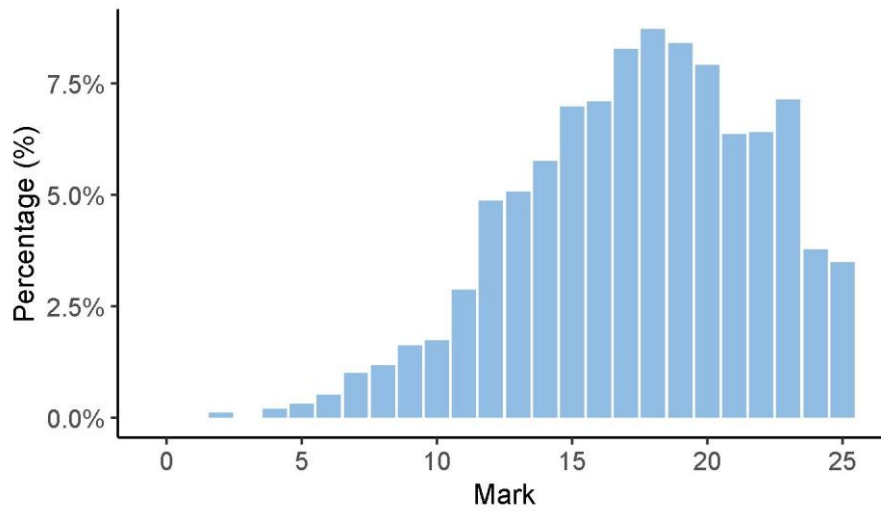
Units 3 and 4 internal assessment (IA) results

Total marks for IA

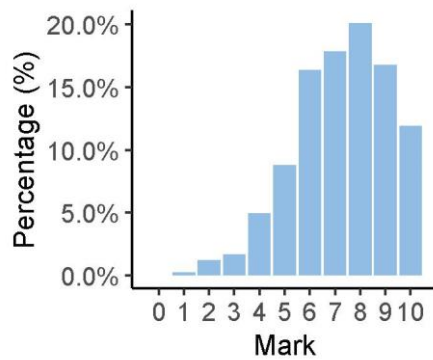


IA1 marks

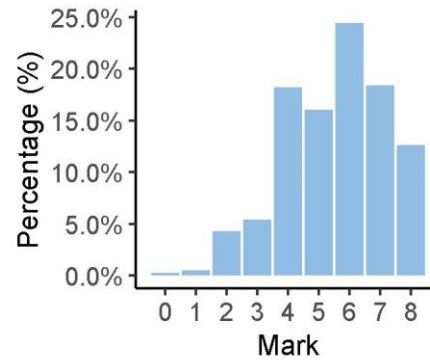
IA1 total



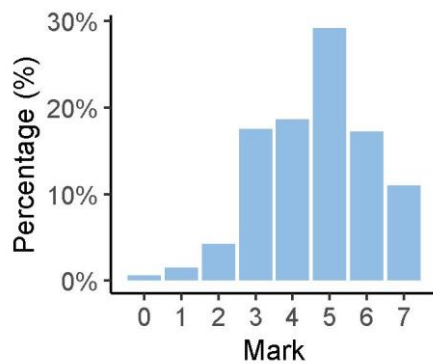
IA1 Criterion: Comprehending



IA1 Criterion: Analysing

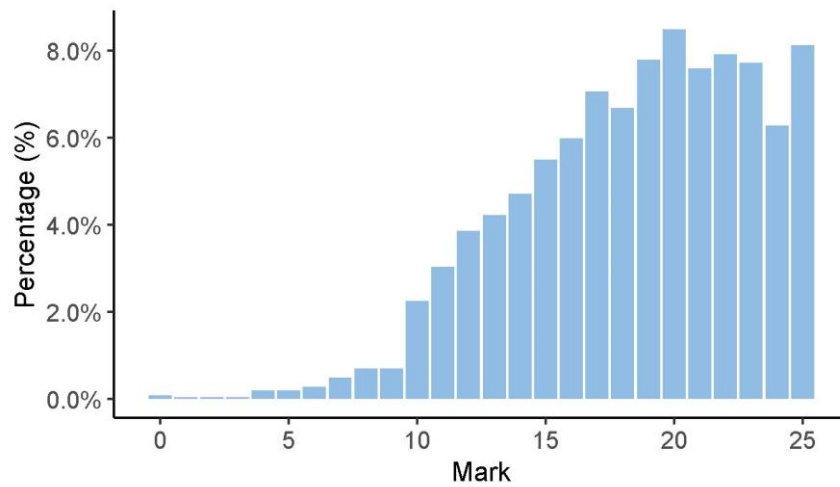


IA1 Criterion: Evaluating

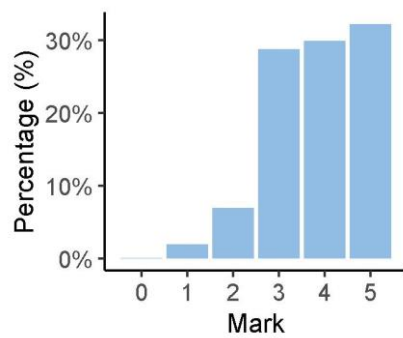


IA2 marks

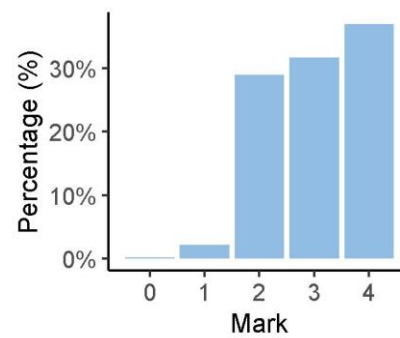
IA2 total



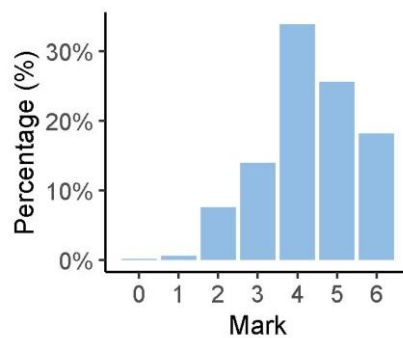
IA2 Criterion: Comprehending



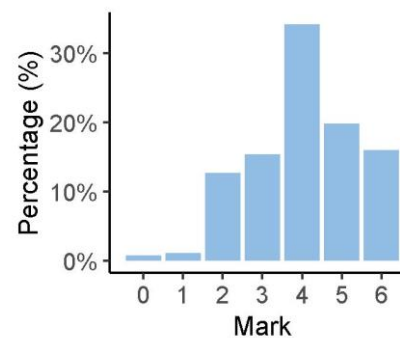
IA2 Criterion: Selecting



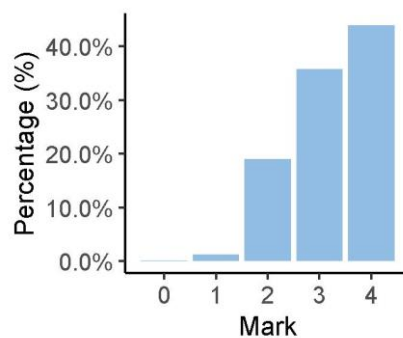
IA2 Criterion: Analysing



IA2 Criterion: Evaluating

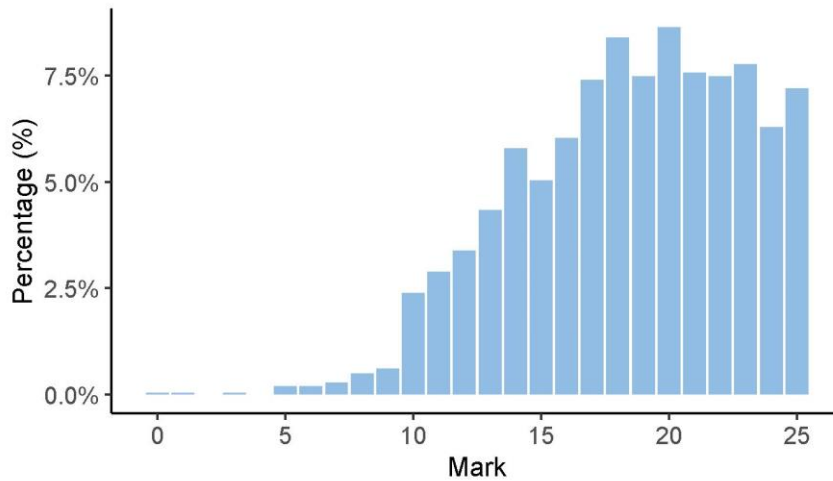


IA2 Criterion: Creating a response

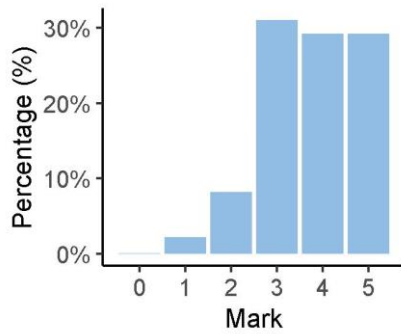


IA3 marks

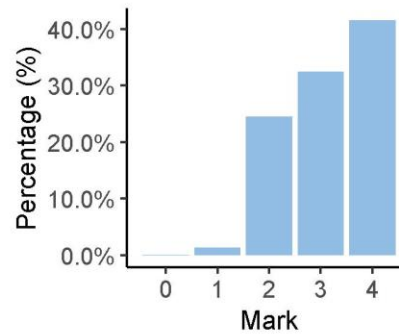
IA3 total



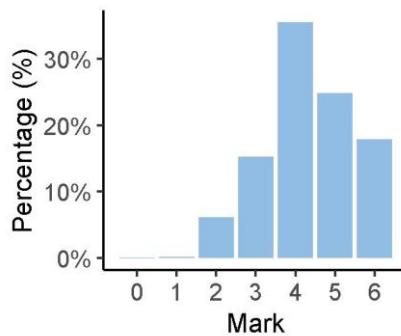
IA3 Criterion: Comprehending



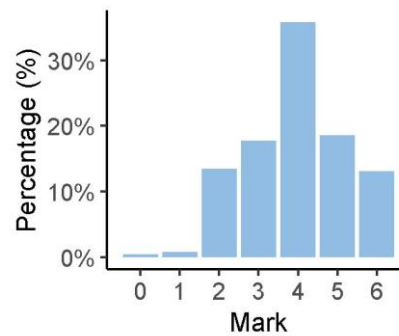
IA3 Criterion: Selecting



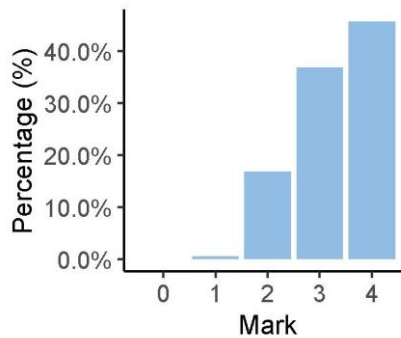
IA3 Criterion: Analysing



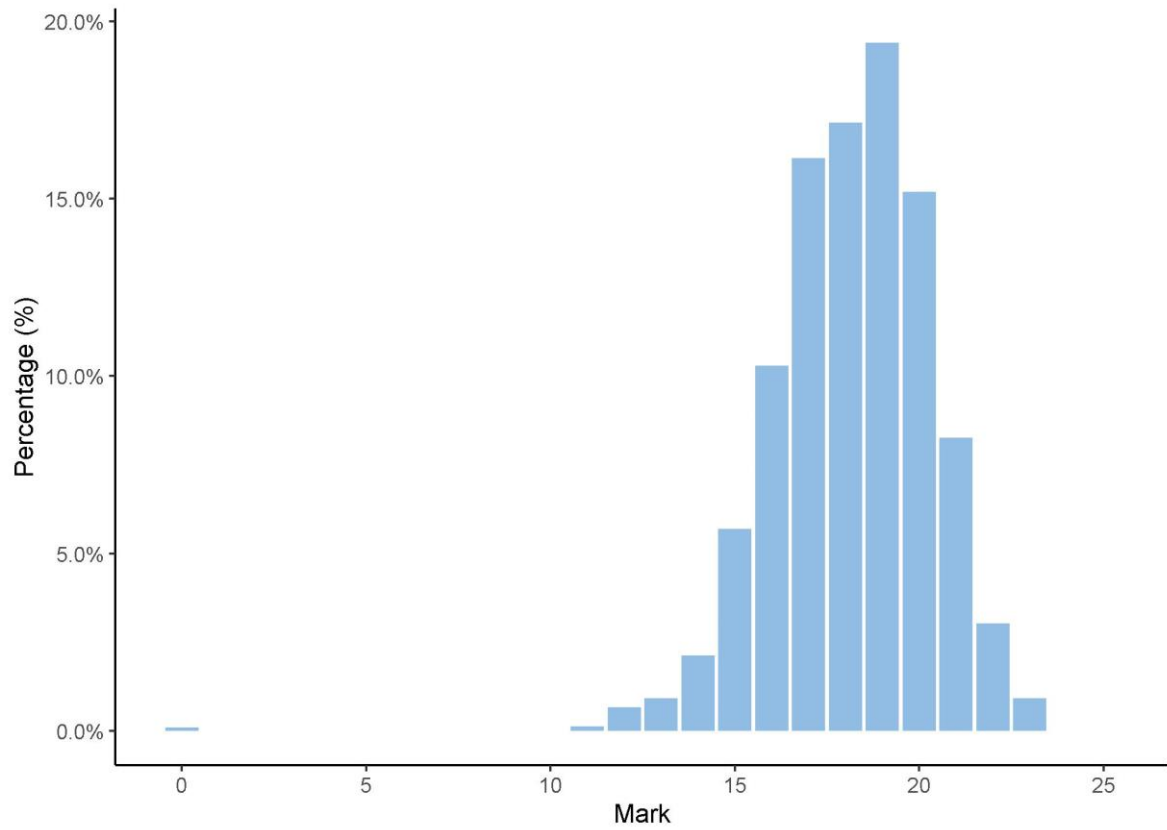
IA3 Criterion: Evaluating



IA3 Criterion: Creating a response

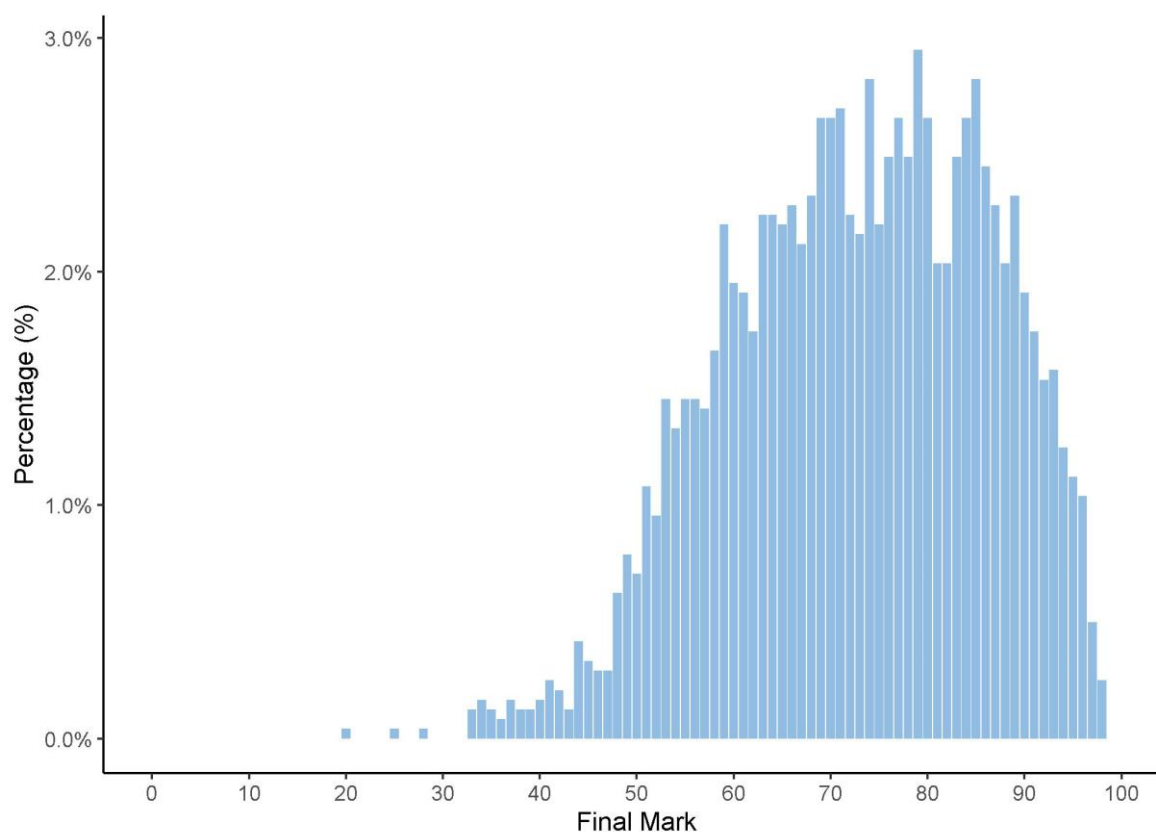


External assessment (EA) marks



Final subject results

Final marks for IA and EA



Grade boundaries

The grade boundaries are determined using a process to compare results on a numeric scale to the reporting standards.

Standard	A	B	C	D	E
Marks achieved	100–83	82–64	63–44	43–20	19–0

Distribution of standards

The number of students who achieved each standard across the state is as follows.

Standard	A	B	C	D	E
Number of students	674	1105	585	43	0



Internal assessment

The following information and advice pertain to the assessment design and assessment decisions for each IA in Units 3 and 4. These instruments have undergone quality assurance processes informed by the attributes of quality assessment (validity, accessibility and reliability).

Endorsement

Endorsement is the quality assurance process based on the attributes of validity and accessibility. These attributes are categorised further as priorities for assessment, and each priority can be further broken down into assessment practices.

Data presented in the Assessment design section identifies the reasons why IA instruments were not endorsed at Application 1, by the priority for assessments. An IA may have been identified more than once for a priority for assessment, e.g. it may have demonstrated a misalignment to both the subject matter and the assessment objective/s.

Refer to the quality assurance tools for detailed information about the assessment practices for each assessment instrument.

Percentage of instruments endorsed in Application 1

Number of instruments submitted	IA1	IA2	IA3
Total number of instruments	101	101	100
Percentage endorsed in Application 1	39%	48%	55%

Confirmation

Confirmation is the quality assurance process based on the attribute of reliability. The QCAA uses provisional criterion marks determined by teachers to identify the samples of student responses that schools are required to submit for confirmation.

Confirmation samples are representative of the school's decisions about the quality of student work in relation to the ISMG and are used to make decisions about the cohort's results. If further information is required about the school's application of the ISMG to finalise a confirmation decision, the QCAA requests additional samples.

Schools may request a review where an individual student's confirmed result is different from the school's provisional mark in one or more criteria and the school considers this result to be an anomaly or exception.

The following table includes the percentage agreement between the provisional marks and confirmed marks by assessment instrument. The Assessment decisions section of this report for each assessment instrument identifies the agreement trends between provisional and confirmed marks by criterion.

Number of samples reviewed and percentage agreement

IA	Number of schools	Number of samples requested	Number of additional samples requested	Percentage agreement with provisional marks
1	100	649	180	93%
2	100	624	86	88%
3	100	637	27	90%



Internal assessment 1 (IA1)

Examination — combination response (25%)

The IA1 Examination — combination response assesses the comprehension of economic concepts, principles and models; the analysis of an economic issue; and the evaluation of an economic outcome. The assessment instrument uses multiple choice items, short response items and an extended response item.

In the General syllabus, the Unit 3 Topic 1 subject matter assessed focused on exchange rates, international trade patterns and trade theories, (Syllabus section 4.5.1).

In the Alternative Sequence, in 2021 the AS Unit 1 Topics 1 and 2 subject matter assessed focused on the economic problem and economic flows in an open economy (Alternative Sequence section 2.7.1).

Assessment design

Validity

Validity in assessment design considers the extent to which an assessment item accurately measures what it is intended to measure and that the evidence of student learning collected from an assessment can be legitimately used for the purpose specified in the syllabus.

Reasons for non-endorsement by priority of assessment

Validity priority	Number of times priority was identified in decisions*
Alignment	67
Authentication	0
Authenticity	0
Item construction	25
Scope and scale	10

*Each priority might contain up to four assessment practices.

Total number of submissions: 101.

Effective practices

Validity priorities were effectively demonstrated in assessment instruments that:

- in Part A
 - used a mix of current and varied data and information as stimulus material, including graphs, tables and text up to 100 words consistent with the subject matter being assessed. For Unit 3 Topic 1, this could include specialisation, comparative advantage, and fixed and floating exchange rates
 - contained items that required the application of economic concepts, principles and models, and also the identification of essential features of the subject matter

- included items that were of sufficient complexity to allow students to achieve at the upper performance levels of the Comprehending criterion
- in Part B
 - presented stimulus materials that were unique to Part B and were clearly presented, allowing some space for students to annotate during planning time
 - used subject matter that was consistent with the topic/s assessed. For Unit 3 Topic 1, this could include trade patterns and the impact on economic growth and sustainability, exchange rate movements, terms of trade, or the composition and direction of trade.

Practices to strengthen

It is recommended that assessment instruments:

- include both question style items (e.g. what, how, why) as well as command style items (e.g. describe, explain) in order to expose students to a range of items. Where cognitive or action verbs are used, they must be consistent in meaning with syllabus objectives and glossary definitions
- contain stimulus materials that comprise a variety of data and text information — including graphs, diagrams, infographics, images, statistics and text — to enable responses to use data and economic information to support the analysis. In the syllabus, the phrase ‘minimal text’ refers to the word count of individual text-based stimulus (less than 100 words), and there should be more than one text-based item to allow the opportunity to analyse more than data
- avoid stimulus with economic reasoning included, which could be used to support a conclusion or decision, e.g. the use of explanatory flowcharts of economic events that provide content knowledge about effects and flow-on or indirect effects, as this can impact the integrity of the final response
- present stimulus materials in ways that align with the syllabus specifications regarding word length and number of pages
- are of appropriate scope and scale such that the response can be completed with sufficient detail within the word length condition, e.g. the scope and scale can be managed either by the task instructions, or by the teacher choice of the seen and unseen stimulus.

Accessibility

Accessibility in assessment design ensures that no student or group of students is disadvantaged in their capacity to access an assessment.

Reasons for non-endorsement by priority of assessment

Accessibility priority	Number of times priority was identified in decisions*
Bias avoidance	6
Language	5
Layout	15
Transparency	17

*Each priority might contain up to four assessment practices.

Total number of submissions: 101.

Effective practices

Accessibility priorities were effectively demonstrated in assessment instruments that:

- in Part A
 - used appropriate language and economic terminology, and avoided unnecessary jargon and colloquial language
 - provided adequate space that reflected the maximum word length stated in the question, e.g. where an item has identified 80–100 words, there should be sufficient space for 100 words
- in Part B
 - presented images, diagrams or other visual elements that were legible, clear, relevant and accessible, and that did not introduce bias by being too large or too small comparative to other stimulus materials.

Practices to strengthen

It is recommended that assessment instruments:

- use clear and unambiguous instructions within items and avoid superfluous information that may distract or confuse the response required. One strategy is to have another teacher read through the examination to ensure clarity of the instructions and information
- present clearly labelled and numbered stimulus materials that contain language consistent with the subject matter for the topic/s assessed.

Additional advice

- Clear and concise question cues and appropriate numbers of lines for responses are assessment design strategies that guide students where to plan and prioritise their time during the examination.

Assessment decisions

Reliability

Reliability is a judgment about the measurements of assessment. It refers to the extent to which the results of assessments are consistent, replicable and free from error.

Agreement trends between provisional and confirmed marks

Criterion number	Criterion name	Percentage agreement with provisional	Percentage less than provisional	Percentage greater than provisional	Percentage both less and greater than provisional
1	Comprehending	97%	1%	2%	0%
2	Analysing	95%	5%	0%	0%
3	Evaluating	95%	4%	1%	0%

Effective practices

Accuracy and consistency of the application of the ISMG for this IA was most effective when:

- in Part A, for the Comprehending criterion,
 - judgments for the features of exchange rates, international trade patterns and trade theories were matched accurately to the available performance levels. The range of qualifiers include ‘accurate and detailed’ (correct in all details), ‘effective’ (successful in producing the intended result), ‘adequate’ (satisfactory or acceptable in quality or quantity) and ‘partial’ (attempted but incomplete)
 - evidence for the application of economic concepts, principles and models was matched to the 7–8 mark range, rather than to the 9–10 mark range; that is, the application was *effective*, rather than *perceptive* (showing insight)
 - judgments regarding the use of economic terminology descriptor were accurately matched to the appropriate performance levels; that is, the qualities of ‘precise’ (definite or exact), ‘effective’, ‘adequate’ and ‘narrow’ (barely sufficient or adequate)
- in Part B, for the Analysing criterion,
 - evidence for the *effective* interpretation, explanation and use of data and economic information was matched to the 5–6 mark range
 - judgments regarding the interpretation of patterns and trends in exchange rates and/or trade data and economic information was matched accurately to the appropriate performance levels; that is, ‘discerning’ (thoughtful and astute), ‘effective’, ‘adequate’ and ‘superficial’ (obvious or cursory)
- in Part B, for the Evaluating criterion,
 - evidence of synthesis, the conclusion/decision and economic reasoning and justification was matched to the effective performance level at the 4–5 mark range.

Samples of effective practices

The following are excerpts from responses that illustrate the characteristics for the criteria at the performance level indicated. The excerpts may provide evidence of more than one criterion. The characteristics identified may not be the only time the characteristics have occurred throughout a response.

This student response excerpt has been included:

- to demonstrate the Comprehending criterion in Part A, with a comprehensive and detailed understanding of the economic theory underpinning international trade, and a perceptive application of this knowledge within the short response. It is a good example to show evidence of all the descriptors associated with the upper performance level in a concise response.

**Comprehending
(9–10 marks)**

- accurate and detailed identification of the essential features of exchange rates, international trade patterns and trade theories
- perceptive application of economic concepts, principles and models to exchange rates, international trade patterns and trade theories
- precise use of economic terminology

Rail infrastructure is important for the movement of materials from producing to their selling stage, mainly through the use of freight transport. An example of this is Gladstone — QLD's largest multi-commodity area, altering patterns of trade and thus allowing for a greater volume of exports (eg: coal) to be expanded. This will ultimately improve competition, provide workers with more employment in mineral extraction, railway and port businesses as well as increase GDP through the flow on effects attracting various businesses (eg: engineering) to the region.

This region of QLD is a logistics hub for resources in the nearby Surat Basin.

This student response excerpt has been included:

- to demonstrate evidence of the Analysing criterion in Part B at the upper performance level. There is a discerning interpretation of economic information related to exchange rates and a discerning explanation of the underlying economic relationships that showed intellectual perception. A perceptive use of data and economic information to support this analysis is evident in the use of both data and dates
- to show conciseness by identifying the most significant trend in the A:US exchange rate between 2017 and 2020 from the second sentence. The response signposts the intended economic criteria at the outset (standard of living and employment)
- to demonstrate how to draw on multiple unseen sources and be discerning in the referenced selections from those sources to support a clear interpretation of the patterns and trends in exchange rates.

Analysing (7–8 marks)

- discerning interpretation of patterns and trends in exchange rates and/or trade data and economic information
- discerning explanation of economic relationships involving exchange rates and/or Australia's place in the global economy
- perceptive use of data and economic information to support the analysis

During the time period, ranging between 2017 to early 2020, there can be seen to be a number of impacts on the exchange rate of the Australian economy, ^{especially in terms of employment and standard of living.} Analysing the ~~AUD~~ Australian dollar (AUD) against to US dollar (USD), from 2017 - 2020 there can be seen to be ~~an~~ ^{a pattern of} overall depreciation in the value of the Australian currency. ^(S) This depreciation ~~decreases~~ the prices of exports, thus causing an increase in the number of goods exported. Source 1 depicting Australia's top 5 exports shows that from the previous year each exported good had endured an increase in the overall percentage range. For example, iron ores and concentrates ~~have~~ had a percentage change increase of 25.8% over the past year, along with natural gas ^{increasing} ~~increases~~ to 60.9%. Similarly, Source 5 corroborates with ~~it~~ ^{Source 1} above as it also depicts a similar trend in the relationship between the depreciating AUD and the upward incline of Australia's exports, moving from 33034 million exports at the beginning of 2017 to 40645 ^{million} ~~as~~ of the early months

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2020 - 2021

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of 2020. This increase ~~of~~ in exports, due to their

This student response excerpt has been included:

- to demonstrate evidence of the Evaluating criterion in Part B, with a discerning synthesis of ideas to draw a conclusion about the profitability of Australian businesses competing in a global economy. It is a good example of evaluation (synthesis, conclusion and reasoning) that matches all the descriptors at the upper performance level
- to provide an example of the synthesis of ideas and perspectives by connecting these with the effects of becoming more internationally competitive, i.e. demand, revenue and profitability. The different perspectives are of consumers who buy imported goods and businesses that require intermediate capital goods. The response develops these ideas and perspectives, rather than simply listing or identifying them
- to illustrate an insightful (perceptive) conclusion and critical economic reasoning. Clear chains of economic logic have been used to consider points that encourage and discourage economic actions. This is evidenced by the use of terms such as 'additionally', 'in turn' and 'however' that signpost astute choices and reasoning, with direct and indirect effects used to support the conclusion
- to show the use of data to support critical reasoning through the second mention of 'however', which references the significant proportion of total imports represented by intermediate and capital goods.

Evaluating (6–7 marks)

- discerning synthesis of economic ideas and/or perspectives to support the conclusion or decision
- perceptive conclusion drawn or decision made about exchange rates, trade patterns and/or trade theories, based on the use of relevant economic criteria
- critical economic reasoning and justification

The depreciation of the Australian dollar will positively affect aggregate demand. This is because it would reduce the cost of Australia's exports, thereby making them more internationally competitive and in turn increasing global demand and businesses' revenue (Source 6), thereby positively impacting their profitability (Source 5). Additionally, this would discourage consumers to purchase imports as they have become more expensive (Source 6) and encourages them to opt for domestic goods and services, in turn supporting Australian businesses. However, ~~the~~ a ~~depreciating~~ depreciating dollar will negatively affect

businesses that require intermediate or capital goods, which make up 49.98% of Australia's total imports (Source 7). However, given that an appreciating dollar only benefitted the profitability of 14.5% of businesses (Source 5), ~~and~~ the depreciating dollar would not have hindered the majority of businesses' profitabilities. Thus,

Practices to strengthen

To further ensure accuracy and consistency of the application of the ISMG for this IA, it is recommended that:

- in Part A,
 - when making judgments about the 'application of economic concepts, principles and models', diagrams and models that are not accurately labelled or discerningly used in the accompanying written response match an effective application of the economic concept or model, rather than a perceptive application
 - teachers note that responses at the upper performance level do not need to be flawless, e.g. responses that incorrectly answer a multiple choice question might still be matched to the upper performance level
- in Part B,
 - the synthesis of economic ideas and/or perspectives must support the decision or conclusion and be discerning (i.e. with thoughtful and astute choices) to be matched to the upper performance level
 - critical economic reasoning and justification must be evident to match the descriptor at the upper performance level. This refers to responses that show skilful judgment or merit in an objective approach that has logical consistency, e.g. developing logical chains of economic

reasoning that stem from the analysis. Without sufficient analysis, there are fewer opportunities to synthesise economic ideas and the conclusions or decisions might not be perceptive.

Additional advice

- Annotated ISMGs should clearly indicate the teacher judgment for the match to descriptors, e.g. identifying two descriptors within a performance level does not fully indicate how a mark is determined when there is a mark range available.



Internal assessment 2 (IA2)

Investigation — research report (25%)

The IA2 Investigation requires students to research a contemporary international economic issue through collection, analysis and synthesis of primary and secondary data, information and sources. Research practices include locating and using information beyond students' own knowledge and the data they have been given. The research report allows students to employ their information & communication technologies (ICT) skills in an assessment context.

In the General syllabus, the Unit 3 Topic 2 subject matter assessed focused on international economic issues associated with trade protection, trade agreements and the balance of payments (Syllabus section 4.5.2).

In the Alternative Sequence, in 2021 the AS Unit 1 Topic 2 subject matter assessed focused on modified markets and/or inequality (Alternative Sequence section 2.7.2).

Assessment design

Validity

Validity in assessment design considers the extent to which an assessment item accurately measures what it is intended to measure and that the evidence of student learning collected from an assessment can be legitimately used for the purpose specified in the syllabus.

Reasons for non-endorsement by priority of assessment

Validity priority	Number of times priority was identified in decisions*
Alignment	9
Authentication	1
Authenticity	24
Item construction	8
Scope and scale	11

*Each priority might contain up to four assessment practices.

Total number of submissions: 101.

Effective practices

Validity priorities were effectively demonstrated in assessment instruments that:

- required analysis, evaluation and the creation of a response in the form of a research response, with comprehension and selection often being subsumed within these instructions
- used the cognitions at the start of each sentence in the task description to direct students to the analysis of an economic issue, and the evaluation of an economic outcome.

Practices to strengthen

It is recommended that assessment instruments:

- increase the authenticity of responses by allowing student choice of criteria to be used in evaluation
- increase the authenticity of responses and opportunities for unique responses by providing a low level of guidance or scaffolding (if any) through the use of bullet points that provide further contextual clarity (if needed) or that focus the scale of the task
- consider scope and scale such that responses can be completed with sufficient detail within the word length condition for this technique, e.g. by directing the task to focus on an industry, trade agreement, trade protection barrier and/or trade partner, or component of the balance of payments.

Accessibility

Accessibility in assessment design ensures that no student or group of students is disadvantaged in their capacity to access an assessment.

Reasons for non-endorsement by priority of assessment

Accessibility priority	Number of times priority was identified in decisions*
Bias avoidance	0
Language	1
Layout	0
Transparency	28

*Each priority might contain up to four assessment practices.

Total number of submissions: 101.

Effective practices

Accessibility priorities were effectively demonstrated in assessment instruments that:

- provided concise instructions using cues that aligned to the specifications, assessment objectives and ISMG
- avoided bias in context statements by not directing responses towards one viewpoint or outcome.

Practices to strengthen

It is recommended that assessment instruments:

- express the task instructions so that it is clear only one decision (or conclusion, recommendation or prediction) is required, e.g. task instructions that require a recommendation, but not a decision and a recommendation
- provide clarity by stating the number or range of economic criteria to be used when evaluating.

Assessment decisions

Reliability

Reliability is a judgment about the measurements of assessment. It refers to the extent to which the results of assessments are consistent, replicable and free from error.

Agreement trends between provisional and confirmed marks

Criterion number	Criterion name	Percentage agreement with provisional	Percentage less than provisional	Percentage greater than provisional	Percentage both less and greater than provisional
1	Comprehending	94%	4%	2%	0%
2	Selecting	93%	7%	0%	0%
3	Analysing	91%	7%	2%	0%
4	Evaluating	92%	7%	0%	1%
5	Creating a response	95%	4%	1%	0%

Effective practices

Accuracy and consistency of the application of the ISMG for this IA was most effective when:

- for the Comprehending criterion, the identification of essential features of trade protection, trade agreements and/or the balance of payments was matched to appropriate performance levels, e.g. *comprehensive* identification (detailed and thorough, including all that is relevant) was distinguished from *effective* (successful in achieving the intended result) at the 7–8 and 5–6 mark range respectively
- for the Selecting criterion, the consistency, accuracy and reliability of the documentation of data and economic information in the form of a reference list and citations was evident when responses were matched to the upper performance level
- for the Analysing criterion, judgments about analysis distinguished between *discerning* (upper performance level) and *effective* (mid performance level) interpretation of patterns and trends in data and economic information from analysis that showed *superficial* descriptions of patterns and trends in data and economic information (low performance level)
- for the Evaluating criterion, *critical* economic reasoning and justification at the 5–6 mark range was distinguished from *feasible* economic reasoning and justification at the 3–4 mark range
- for the Creating a response criterion, the *consistent* demonstration of features of a report genre was evident in judgments at the upper performance level, e.g. the report included an introduction, main body, and conclusion that contained informative headings and subheadings. Reports with headings that were relevant to the ISMG (e.g. 'Analysis' and 'Evaluation') instead of relevant to the issue being analysed and evaluated were matched to the mid performance level.

Samples of effective practices

The following are excerpts from responses that illustrate the characteristics for the criteria at the performance level indicated. The excerpts may provide evidence of more than one criterion. The characteristics identified may not be the only time the characteristics have occurred throughout a response.

This student response excerpt has been included:

- to show an introduction that outlines the structure of the report, including foreshadowing the eventual conclusion indirectly by referring to the overall purpose and significance of the report: 'to continue to attain successful bilateral trade agreements'. It demonstrates concise expression that intentionally signposts the relevant economic criteria that the report will use: maximum economic returns based on benefits and costs. The logical development of ideas and concise style is used to foreshadow the analysis and evaluation. This shows a consistent demonstration of the features of the report genre required in a high-level response
- to demonstrate a conclusion that is an effective summary of the whole report, rather than a recount of the activities undertaken within the report.

<p>Creating a response (3–4 marks)</p> <ul style="list-style-type: none"> concise expression and logical development of relevant ideas that enhance economic meaning features of an analytical genre are consistently demonstrated 	<p>Introduction</p> <p>Australia's free economy was compared to 180 other free trade economies and was ranked in the top 5 for having the most advanced market (Tang, 2020). A major part of Australia's success in recent years is due to its effective free trade agreements and its strong relationship with foreign countries. To continue to attain successful bilateral trade agreements in Australia, the analysis of two new agreements with Canada and Saudi Arabia will be evaluated to determine which agreement Australia should pursue. This will be determined through the costs and benefits of each agreement, then a final decision will be made ensuring that maximum economic return is feasible.</p> <p>Conclusion</p> <p>The study of two new free trade agreements with Canada and Saudi Arabia were assessed to discover which agreement can produce better opportunity for economic growth in Australia. Although the Canadian economy may be more stable and may appear better currently, there are additional advantages that come with the Saudi Arabian agreement which incorporate a better geographical location, no tariffs, less costs involved, more room for economic growth and a further drive for more international trade. Respectively, if the government happened to pursue a new agreement they should concentrate their hard work on the Saudi Arabian Free Trade Agreement as it would give Australia more long term benefits.</p>
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This student response excerpt has been included:

- to demonstrate analysis, matching to the upper performance level. Figure 6 (Value of Australian Agricultural Exports to Major World Markets) is an example of a *discerning* interpretation of the data — selecting the most relevant aspects of the chart to analyse and nominating the uptrend of exports to China using specific notation designed by the student, not the author of the bar chart
- to illustrate economic data and information being *perceptively* used to support the analysis in the accompanying text. Further evidence is seen in the consideration of consequences for the demand for Australian agricultural goods. Finally, there is a calculation to show 200% growth of exports, adding weight to the trend observed.

Analysing (5–6 marks)

- discerning interpretation of patterns and trends in data and economic information
- perceptive use of data and economic information to support the analysis

2.1 Trends in the wine industry and agricultural sector

Illustrated in Figure 6, during the early 2000's agricultural export volume to China was between \$2M-\$3M (AUD). However, from 2005-2014 there is a significant growth of 200% observed, which is most likely a result of China's rapid economic growth and transition to a developed economy (Rural Bank, 2019). Although, from a period of 2013-2015, the export growth plateaued. This plateau, however, was short lived due to the introduction of ChAFTA.

The introduction of this bi-lateral trade agreement resulted in an uptrend of exports to China, which is demonstrated above with the arrow. Most tariffs on Australian agricultural goods were removed resulting in a reduced price of Australian goods, relative to the world price (Radcliffe, 2019). Consequently, demand for Australian agricultural products increased. ABARES forecasts a reduction of 4.18% in total agricultural exports from 2019-2020 (ABARES, 2021). This is a result of COVID-19 and the subsequent trade war with China.

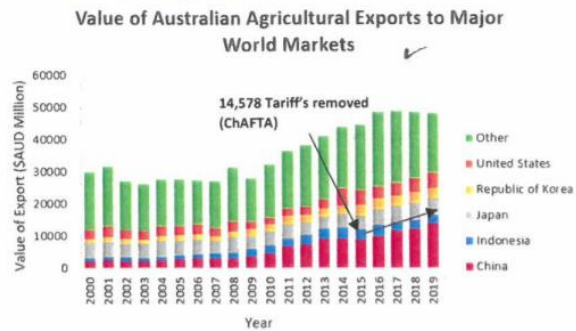


Figure 6: Value of Australian Agricultural Exports to Major World Markets (ABARES, 2021) Created by 9103897 (Appendix 1)

This excerpt has been included:

- to demonstrate the astute synthesis of temporal aspects of the free trade agreement with China drawn from the analysis. This facilitated a perceptive conclusion using critical economic reasoning and justification
- to show comprehension in terms of a perceptive application of the economic concept of opportunity cost, through references to non-tangible and non-monetary costs (forgone benefits, trade retaliation and inefficiency) and precise use of economic terminology, e.g. 'utility', 'shock' and 'consumer sovereignty'.

Comprehending (4–5 marks)

- perceptive application of economic concepts, principles and models
- precise use of economic terminology

Evaluating (5–6 marks)

- discerning synthesis of economic ideas and perspectives to support the conclusion or decision
- perceptive conclusion drawn or decision made about macro-economic objectives, based on the use of relevant economic criteria
- critical economic reasoning and justification

3.3 Long-term

The decision matrix has determined that free trade/trade liberalisation is the most beneficial stance in the long-term. As demonstrated in the analysis, free trade agreements such as ChAFTA can be positively correlated with an increase in export revenue and thereby TOT (Figure 10). Which in turn results in, increased employment in export sectors, increased GDP, improved trade relations, greater economic integration, and increased consumer sovereignty. All of which promote, greater long-term living standards, and utility among not only domestic consumers, but international consumers.

While long-term free trade will result in short-term structural unemployment, and the closure of sunset/infant industries. These costs are offset by the employment created overtime in a diverse range of sectors. The closure of inefficient sunset and infant industries allows only the most technical and allocatively efficient firms to remain functional. Consequently, the quality of goods increase, all while price decreases. Once the Australian economy has recovered from the COVID-19 market shock, the induction of trade liberalist policies, such as removal of tariffs, subsidies and regulations results in a long-term free trade stance being established.

	<p>3.2 Short-term</p> <p>Costs associated with short-term protection include foregone free trade benefits, retaliation from crucial trade partners, and inefficiency. Given that two-way trade with China is worth 18% of GDP, engaging in full blown protection may result in retaliation from China that would hinder the ability to gain essential export revenue in a variety of sectors. This in-turn would reduce GDP resulting in a detrimental effect towards economic growth, employment, and consumer spending.</p> <p>However, due to the recent market shock brought upon by the COVID-19 pandemic, the Australian government must take steps to absorb this shock. Through the implementation of protectionist policies in the short-term, domestic structural employment is retained, sunset/infant industries remain competitive, and domestic economic stability is promoted. Prioritization of these factors allows for Australian consumers as well as the economy, to transition back to the pre-covid economic prosperity. Furthermore, engaging in free trade now would be counter intuitive, as the current global economic climate will not allow for the degree of exports or imports previously associated with free trade.</p>
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Practices to strengthen

To further ensure accuracy and consistency of the application of the ISMG for this IA, it is recommended that:

- the use of relevant economic criteria intentionally supports the conclusion or decision about trade protection, trade agreements and/or the balance of payments. At the upper and mid performance levels in the Evaluating criterion, *relevant* economic criteria are used as a lens through which decisions are made or conclusions are reached. Where the economic criteria used are not relevant, the match is to the descriptor at the 1–2 mark range
- in the Creating a response criterion, the upper performance level requirement to consistently demonstrate the features of a report involves more than just a table of contents. The features of a report — inclusion of headings and subheadings, logically and objectively developed ideas, inclusion of charts/tables/diagrams and documentation of evidence — need to be consistently demonstrated throughout the research report to substantiate upper performance level decisions. In addition, teachers should note that any information or graphs provided within an Appendix is supplementary material that is not directly used as evidence when marking the response
- the selection of data from relevant sources must involve the choice of current data, i.e. the most recent available. The choice of current, accurate and reliable data is a required qualitative element of the upper performance level for the first descriptor in the Selecting criterion
- to demonstrate the Analysing criterion at the upper performance level, responses are required to be *discerning* (with thoughtful and astute choices) in their interpretation of patterns and trends in data and *perceptive* (showing insight) in the use of economic information. Students should avoid large ‘data dumps’ of charts or tables into a research report, with no identification of the most relevant aspects. At the upper performance level, responses demonstrated discernment in the identification of the significant components of the charts/tables and explained the underlying economic relationships
- there is evidence of a clear connection between the findings from the analysis and the evaluation, demonstrated in both the *critical* economic reasoning within the evaluation and the *discerning* synthesis of ideas and perspectives that support the conclusion or decision. Critical economic reasoning requires an objective judgment with a rational appraisal for economic logic, consistency and merit
- a conclusion or decision does not require additional decisions that propose recommendation/s about trade protection, trade agreements or balance of payments for the Evaluating criterion.

Responses must make conclusions or decisions based on the use of relevant economic criteria.

Additional advice

- Teachers can encourage students to show discernment by drawing attention to those parts of charts or tables that are relevant to the response rather than including complex charts or very large tables containing data or information that may not be relevant.



Internal assessment 3 (IA3)

Examination — extended response to stimulus (25%)

The IA3 Examination — extended response to stimulus assesses the full range of assessment objectives. Students respond, in an analytical essay response, to an unseen question and a series of seen and unseen stimulus material.

In the General syllabus, the Unit 4 Topic 1 subject matter assessed focuses on macro-economic objectives and theory (Syllabus section 5.5.1).

In the Alternative Sequence, in 2021, the AS Unit 2 Topic 1 subject matter assessed focused on international economic issues associated with trade protection, trade agreements and the balance of payments (Alternative Sequence section 3.6.1).

Assessment design

Validity

Validity in assessment design considers the extent to which an assessment item accurately measures what it is intended to measure and that the evidence of student learning collected from an assessment can be legitimately used for the purpose specified in the syllabus.

Reasons for non-endorsement by priority of assessment

Validity priority	Number of times priority was identified in decisions*
Alignment	23
Authentication	0
Authenticity	5
Item construction	7
Scope and scale	19

*Each priority might contain up to four assessment practices.

Total number of submissions: 100.

Effective practices

Validity priorities were effectively demonstrated in assessment instruments that:

- included a succinct task statement, using the language of the assessment objectives within the task, or questions to elicit analysis and evaluation
- limited or avoided scaffolding, to enable students to show their knowledge and skills, and to match with the examination technique
- provided a range and variety of seen and unseen stimulus material equivalent to the syllabus specifications of two A3 double-sided pages or equivalent. The stimulus was of sufficient quantity and complexity to provide students with opportunities to demonstrate the upper performance levels of the Selecting, Analysing and Evaluating criteria of the ISMG.

Practices to strengthen

It is recommended that assessment instruments:

- present seen and unseen stimulus items that use subject matter and terminology appropriate to the topic being assessed. Assessments for Unit 4 Topic 1: Macroeconomic objectives and theory should avoid relying on detailed knowledge of subject matter that is aligned to Unit 4 Topic 2: Economic management, e.g. in Topic 1: Fiscal and monetary policy appear as comprehension elements only
- contain a balance of visual and text stimulus material that is succinct yet provides sufficient commentary and critical information to ensure analysis and evaluation can occur. In particular, the seen stimulus should not allow students to pre-prepare responses, and unseen stimulus must have information that is critical to the item
- are of appropriate scope and scale, such that the response can be completed with sufficient detail within the length and time conditions of the assessment instrument.

Accessibility

Accessibility in assessment design ensures that no student or group of students is disadvantaged in their capacity to access an assessment.

Reasons for non-endorsement by priority of assessment

Accessibility priority	Number of times priority was identified in decisions*
Bias avoidance	5
Language	2
Layout	2
Transparency	8

*Each priority might contain up to four assessment practices.

Total number of submissions: 100.

Effective practices

Accessibility priorities were effectively demonstrated in assessment instruments that:

- presented images, diagrams or other visual elements that were legible, clear and accessible with relevant titles and consistent numbering of stimulus, and diagram labels and axes that were legible
- provided clear and concise instructions using cues that aligned to the specifications, objectives and ISMG.

Practices to strengthen

It is recommended that assessment instruments:

- use direct and clear task instructions, so that students can quickly and clearly understand the task requirements, e.g. including a clear timeframe for analysis if stimulus materials are from a range of dates.

Additional advice

- The unseen sources must include information that is critical to the task to ensure that students cannot write pre-prepared or overly scripted responses.

Assessment decisions

Reliability

Reliability is a judgment about the measurements of assessment. It refers to the extent to which the results of assessments are consistent, replicable and free from error.

Agreement trends between provisional and confirmed marks

Criterion number	Criterion name	Percentage agreement with provisional	Percentage less than provisional	Percentage greater than provisional	Percentage both less and greater than provisional
1	Comprehending	97%	1%	1%	1%
2	Selecting	97%	0%	2%	1%
3	Analysing	92%	6%	1%	1%
4	Evaluating	95%	3%	1%	1%
5	Creating a response	98%	0%	2%	0%

Effective practices

Accuracy and consistency of the application of the ISMG for this IA was most effective when:

- responses at the upper performance level for the Comprehending criterion demonstrated the *precise* (definite or exact expression) use of economic terminology and the *perceptive* (showing insightful) application of economic concepts, principles and models
- responses demonstrating *accurate* and *consistent* documentation of data and economic information in the form of citations were matched to the 3–4 mark range of the Selecting criterion
- judgments for the Analysing criterion distinguished between the *discerning* and *effective* interpretation of patterns and trends in data and economic information at the upper and mid performance levels from *superficial descriptions* of patterns and trends at the lower performance level
- judgments for the Evaluating criterion discriminated between the 5–6 mark range (discerning synthesis, perceptive conclusion/decision and critical reasoning) and the 3–4 range (effective synthesis, effective conclusion/decision and feasible reasoning). *Critical* reasoning refers to responses that show skilful judgment or merit in an objective approach that has logical consistency. *Feasible* reasoning is probable or reasonable enough to be accepted.

Samples of effective practices

The following are excerpts from responses that illustrate the characteristics for the criteria at the performance level indicated. The excerpts may provide evidence of more than one criterion. The characteristics identified may not be the only time the characteristics have occurred throughout a response.

This student response excerpt has been included:

- to illustrate the way that high-level comprehension and application of economic concepts, principles and models can occur throughout economic analysis by making connections and including the circular flow of income model
- to show a considered response discussing slowing household consumption as a cause of the slowing rate of GDP growth in the Australian economy. The excerpt shows a discerning choice and perceptive use of data and information that support the analysis and identifies the scope and scale of significant trends and relationships. The response uses multiple sources to interpret the patterns in household consumption and consumer confidence. Insight is demonstrated by using the data and information to explain the economic relationship between household consumption and GDP
- to demonstrate the recognition of the significance of the slowdown in household consumption. The response establishes an analytical finding that can be developed later into an evaluation using relevant criteria.

<p>Comprehending (4–5 marks)</p> <ul style="list-style-type: none"> perceptive application of economic concepts, principles and models <p>Selecting (3–4 marks)</p> <ul style="list-style-type: none"> perceptive use of data and economic information from seen and unseen sources <p>Analysing (5–6 marks)</p> <ul style="list-style-type: none"> discerning interpretation of patterns and trends in data and economic information perceptive use of data and economic information to support the analysis 	<p>Excerpt 1</p> <p>A cause of the recently slowing GDP growth is slowing household consumption growth, which slowed from $\sim 1.8\%$ in 2016 to $\sim -0.1\%$ in 2019; as compared to previous growth which ranged from $\sim 0\%$ in 1994 to $\sim 5.9\%$ in 1999 (Source 1b). This slowing household consumption is likely the result of stagnated consumer confidence, which has ranged only between 97 and 107 of the 1980 average index between 2016 and 2019 (compared to a range of 100 ~ 100 to ~ 110 of the 1980 index between 2008 and 2013) (Source 1c), which caused "households [to] throttle back in particular in spending on recreation and culture, hospitality and furnishings and household equipment (Source 3a). This slowed household consumption is significant in terms of GDP growth as consumer expenditure is an injection into the economy under the Circular Flow Model (CFM), and represents the largest component of Australia's GDP. Another cause of slowing GDP is stagnate</p>
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This student response excerpt has been included:

- to demonstrate the way that high-level comprehension and application of economic concepts, principles and models can occur throughout economic analysis, e.g. references to factor inputs, the production possibility curve, underemployment and spare capacity
- to show an intentional use of relevant economic criteria. The decision that the Australian economy is performing poorly when examined through the lens of full employment is well-supported in the response with an economic model and the use of seen and unseen sources. Multiple perspectives are considered in the making of the decision, with critical reasoning demonstrated when the response examines the potential for growth due to two-way trade with China

- to provide an example of concise expression and logical development of the argument/central point.

<p>Comprehending (4–5 marks)</p> <ul style="list-style-type: none"> perceptive application of economic concepts, principles and models <p>Evaluating (5–6 marks)</p> <ul style="list-style-type: none"> discerning synthesis of economic ideas and perspectives to support the conclusion or decision perceptive conclusion drawn or decision made about macroeconomic objectives, based on the use of relevant economic criteria critical economic reasoning and justification <p>Creating a response (3–4 marks)</p> <ul style="list-style-type: none"> concise expression and logical development of relevant ideas that enhance economic meaning, and effective use of graphs, diagrams and/or statistics 	<p>Excerpt 1</p> <p>and underemployment can be reduced further via "government spending, including spending on infrastructure" (Source 4c). Additionally, whilst employment has grown since 2019, this has not resulted in "sustained drops in unemployment and underemployment" which grew by 110,000 persons from 2015 to 2019 (Sources). Moreover, the employment opportunities being created, "haven't been the quality full-time positions the country needs" with only 54% of jobs created in 2019 being full time, which is a lower rate of full-time job creation when compared to 2017 and 2018 (Source 6b). This increasing casualisation of employment is likely to lead to worsening underemployment and growing spare capacity (placing the economy even further beneath the PPC curve). However, Australia's continually increasing two-way trade with China, from which new trade records were set in 2019, may largely significantly alleviate the country's stagnate unemployment and underemployment by generating new the full-time employment opportunities in trade-related industries (Source 3c). Additionally, the Australia has "seen job creation and</p>
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This student response excerpt has been included:

- because it draws on both the seen and unseen sources, with the combination of the economic theory of the aggregate demand and supply model, to make a perceptive and well-synthesised decision about the impact of falling consumption and business investment on the Australian economy. It demonstrates a discerning synthesis of ideas by noting that the fall in consumption and investment outweigh increases in government expenditure and the current account surplus
- to demonstrate the perceptive application of a relevant economic model (AD/AS) to the economic issue being analysed.

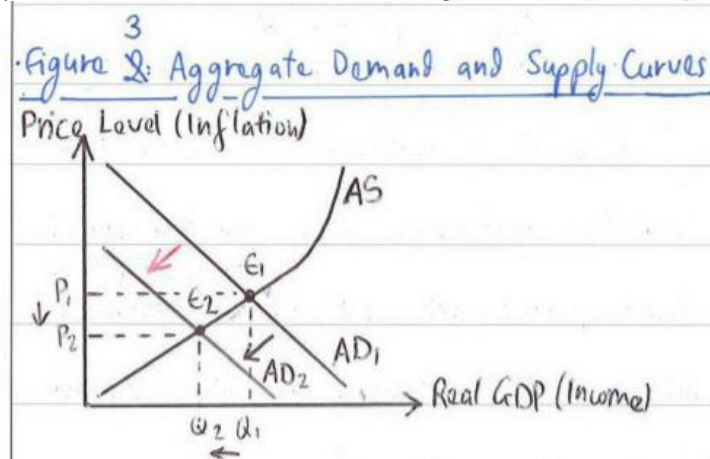
<p>Comprehending (4–5 marks)</p> <ul style="list-style-type: none"> perceptive application of economic concepts, principles and models <p>Evaluating (5–6 marks)</p> <ul style="list-style-type: none"> discerning synthesis of economic ideas and perspectives to support the conclusion or decision perceptive conclusion drawn or decision made about macroeconomic objectives, based on the use of relevant economic criteria 	<p>Excerpt 1</p> <p>Low wages growth has been caused by a combination of high under-employment and lower consumption, as businesses cannot afford to</p>
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- critical economic reasoning and justification

Creating a response (3–4 marks)

- concise expression and logical development of relevant ideas that enhance economic meaning and effective use of diagrams

increase employees' incomes, being "a symptom of systematic action by businesses to cut labour costs" (Source 3). While several decades ago inflation and wages skyrocketed, together with the cost of living, Australia has now experienced "five years of stagnating incomes," reaching a record low of 1.9% in 2017 (Source 3). The macroeconomic impact of low wages growth have caused consumer spending to fall, with "soft household spending", and a reduced ~~profits~~ wages:profits share then causing economic growth to fall (Sources 5, 7). This is evident in the contraction in aggregate demand ^(AD) over the past five years, with falling consumption and low business investment outweighing increased government expenditure and our current account surplus (Sources 5, 6), shifting the AD curve to the left (see Figure 3). Because $AD = C + I + G + (X - M)$, economists predict that low consumption caused by declines in the WPI may send Australia into a recession (Source 6). This trend is corroborated by the fact that Australia has "entered recession on a per capita basis" and economic growth is barely increasing (Sources 5, 6, 9B).



Practices to strengthen

To further ensure accuracy and consistency of the application of the ISMG for this IA, it is recommended that:

- clear connections are made between the conclusion/decision and the economic analysis undertaken. Where responses demonstrate decisions or conclusions that have not emerged logically from the analysis, evidence will match in the 3–4 performance level rather than the higher 5–6 performance level for the Evaluating criterion

- analytical essay responses that match to the upper performance level descriptors in the Creating a response criterion demonstrate concise *expression* (to convey or communicate) and *logical development* of relevant ideas that enhance economic meaning. Development of ideas refers to the central idea and main points being identifiable and advanced throughout the response
- responses that have not drawn on the unseen sources are matched to 1 mark in the Selecting criterion
- the whole response is considered when looking for evidence of identification of the essential features of macroeconomic objectives because these may be demonstrated at any point throughout an analytical essay, i.e. not just in the opening section of the response
- responses at the upper performance level do not need to be flawless, e.g. a response might contain a minor error or flaw in the interpretation of a trend, without affecting the discerning nature of the analysis.



External assessment

External assessment (EA) is developed and marked by the QCAA. The external assessment for a subject is common to all schools and administered under the same conditions, at the same time, on the same day.

Examination — combination response (25%)

Assessment design

The assessment instrument was designed using the specifications, conditions and assessment objectives described in the summative external assessment section of the syllabus. The examination consisted of one paper:

- Paper 1, Section 1 consisted of 10 multiple choice questions (10 marks)
- Paper 1, Section 2 consisted of 2 short response questions (25 marks)
- Paper 1, Section 3 consisted of 1 extended response question (25 marks).

The examination assessed subject matter from Unit 4. Questions were derived from the context of Topic 2: Economic management.

The assessment required students to:

- respond to multiple choice questions based on economic concepts, principles and models
- provide short answers in paragraph form, responding to discrete stimulus. One question required a diagram to be drawn
- provide an extended response to stimulus, in a series of paragraphs.

The stimulus included a range of text and visual stimulus comprising graphs, diagrams and tables.

The AS assessment instrument was designed using the specifications, conditions and assessment objectives described in the summative external assessment section of the AS. The AS examination consisted of one paper:

- Paper 1, Section 1 consisted of 10 multiple choice questions (10 marks)
- Paper 1, Section 2 consisted of 3 short response questions (28 marks)
- Paper 1, Section 3 consisted of 1 extended response question (24 marks).

The AS examination assessed subject matter from AS unit 2. Questions were derived from the context of Topic 2: The global economy and Topic 3: Global impacts of resource misallocation.

The AS assessment required students to:

- respond to multiple choice questions based on economic concepts, principles and models
- provide short answers in paragraph form, responding to discrete stimulus. One question required a diagram to be drawn
- provide an extended response to stimulus, in a series of paragraphs.

The AS stimulus included a range of text and visual stimulus comprising graphs, diagrams and tables.

Assessment decisions

Assessment decisions are made by markers by matching student responses to the external assessment marking guide (EAMG). The external assessment papers and the EAMG are published in the year after they are administered.

General multiple choice item responses

There were 10 multiple choice items.

Percentage of student responses to each option

Note:

- The correct answer is **bold** and in a blue shaded table cell.
- Some students may not have responded to every question.

Question	A	B	C	D
1	7.06	76.68	5.62	10.18
2	38.61	9.84	6.55	44.49
3	12.29	10.56	54.75	21.84
4	52.01	29.07	5.24	13.18
5	5.53	64.47	22.98	6.42
6	18.38	13.39	15.04	52.34
7	4.86	50.44	9.51	34.26
8	49.94	20.83	23.83	4.56
9	15.55	24.17	41.11	18.5
10	15.63	14.49	27.38	41.74

AS multiple choice item responses

There were 10 multiple choice items.

Percentage of student responses to each option

Note:

- The correct answer is **bold** and in a blue shaded table cell.
- Some students may not have responded to every question.

Question	A	B	C	D
1	21.88	34.38	25	18.75
2	40.63	9.38	18.75	31.25
3	12.5	0	46.88	40.63
4	0	28.13	43.75	28.13

Question	A	B	C	D
5	37.5	37.5	15.63	9.38
6	43.75	37.5	12.5	6.25
7	18.75	34.38	15.63	28.13
8	21.88	43.75	18.75	15.63
9	6.25	37.5	28.13	28.13
10	37.5	28.13	21.88	12.5

Effective practices

Overall, students responded well to:

- comprehending and applying economic concepts, principles and models in both real and hypothetical situations
- analysing economic issues by interpreting patterns and trends in unseen stimulus, explaining economic relationships and using data and economic information to support the analysis. 'Interpreting' refers to drawing meaning from, e.g. the direction, nature and scale of the pattern or trend
- evaluating economic outcomes using findings from the analysis, with conclusions/decisions supported by economic criteria and reasoning.

The following excerpts have been selected to illustrate effective student responses in one or more of the syllabus assessment objectives. The characteristics identified may not be the only time the characteristics have occurred throughout a response.

Samples of effective practices

Short response

Criteria: Analysing and evaluating

Question 12

This question required students to analyse data and economic information regarding rising electricity bills across Australian states and evaluate the effectiveness of monetary policy to improve the economic prosperity of low-income households. The monetary policy was in a low cash rate setting of 1%.

Effective student responses:

- described the economic issue, identified a relevant reason for the economic issue being important, quantified the pattern/trend of increasing electricity prices, interpreted an identified pattern/trend and calculated a number to make meaning
- made a valid decision about the effectiveness of monetary policy based on the criterion of economic prosperity
- effectively used economic reasoning and synthesised an economic idea linked to the perspective of low-income households.

This student response excerpt has been included:

- to show evidence of deductive analysis of the graph, i.e. reading the title, axes and key, and understanding the scale. The response clearly identifies and quantifies the issue in terms of data that adds valuable information to the inferences and interpretations that can be drawn. Quantifying is an authentic economic approach whenever trends and/or patterns are interpreted.

Analysing	<p>Excerpt 1</p> <p>In a little more than a decade, average household electricity bills per annum have soared by 53%, presenting a serious economic problem (Source 5). This dramatic rise in prices is even more problematic for Australian low-income households, for whom the percentage of disposable household income needed to pay the average electricity bill can be as high as ~8.5% (Source 4).</p>
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This student response excerpt has been included:

- to illustrate a key link between the economic issue, the perspective and the economic criterion. The response effectively and efficiently anchors the impact of the economic issue on low-income households to economic prosperity in terms of their capacity to borrow and consume.

Evaluating	<p>households (difference of factor ~2.2) (Source 4). As a result, decreases to the cash decreases to the cash rate under expansionary monetary policy are less effective at increasing the ability of low-income households to borrow and consume (and therefore economic prosperity), as a higher percentage of their incomes are being diverted to electricity costs which have</p>
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This student response excerpt has been included:

- to demonstrate effective economic reasoning that discusses limitations in terms of low-income households using a comparison to fiscal policy to add validity to the final decision regarding monetary policy. A range of other connections were possible, e.g. comparisons may have referred to microeconomic policies. However, the main focus of the conclusion and reasoning needed to be about the effectiveness of monetary policy in order to successfully respond to the question asked.

Evaluating	<p>However the monetary policy would be limited as it would not directly affect low-income households compared to fiscal policy which can directly target certain sectors like low income households, which means economic prosperity may not be improved as much as it could be. Another limitation</p>
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Extended response

Criteria: Analysing and evaluating

Question 13

This question required students to use data and economic information to analyse the economic issue of ageing in Australia's population and evaluate two different policy responses: one that involved incentivising savings, and the other that focused on increasing the supply of labour.

Effective student responses:

- described the economic problem, identified a rationale for government intervention, provided a reason to support the rationale, and calculated a number to make meaning
- for the age-related data — quantified the projected increase in both trends and effectively provided a detailed interpretation of both trends
- for the consumption related data — quantified the pattern of income and consumption and effectively provided a detailed interpretation of the pattern
- explained the efficacy of targeting household savings and labour supply and effectively used economic reasoning and data to discuss the potential of each policy
- drew a valid conclusion about which policy should be used, based on a relevant economic criterion and effectively synthesised economic ideas and perspectives to support the conclusion.

This student response excerpt has been included:

- to demonstrate proficient use of statistics to establish the scale of the economic problem and the pressures faced by the government on its future expenditure decisions. The dates provide the time range of the issue, and the quantities represent a doubling of existing expenditure
- to show the use of the economic concepts of opportunity cost and scarcity when connecting the economic issue to the rationale for government intervention. The trade-off is explained by the choices of reducing spending on other income support, education and defence in order to support the elderly population in the future.

Analysing	<p>future the government will face increasing pressure to financially support the ageing population. Further, source 11 shows that between 2015 to 2055, the ^{Australian} percentage government is projected to increase expenditure on health from 4 to 7.1% of GDP, age-related pensions from 2.8 to 3.9% of GDP, and aged care from 0.9 to 1.9% of GDP. Although this ^{increase} may be financed by a decrease in the proportion of money need to be spent on other income support, education & defence, it reflects future pressure that the government will face to support the elderly. This suggests the Australian Government needs to implement ^{reduce the} reliance of the elderly</p>
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This student response excerpt has been included:

- to demonstrate the Analysing criterion through the effective use of data and information regarding income and consumption and different ages by comparing income peaks at age 45 to consumption lows at age 20. This specific use of data enhances the meaning of the economic relationship about to be introduced
- to illustrate the Evaluating criterion through effective economic reasoning and synthesising temporal economic relationships. This is evident by the recognition that the incentive to save now decreases economic growth in the short term (a limitation) but increases aggregate demand in the longer term (a strength). The reasoning identifies the implication that disposable income for those who save now would be higher than otherwise in their retirement. This reasoning is used to justify a valid conclusion regarding the use of a policy that targets the incentive to save. A valid conclusion is one that is well-founded in economic logic with an absence of major flaws.

Analysing and evaluating	<p>Source. Further, Source 9 details the income vs consumption compared to age. As evident in the graph, income peaks at approximately 45, which coincides with the lowest consumption rate since age 20. This suggests that incentivising saving for middle age workers would be beneficial. This option would somewhat reduce GDP, in the short term, a key economic criteria, in the short term, as an incentive to save would reduce overall consumption in the short term. However, in the long run, disposable income for older Australians would increase AD as their consumption increases. Therefore, there would</p>
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These student response excerpts have been included:

- to show the range of economic ideas that could be used to support the conclusion.
 - Excerpt 1 links information in the sources regarding the changing nature of work from a manual base to one that provides greater opportunities for older workers. This is effectively identified as structural change that may impact the participation rate used to discuss the potential of a labour supply policy
 - Excerpt 2 uses the provided sources to demonstrate the concept of spare labour capacity in Australia compared to Australia's trade partners. The statistics used support an understanding of the scale of the potential for higher labour utilisation in Australia and enhance the effectiveness of the synthesis of economic ideas within the response.

Evaluating	<p>Excerpt 1</p> <p>up opportunities for older workers. This structural change in Australia's economy from a goods-based economy to a service-based economy means it will become far easier for older people to participate in the labour force. If this policy was introduced If the</p> <p>Excerpt 2</p> <p>Labour supply policy would be reasonably effective in reducing aged care GE by 2055. The labour participation rate of 65+ year olds in Australia (14%) is relatively lower than trade partners Japan (24.7%) and Korea (32.2%), suggesting there may be spare labour capacity that can be utilised to increase wages and retirement income for 65+ year olds (source 12). Additionally, as work in Australia becomes less manually-</p>
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Practices to strengthen

It is recommended that when preparing students for external assessment, teachers consider:

- practising the notation of economic diagrams with a title, correct labels and the identification of curves and their movement or shift, e.g. an aggregate demand/aggregate supply diagram should not be confused with a demand and supply diagram (i.e. labels of price and quantity are not appropriate for the macroeconomic version of the model)
- providing examples of where economic understanding is enhanced by using data to quantify the scale of a pattern or trend. Students should develop the habit of including statistics when analysing data and information, e.g. in Question 11, when analysing graphs, it was not sufficient for students to identify the direction of the trend in energy prices. This needed to be quantified to communicate both the nature and scale of the economic issue
- creating activities where students use a technique or strategy (e.g. highlighting) to

- distinguish analysis from evaluation to develop an appreciation of the need for a balance of each, particularly in extended responses. Note that this does not mean the analysis needs to be separate from the evaluation, as often these are intertwined
- check the extent that strengths, limitations and/or implications are included in the economic reasoning and justification when an economic outcome is evaluated, e.g. in Question 13, effective economic reasoning within the evaluation was more effective when strengths or benefits and weaknesses or costs of a potential policy decision were discussed
- using multiple teaching and learning activities to increase student mastery of analysing and evaluating unfamiliar data and economic information. To gain maximum efficacy from this approach, meaningful feedback should be provided in a range of ways. Further, students should have time to implement the feedback so that they can reflect metacognitively on the development of their skills
- creating opportunities to distinguish the key economic problem involved in a set of stimulus material. This then becomes the focus of the analysis. An example is in Question 12, where students commenced their responses by establishing the central idea as one of cash rate movements over time. However, based on the question and the stimulus, the impact on the economic prosperity of low-income households resulting from rising electricity prices over time was the central idea that required economic management
- modelling how to use a calculation to add meaning. A calculation by itself does not add value to a response unless it is accurate and used in an explanation to enhance economic meaning. It is important that the calculation for change be used when discussing the extent of a change from one period in time to another, e.g. in Question 13 Source 10, the reduction of household savings from 8% to 2% is a fall of 75% in the average propensity to save
- checking understanding of key terminology, e.g. the difference between 'marginal' propensity to consume or save, and 'average' propensity to consume or save, as the former refers to the change in consumption when a change in income occurs. In mathematical terms, it is the difference between $\Delta C \div \Delta Y$ (marginal MPC) compared to $C \div Y$ (average MPC).