

INTERNATIONAL AS
ECONOMICS
EC02

Unit 2 The National Economy in a Global Environment

Mark scheme

January 2024

Version: 1.0 Final



Mark schemes are prepared by the Lead Assessment Writer and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation events which all associates participate in and is the scheme which was used by them in this examination. The standardisation process ensures that the mark scheme covers the students' responses to questions and that every associate understands and applies it in the same correct way. As preparation for standardisation each associate analyses a number of students' scripts. Alternative answers not already covered by the mark scheme are discussed and legislated for. If, after the standardisation process, associates encounter unusual answers which have not been raised they are required to refer these to the Lead Examiner.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of students' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

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International AS Economics mark scheme

How to mark

Aims

When you are marking your allocation of scripts your main aims should be to:

- recognise and identify the achievements of students
- place students in the appropriate mark band and in the appropriate part of that mark band (high, low, middle)
- record your judgements with brief notes, annotations and comments that are relevant to the mark scheme and make it clear to other examiners how you have arrived at the numerical mark awarded
- put into a rank order the achievements of students (not to grade them – that is done later using the rank order that your marking has produced)
- ensure comparability of assessment for all students, regardless of question or examiner.

Approach

It is important to be **open minded** and **positive** when marking scripts.

The specification recognises the variety of experiences and knowledge that students will have. It encourages them to study Economics in a way that is relevant to them. The questions have been designed to give them opportunities to discuss what they have found out about Economics. It is important to assess the quality of **what the student offers**.

Assessment objectives

This component requires students to:

AO1	Demonstrate knowledge of terms/concepts and theories/models to show an understanding of the behaviour of economic agents and how they are affected by and respond to economic issues.
AO2	Apply knowledge and understanding to various economic contexts to show how economic agents are affected by and respond to economic issues.
AO3	Analyse issues within economics, showing an understanding of their impact on economic agents.
AO4	Evaluate economic arguments and use qualitative and quantitative evidence to support informed judgements relating to economic issues.

The marking grids

The marking grids cover all the Assessment Objectives indicated as being assessed in each question, followed by indicative content for individual tasks. These have been designed to allow assessment of the range of knowledge, understanding and skills that the specification demands.

The indicative content gives examples of the kind of things students might cover in their responses. They are neither exhaustive nor required – they are simply indicative of what could appear. Other valid content presented in student responses should always be credited.

Using the grids

These levels of response mark schemes are broken down into levels, each of which has descriptors. The descriptors for the level show the performance characteristics of the level. There is the same number of marks in each level. The number of marks per level varies depending upon the total number of marks allocated to the question.

Having familiarised yourself with the descriptors and indicative content, read through the answer and annotate it to identify the qualities that are being looked for and that it shows. You can now check the levels and award a mark.

Step 1 Determine a level

Start at the lowest level of the mark scheme and use it as a ladder to see whether the answer meets the descriptors for that level. The descriptors for the level indicate the different qualities that might be seen in the student's answer for that level.

When assigning a level, you should look at the overall quality of the answer and not look to pick holes in small and specific parts of the answer where the student has not performed quite as well as the rest. If the answer covers different aspects of different levels of the mark scheme you should use a best-fit approach for defining the level and then use the variability of the response to help decide the mark within the level; ie if the response fulfils most but not all of level 3 with a small amount of level 4 material, it would be placed in level 3 but be awarded a mark near the top of the level because of the level 4 content.

Step 2 Determine a mark

Once you have assigned a level you need to decide on the mark.

It is often best to start in the middle of the level's mark range and then check and adjust.

The exemplar materials used during standardisation should be referred to. There will be an answer in the standardising materials that will correspond with each level of the mark scheme. This answer will have been awarded a mark by the Lead Examiner. You can compare the student's answer with the example to determine if it is of the same standard, better or worse. You can then use this to allocate a mark for the answer based on the Lead Examiner's mark on the example.

You may well need to read back through the answer as you apply the mark scheme to clarify points and assure yourself that the level and the mark are appropriate.

An answer that contains nothing of relevance to the question must be awarded no marks.

Examiners are required to assign each of the students' responses to the most appropriate level according to its overall quality, then allocate a single mark within the level. When deciding upon a mark in a level, examiners should bear in mind the relative weightings of the assessment objectives and be careful not to over/under credit a particular skill. For example, in question 21 more weight should be given to AO4 than to AO1, AO2 and AO3. This will be exemplified and reinforced as part of examiner training.

Annotating scripts

Annotating scripts will help you with making accurate judgements and it will help any subsequent markers to identify how you are thinking. Please do not write negative comments about students' work; this is unprofessional and it impedes a positive marking approach.

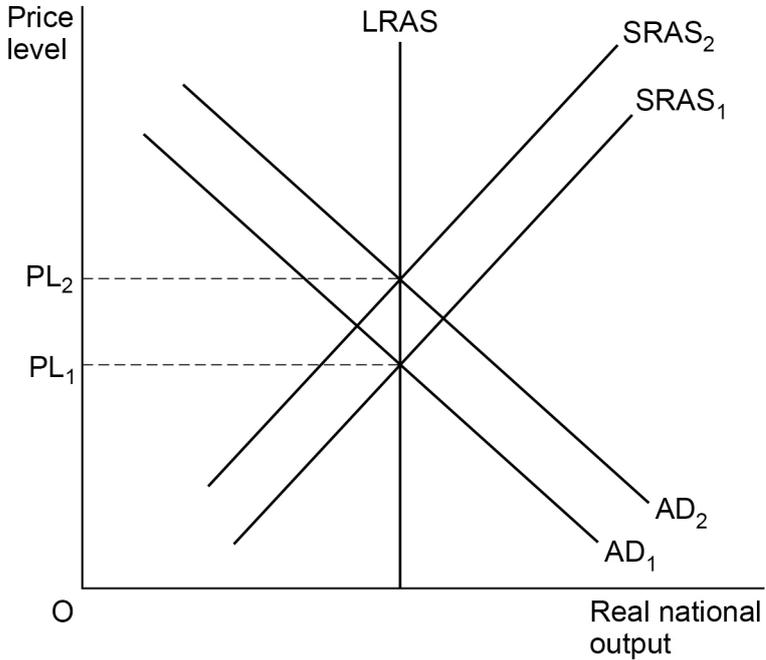
Section A

Total for this section: 15 marks

Question	Part	Marking guidance	Total marks
01		Which one of the following is most likely to be part of an expansionary monetary policy? Answer: A (Increasing quantitative easing)	1 AO1 = 1

Question	Part	Marking guidance	Total marks
02		A government reduces indirect taxes on a wide range of products. Which one of the following is the most likely effect of this? Answer: C (Short-run aggregate supply increases)	1 AO1 = 1

Question	Part	Marking guidance	Total marks												
03		<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th></th> <th>Real GDP (€ billion)</th> </tr> </thead> <tbody> <tr> <td>2019</td> <td>260.0</td> </tr> <tr> <td>2020</td> <td>254.8</td> </tr> <tr> <td>2021</td> <td>272.1</td> </tr> <tr> <td>2022</td> <td>286.2</td> </tr> <tr> <td>2023</td> <td>288.5</td> </tr> </tbody> </table> <p>At the end of 2018, the country was at its full employment level of national income. Between 2018 and 2019 the country grew at its trend rate of 3% growth per annum.</p> <p>During which period was the country most likely to experience a positive output gap?</p> <p>Answer: C (Between 2021 and 2022)</p>		Real GDP (€ billion)	2019	260.0	2020	254.8	2021	272.1	2022	286.2	2023	288.5	1 AO3 = 1
	Real GDP (€ billion)														
2019	260.0														
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2021	272.1														
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Question	Part	Marking guidance	Total marks
04		 <p>All other things being equal, which one of the following is most likely to cause the price level to rise from PL_1 to PL_2?</p> <p>Answer: A (Increased exports and higher prices for factors of production)</p>	<p>1</p> <p>AO3 = 1</p>

Question	Part	Marking guidance	Total marks
05		<p>Which one of the following best defines disinflation?</p> <p>Answer: C (The price level is rising but the rate of increase is falling.)</p>	<p>1</p> <p>AO1 = 1</p>

Question	Part	Marking guidance	Total marks
06		<p>All other things being equal, in 2023 the country must have seen</p> <p>Answer: A (a positive figure for short-run economic growth.)</p>	<p>1</p> <p>AO2 = 1</p>

Question	Part	Marking guidance	Total marks
07		<p>An index is set up to measure productivity growth in the economy.</p> <p>What will determine the weight given to each industry in the index?</p> <p>Answer: D (The relative importance of each industry to the economy)</p>	<p>1</p> <p>AO1 = 1</p>

Question	Part	Marking guidance	Total marks
08		<p>Which one of the following diagrams shows that a successful supply-side policy has reduced the price level?</p> <p>Answer: B</p> <p>Price level</p> <p>LRAS₁ LRAS₂</p> <p>SRAS₁</p> <p>SRAS₂</p> <p>AD₁</p> <p>O</p> <p>Real national output</p>	<p>1</p> <p>AO2 = 1</p>

Question	Part	Marking guidance	Total marks																				
09		<p>Which country has a proportional tax system?</p> <table border="1"> <thead> <tr> <th>Country</th> <th>Tax paid on income of \$15 000</th> <th>Tax paid on income of \$25 000</th> <th>Tax paid on income of \$35 000</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>150</td> <td>2500</td> <td>3500</td> </tr> <tr> <td>B</td> <td>1500</td> <td>2750</td> <td>4200</td> </tr> <tr> <td>C</td> <td>2100</td> <td>3500</td> <td>4900</td> </tr> <tr> <td>D</td> <td>2250</td> <td>3500</td> <td>4550</td> </tr> </tbody> </table> <p>Answer: C (Country C)</p>	Country	Tax paid on income of \$15 000	Tax paid on income of \$25 000	Tax paid on income of \$35 000	A	150	2500	3500	B	1500	2750	4200	C	2100	3500	4900	D	2250	3500	4550	<p>1</p> <p>AO2 = 1</p>
Country	Tax paid on income of \$15 000	Tax paid on income of \$25 000	Tax paid on income of \$35 000																				
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Question	Part	Marking guidance	Total marks																		
10		<table border="1"> <thead> <tr> <th></th> <th>2019</th> <th>2020</th> <th>2021</th> <th>2022</th> <th>2023</th> </tr> </thead> <tbody> <tr> <td>Balance of payments on current account</td> <td>135.6</td> <td>140.1</td> <td>62.6</td> <td>-146.3</td> <td>-135.2</td> </tr> <tr> <td>Nominal GDP</td> <td>3013.3</td> <td>3258.2</td> <td>3971.9</td> <td>4405.2</td> <td>4022.9</td> </tr> </tbody> </table> <p>It can be concluded from Table 3 that the balance of payments on current account as a percentage of nominal GDP</p> <p>Answer: A (deteriorated every year from 2020 to 2023.)</p>		2019	2020	2021	2022	2023	Balance of payments on current account	135.6	140.1	62.6	-146.3	-135.2	Nominal GDP	3013.3	3258.2	3971.9	4405.2	4022.9	<p>1</p> <p>AO3 = 1</p>
	2019	2020	2021	2022	2023																
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Nominal GDP	3013.3	3258.2	3971.9	4405.2	4022.9																

Question	Part	Marking guidance	Total marks																				
11		<p>Which one of the following combinations in Table 4 is most likely to show a government's macroeconomic objectives?</p> <table border="1" style="margin-left: 40px;"> <thead> <tr> <th></th> <th>Balance of payments on current account</th> <th>Inflation</th> <th>Unemployment</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Growing surplus</td> <td>Negative</td> <td>Low</td> </tr> <tr> <td>B</td> <td>Growing surplus</td> <td>Zero</td> <td>Zero</td> </tr> <tr> <td>C</td> <td>Stable</td> <td>Low and stable</td> <td>Low</td> </tr> <tr> <td>D</td> <td>Stable</td> <td>Zero</td> <td>Rising</td> </tr> </tbody> </table> <p>Answer: C (Stable, Low and stable, Low)</p>		Balance of payments on current account	Inflation	Unemployment	A	Growing surplus	Negative	Low	B	Growing surplus	Zero	Zero	C	Stable	Low and stable	Low	D	Stable	Zero	Rising	<p>1</p> <p>AO1 = 1</p>
	Balance of payments on current account	Inflation	Unemployment																				
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C	Stable	Low and stable	Low																				
D	Stable	Zero	Rising																				

Question	Part	Marking guidance	Total marks
12		<p>Which one of the following is a formula that can be used to calculate the multiplier?</p> <p>Answer: A $\frac{1}{(1 - \text{marginal propensity to consume})}$</p>	<p>1</p> <p>AO1 = 1</p>

Question	Part	Marking guidance	Total marks
13		<p>Which one of the following is most likely to cause cost-push inflation in an economy?</p> <p>Answer: D (The country's exchange rate depreciating)</p>	<p>1</p> <p>AO2 = 1</p>

Question	Part	Marking guidance	Total marks									
14		<table border="1"> <thead> <tr> <th>Year</th> <th>Government spending on health care (\$ millions)</th> <th>Price index</th> </tr> </thead> <tbody> <tr> <td>2022</td> <td>300</td> <td>110</td> </tr> <tr> <td>2023</td> <td>396</td> <td></td> </tr> </tbody> </table>	Year	Government spending on health care (\$ millions)	Price index	2022	300	110	2023	396		1 AO3 = 1
		Year	Government spending on health care (\$ millions)	Price index								
		2022	300	110								
		2023	396									
Government spending on health care was the same in real terms in both years.												
What was the value of the price index in 2023?												
Answer: C (145.2)												

Question	Part	Marking guidance	Total marks
15		A country with a high level of exports and imports has experienced a fall in its exchange rate.	1 AO2 = 1
		Which one of the following groups in the country is most likely to benefit from this?	
		Answer: B (Firms that compete with imported goods and services)	

Section B

Total for this section: 65 marks

Question	Part	Marking guidance	Total marks
16	1	<p>Define 'unemployment rate' (Extract B, line 11).</p> <p>A full and precise definition is given (3 marks)</p> <p>Examples:</p> <ul style="list-style-type: none"> • the percentage (proportion) of the labour force who are willing and able to work but who cannot find a job • the percentage (proportion) of the labour force who are out of work and (actively) looking for a job. <p>The substantive content of the definition is correct but there may be some imprecision or inaccuracy (2 marks)</p> <p>Examples:</p> <ul style="list-style-type: none"> • the number of people out of work and actively seeking work (no acknowledgement of unemployment rate) • the percentage (proportion) of people looking for work • unemployment as a proportion of the labour force • $\frac{\text{number of people unemployed}}{\text{labour force}} \times 100$ <p>Fragmented points only (1 mark)</p> <p>Examples:</p> <ul style="list-style-type: none"> • the number of people out of work • people who have lost their job. 	<p>3</p> <p>AO1 = 3</p>

Question	Part	Marking guidance	Total marks
16	2	<p>Define 'normal capacity level of output' (Extract C, line 7).</p> <p>A full and precise definition is given (3 marks)</p> <p>Examples:</p> <ul style="list-style-type: none"> • the maximum output that an economy can continue to produce in the long run • the maximum sustainable output given the quantity and quality of factors of production • long-run equilibrium level of real national output. <p>The substantive content of the definition is correct but there may be some imprecision or inaccuracy (2 marks)</p> <p>Examples:</p> <ul style="list-style-type: none"> • the output represented by the position of the long-run aggregate supply curve • the economy is at its productive potential. <p>Fragmented points only (1 mark)</p> <p>Examples:</p> <ul style="list-style-type: none"> • maximum aggregate supply • limit of output with current resources. 	<p>3</p> <p>AO1 = 3</p>

MAXIMUM FOR QUESTION 16: 6 MARKS

Question	Part	Marking guidance	Total marks								
17	1	<p>Extract A shows data on the annual percentage change in real GDP and the percentage of income received by the poorest 10% of households in Georgia and Thailand.</p> <p>Use Extract A (i) to calculate Georgia’s mean annual percentage change in real GDP for the five years shown.</p> <p>Give your answer to one decimal place.</p> <p>Calculation:</p> $\frac{(4.8 + 4.8 + 5.0 - 6.8 + 10.4)}{5} = 3.64\% = 3.6\% \text{ (1dp)}$ <table border="1" data-bbox="368 763 1283 1628"> <thead> <tr> <th data-bbox="368 763 1129 846">Response</th> <th data-bbox="1129 763 1283 846">Max 3 marks</th> </tr> </thead> <tbody> <tr> <td data-bbox="368 846 1129 965">For the correct answer: 3.6% (with or without working shown)</td> <td data-bbox="1129 846 1283 965">3 marks</td> </tr> <tr> <td data-bbox="368 965 1129 1294"> For the correct answer but not rounded to one decimal place: eg 3.64% OR For the correct answer but with missing/incorrect unit: eg 3.6 OR For the correct answer rounded the wrong way: 3.7% </td> <td data-bbox="1129 965 1283 1294">2 marks</td> </tr> <tr> <td data-bbox="368 1294 1129 1628"> For the correct method but the wrong final answer OR For the correct method but ignoring the negative in 2020: 6.4% OR For the correct answer but not rounded to 1dp and with missing/incorrect unit: eg 3.64 </td> <td data-bbox="1129 1294 1283 1628">1 mark</td> </tr> </tbody> </table>	Response	Max 3 marks	For the correct answer: 3.6% (with or without working shown)	3 marks	For the correct answer but not rounded to one decimal place: eg 3.64% OR For the correct answer but with missing/incorrect unit: eg 3.6 OR For the correct answer rounded the wrong way: 3.7%	2 marks	For the correct method but the wrong final answer OR For the correct method but ignoring the negative in 2020: 6.4% OR For the correct answer but not rounded to 1dp and with missing/incorrect unit: eg 3.64	1 mark	<p>3</p> <p>AO1 = 1 AO2 = 2</p>
Response	Max 3 marks										
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Question	Part	Marking guidance	Total marks								
17	2	<p>Use Extract A (ii) to calculate the difference between the median percentage of income received by the poorest 10% of households in Georgia and the median percentage of income received by the poorest 10% of households in Thailand, for the five years shown.</p> <p>Calculation:</p> <p>Median for Georgia = 2.6% Median for Thailand = 3.2% Difference = 0.6 percentage points (allow 0.6%)</p> <table border="1" data-bbox="368 672 1287 1523"> <thead> <tr> <th data-bbox="368 672 1129 748">Response</th> <th data-bbox="1129 672 1287 748">Max 3 marks</th> </tr> </thead> <tbody> <tr> <td data-bbox="368 748 1129 891">For the correct answer: 0.6 percentage points, 0.6%, –0.6 percentage points or –0.6% (with or without working shown)</td> <td data-bbox="1129 748 1287 891">3 marks</td> </tr> <tr> <td data-bbox="368 891 1129 1158"> For the correct answer with missing/incorrect units: eg 0.6 OR For correct calculation of the median percentage of income received in the two countries but without calculation of the difference: 2.6% and 3.2% </td> <td data-bbox="1129 891 1287 1158">2 marks</td> </tr> <tr> <td data-bbox="368 1158 1129 1523"> For the correct method but the wrong answer OR For correct calculation of one of the medians: 2.6% or 3.2% OR For correct calculation of both medians but without calculation of the difference and with missing/incorrect units: eg 2.6 and 3.2 </td> <td data-bbox="1129 1158 1287 1523">1 mark</td> </tr> </tbody> </table>	Response	Max 3 marks	For the correct answer: 0.6 percentage points, 0.6%, –0.6 percentage points or –0.6% (with or without working shown)	3 marks	For the correct answer with missing/incorrect units: eg 0.6 OR For correct calculation of the median percentage of income received in the two countries but without calculation of the difference: 2.6% and 3.2%	2 marks	For the correct method but the wrong answer OR For correct calculation of one of the medians: 2.6% or 3.2% OR For correct calculation of both medians but without calculation of the difference and with missing/incorrect units: eg 2.6 and 3.2	1 mark	<p>3</p> <p>AO1 = 1 AO2 = 2</p>
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MAXIMUM FOR QUESTION 17: 6 MARKS

Question	Part	Marking guidance	Total marks
18	1	<p>Extract B (line 16) states: ‘Economic growth can help to reduce income inequality.’</p> <p>Explain how economic growth can help to reduce income inequality.</p>	<p>6</p> <p>AO1 = 2 AO2 = 2 AO3 = 2</p>

Examiners are reminded that AO1, AO2 and AO3 are regarded as interdependent. When deciding on a mark all should be considered together using the best-fit approach. In doing so, examiners should bear in mind the relative weightings of the assessment objectives in this question.

Level	Marks	Descriptor
3	5–6	<ul style="list-style-type: none"> Shows sound knowledge and understanding of relevant economic terminology, concepts and principles. Includes good application of relevant economic principles to support the response. Includes well-focused analysis with a clear, logical chain of reasoning.
2	3–4	<ul style="list-style-type: none"> Shows reasonable knowledge and understanding of economic terminology, concepts and principles but some weaknesses may be present. Includes reasonable application of relevant economic principles to the question. Includes some reasonable analysis but it might not be adequately developed and may be confused in places.
1	1–2	<ul style="list-style-type: none"> Shows limited knowledge and understanding of relevant economic terminology, concepts and principles. Includes limited application of relevant economic principles to the question. May include some limited analysis but the analysis lacks focus and/or becomes confused.
	0	No creditworthy material

Indicative content:

- meanings of economic growth, income and income inequality
- explaining that economic growth can increase average income if it rises faster than population
- explaining how economic growth can provide job opportunities and improve infrastructure, reducing geographical immobility, helping to reduce unemployment and reducing income inequality
- explaining how economic growth can make it easier for the government to fund education and health care which can raise the living standards of poorer households reducing income inequality
- explaining how a better education and improved health for people on low incomes may allow them to earn a higher income
- explaining how economic growth can enable the government to increase welfare provision.

Note: Some students may support their answer with a diagram(s) but this is not needed for full marks.

Credit valid alternative content.

Question	Part	Marking guidance	Total marks
18	2	To what extent do the data suggest that economic growth reduces income inequality? Use the data in Extract A to help support your answer.	6 AO2 = 1 AO3 = 1 AO4 = 4

Examiners are reminded that AO2, AO3 and AO4 are regarded as interdependent. When deciding on a mark all should be considered together using the best-fit approach. In doing so, examiners should bear in mind the relative weightings of the assessment objectives in this question.

Level	Marks	Descriptor
3	5–6	<ul style="list-style-type: none"> Includes sound evidence that indicates the extent to which economic growth reduces income inequality. Includes a supported overall judgement concerning the extent to which economic growth reduces income inequality.
2	3–4	<ul style="list-style-type: none"> Includes limited evidence that indicates the extent to which economic growth reduces income inequality. Attempts a judgement concerning the extent to which economic growth reduces income inequality.
1	1–2	<ul style="list-style-type: none"> Includes evidence that does not clearly indicate the extent to which economic growth reduces income inequality. May include an unsupported judgement concerning the extent to which economic growth reduces income inequality.
	0	No creditworthy material

Indicative content:

- both Georgia and Thailand had real GDP growth in four of the five years shown and the share of income received by the poorest 10% of households rose by 0.4 percentage points (17.4%) in Georgia and 0.2 percentage points (6.7%) in Thailand
- Georgia had positive economic growth between 2017 and 2019 and over that period the share of income received by the poorest 10% of households rose from 2.3% to 2.6%
- Thailand had positive economic growth between 2017 and 2019 and over that period the share of income received by the poorest 10% of households rose from 3.0% to 3.3%
- Thailand's rate of economic growth dropped from 4.2% in 2018 to 2.2% in 2019 but the share of income received by the poorest 10% of households rose by 0.3 percentage points (10%) between 2018 and 2019
- in 2020, real GDP fell in both countries and the share of income received by the poorest 10% of households in Georgia rose by only 0.1 percentage point in 2020 and failed to rise in 2021, while in Thailand the figure dropped from 3.3% to 3.2%
- Georgia had its fastest growth rate in 2021 but the share of income received by the poorest 10% of households stayed at 2.7%
- both Thailand and Georgia saw their economies return to growth in 2021, but the share of income received by the poorest 10% of households was unchanged from 2020 for both countries
- Extract A only reports the income share of the poorest 10% of households and there are no data for other sections of the population or for other indicators of inequality
- the final two years of the dataset are likely to show the impact of the global pandemic and this makes it difficult to draw conclusions from the data
- Extract A shows some years in which economic growth and the share of income received by the poorest 10% of households appear to be positively correlated and others where they are not
- Extract A only shows data for five years and income inequality may be a long-term feature of an economy meaning any improvement related to economic growth may only come after a time lag

- it would be reasonable to conclude that economic growth plays a part in reducing income equality but cannot fully explain it, eg other factors such as government policies on taxation or welfare may influence income inequality.

Note: While good answers are likely to draw on the data for Georgia and Thailand, it is possible to achieve the highest level by considering data for only one of the two countries.

Credit valid alternative content.

MAXIMUM FOR QUESTION 18: 12 MARKS

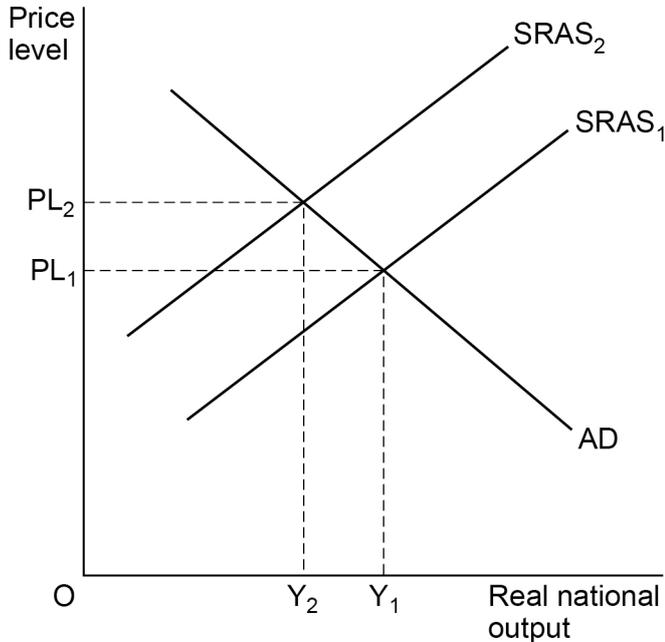
Question	Part	Marking guidance	Total marks
19		<p>Extract C (lines 13–14) states: ‘Thailand’s investment in education has improved firms’ productivity. This has helped to protect the country from the impact of global economic shocks’.</p> <p>With the help of a diagram, explain the impact of a negative supply-side shock on the macroeconomy.</p>	<p>9</p> <p>AO1 = 2 AO2 = 4 AO3 = 3</p>

Examiners are reminded that AO1, AO2 and AO3 are regarded as interdependent. When deciding on a mark all should be considered together using the best-fit approach. In doing so, examiners should bear in mind the relative weightings of the assessment objectives in this question.

Level	Marks	Descriptor
3	7–9	<ul style="list-style-type: none"> Is well organised and develops one or more of the key issues that are relevant to the question. Shows sound knowledge and understanding of relevant economic terminology, concepts and principles. Includes good application of relevant economic principles and/or good use of data to support the response. Includes well-focused analysis with a clear, logical chain of reasoning. Includes a relevant diagram, that will, at the top of this level, be accurate and used appropriately to support their explanation.
2	4–6	<ul style="list-style-type: none"> Includes one or more issues that are relevant to the question. Shows reasonable knowledge and understanding of economic terminology, concepts and principles but some weaknesses may be present. Includes reasonable application of relevant economic principles and/or data to the question. Includes some reasonable analysis but it might not be adequately developed and may be confused in places. May include a relevant diagram to support their explanation.
1	1–3	<ul style="list-style-type: none"> Is very brief and/or lacks coherence. Shows some limited knowledge and understanding of economic terminology, concepts and principles but some errors are likely. Demonstrates very limited ability to apply relevant economic principles and/or data to the question. May include some very limited analysis but the analysis lacks focus and/or becomes confused. May include a diagram but the diagram is likely to be inappropriate or inaccurate in some respects, or not used.
	0	No creditworthy material

Indicative content:

The expected diagram is an AD/SRAS diagram (below), showing a leftwards shift (decrease) in short-run aggregate supply (SRAS) and a fall in the level of real national output. A negative supply-side shock, such as a sudden rise in world energy prices, would cause a fall in the SRAS and a rise in the price level, leading to a contraction in aggregate demand and a fall in real national output.



Also allow a production possibility diagram with acceptable macroeconomic labels, such as 'Capital goods' and 'Consumer goods'. This would be expected to show a short-run contraction of economic activity within an existing production possibility boundary **not** a leftward shift in the production possibility boundary itself.

A student could make a valid case for a natural disaster being an example of a supply-side shock that could destroy some productive capacity and shift LRAS to the left (or the production possibility boundary inwards), but they would have to justify that clearly.

Relevant issues include:

- the meaning of a negative supply-side shock and/or an example that shows understanding
- the meanings of short-run economic growth and macroeconomy
- how supply-side shocks affect the SRAS curve
- how this may result from a rise in costs of production or supply chain shortages
- why, as SRAS shifts to the left, the price level rises
- how this causes a contraction in aggregate demand and a fall in the equilibrium level of real national output
- economic activity has fallen and the economy may now be below or further below its normal capacity level of output
- why this is likely to lead to unemployment and/or underemployment of the economy's factors of production
- how the impact of the shock may be increased by the multiplier effect
- there may be wider economic consequences such as a rise in cost-push inflation and a loss of international competitiveness.

Credit valid alternative content.

Question	Part	Marking guidance	Total marks
20		<p>Extract B (lines 5–6) states: ‘Georgia has clear rules to limit government spending and control the national debt.’</p> <p>Analyse the relationship between government spending and the national debt.</p>	<p>12</p> <p>AO1 = 3 AO2 = 4 AO3 = 5</p>

Examiners are reminded that AO1, AO2 and AO3 are regarded as interdependent. When deciding on a mark all should be considered together using the best-fit approach. In doing so, examiners should bear in mind the relative weightings of the assessment objectives.

Level	Marks	Descriptor
3	9–12	<ul style="list-style-type: none"> • Is well organised and develops one or more of the key issues that are relevant to the question. • Shows sound knowledge and understanding of relevant economic terminology, concepts and principles. • Includes good application of relevant economic principles and/or good use of data to support the response. • Includes well-focused analysis with a clear, logical chain of reasoning. • May include a relevant diagram that is accurate and used appropriately to support their explanation.
2	5–8	<ul style="list-style-type: none"> • Includes one or more issues that are relevant to the question. • Shows reasonable knowledge and understanding of economic terminology, concepts and principles but some weaknesses may be present. • Includes reasonable application of relevant economic principles and/or data to the question. • Includes some reasonable analysis but it might not be adequately developed and may be confused in places. • May include a relevant diagram to support their explanation.
1	1–4	<ul style="list-style-type: none"> • Is very brief and/or lacks coherence. • Shows some limited knowledge and understanding of economic terminology, concepts and principles but some errors are likely. • Demonstrates very limited ability to apply relevant economic principles and/or data to the question. • May include some very limited analysis but the analysis lacks focus and/or becomes confused. • May include a diagram but the diagram is likely to be inaccurate in some respects or is inappropriate.
	0	No creditworthy material

Indicative content:

- the meaning of government spending and national debt
- understanding of how government spending links to a budget deficit and therefore to the national debt
- illustration of the need for government spending, for example with reference to cyclical and structural influences
- analysis of **Extract B**'s statement that Georgia has rules to limit government spending in order to control the national debt
- understanding of fiscal policy, for example expansionary fiscal policy is associated with a falling budget surplus or a rising budget deficit
- governments need to borrow in order to finance a budget deficit, creating government debt
- a high national debt can increase pressure on government spending if repayment costs are high
- governments typically borrow by issuing bonds that require repayment with interest and so an increase in the national debt will increase future government spending on interest repayments
- analysis of **Extract B** and **Extract C**'s indications that a lack of investment in education and health can lead to low-skilled jobs and higher unemployment, increasing government welfare expenditure which can add to the national debt
- analysis of **Extract B**'s indication that government spending on public services and infrastructure may increase the economy's normal capacity level of output, generating economic growth and increasing government revenue so that, in the long run, it is uncertain how the increase in government spending will affect the budget deficit and national debt.

Note: Students should be rewarded for analysing how the national debt can affect government spending **and/or** how government spending can affect the national debt.

Credit valid alternative content.

Question	Part	Marking guidance	Total marks
21		<p>Extract C (line 18) states that investment in education and training ‘improves incomes, health, productivity and economic growth.’</p> <p>Use the extracts and your knowledge of economics to assess the impact of investment in education and training on economic growth.</p>	<p>20</p> <p>AO1 = 3 AO2 = 4 AO3 = 5 AO4 = 8</p>

Examiners are reminded that AO1, AO2, AO3 and AO4 are regarded as interdependent. When deciding on a mark all should be considered together using the best-fit approach. In doing so, examiners should bear in mind the relative weightings of the assessment objectives in this question. More weight should therefore be given to AO4 than AO1, AO2 and AO3.

Level	Marks	Descriptor
5	17–20	<p>Sound, focused analysis and well-supported evaluation that:</p> <ul style="list-style-type: none"> is well organised, showing sound knowledge and understanding of economic terminology, concepts and principles with few, if any, errors includes good application of relevant economic principles to the given context and, where appropriate, good use of data to support the response includes well-focused analysis with clear, logical chains of reasoning includes supported evaluation throughout the response and in a final conclusion.
4	13–16	<p>Sound, focused analysis and some supported evaluation that:</p> <ul style="list-style-type: none"> is organised, showing sound knowledge and understanding of economic terminology, concepts and principles but some minor errors may be present includes some good application of relevant economic principles to the given context and, where appropriate, some good use of data to support the response includes some well-focused analysis with clear, logical chains of reasoning includes some reasonable, supported evaluation.
3	9–12	<p>Some reasonable analysis but generally unsupported evaluation that:</p> <ul style="list-style-type: none"> focuses on issues that are relevant to the question, showing satisfactory knowledge and understanding of economic terminology, concepts and principles but some weaknesses may be present includes reasonable application of relevant economic principles to the given context and, where appropriate, some use of data to support the response includes some reasonable analysis but which might not be adequately developed or becomes confused in places includes fairly superficial evaluation; there is likely to be some attempt to make relevant judgements but these aren’t well-supported by arguments and/or data.
2	5–8	<p>A fairly weak response with some understanding that:</p> <ul style="list-style-type: none"> includes some limited knowledge and understanding of economic terminology, concepts and principles is shown but some errors are likely includes some limited application of relevant economic principles to the given context and/or data to the question includes some limited analysis but it may lack focus and/or become confused includes some evaluation which is weak and unsupported.
1	1–4	<p>A very weak response that:</p> <ul style="list-style-type: none"> includes little relevant knowledge and understanding of economic terminology, concepts and principles includes application to the given context which is, at best, very weak includes attempted analysis which is weak and unsupported.
	0	No creditworthy material

Indicative content:

- explanation of investment and economic growth in the short run and long run
- explanation of the impact of investment on aggregate demand and short-run growth
- how investment in education and training can lead to supply-side improvements
- how government investment in education and training, as an example of a supply-side policy, may correct underprovision of education and training by markets
- **Extract C** indicates that investment in education and training increases the population's knowledge, skills, abilities and experience ('human capital') increasing the economy's maximum capacity
- how improved education and training can impact positively on economic growth, for example:
 - increasing productivity and international competitiveness, improving exports
 - reducing the training costs of firms when they recruit staff, allowing them to expand output
 - improving competitiveness as higher-skilled workers allow firms to produce higher-value products
 - helping reduce inflation and increase real economic growth, for example references in **Extract B** and **Extract C** to the impact on growth
 - improving wages and reducing poverty may lead to higher consumption, for example references in **Extract B** and **Extract C** to unequal access to education and employment
 - **Extract B**'s indication that improved education and training makes it easier for the country's workers to adapt to new technology and the skills required in a modern economy
 - analysis of positive impacts on specific groups mentioned in **Extract B** and **Extract C**
- evaluation of the effectiveness of increased investment in education and training, for example:
 - possibility of government failure, perhaps due to information failure
 - lack of education and training of teachers or unequal access to provision (**Extract B**)
 - time lags before the benefits of the investment take effect, especially if the investment is in school-age children
 - opportunity cost of government spending on education and training, which could be at the expense of health or infrastructure needs
 - risk of a budget deficit that may lead to higher interest rates and/or future taxes, resulting in a fall in economic growth
 - lack of expected impact on productivity, for example if the country has poor quality capital stock or a lack of infrastructure
 - risk discussed in **Extract C** of workers with a high level of education and training leaving the country, especially if wages are low by international standards
- economic growth will depend on other factors such as world economic conditions, population trends and the extent to which the country is endowed with good natural resources
- an overall assessment of the extent to which investment in education and training is likely to improve economic growth.

The use of relevant diagrams to support the analysis should be taken into account when assessing the quality of the student's response to the question.

Credit valid alternative content.

Assessment Objectives Grid

	AO1	AO2	AO3	AO4	Total
Section A					
01	1				1
02	1				1
03			1		1
04			1		1
05	1				1
06		1			1
07	1				1
08		1			1
09		1			1
10			1		1
11	1				1
12	1				1
13		1			1
14			1		1
15		1			1
Section B					
16.1	3				3
16.2	3				3
17.1	1	2			3
17.2	1	2			3
18.1	2	2	2		6
18.2		1	1	4	6
19	2	4	3		9
20	3	4	5		12
21	3	4	5	8	20
Unit total	24	24	20	12	80