



ECO.MAC1 Economic Growth: Causes, Types and the Economic Cycle

AQA 7136 · Calculators not allowed · about 90 minutes

Total Marks

--

Name: _____ Date: ____ / ____ / ____

Answer all questions. Full sentences are required for extended responses and for any explanation-style questions. Do not use a calculator unless specified.

- 1** Define the term 'actual economic growth' as used for a national economy such as the UK, stating how it is measured and what it indicates about output.

(Total for Question 1 is 2 marks)

- 2** Define the term 'potential (trend) economic growth' for a country such as the UK, explain what determines it, and name one diagrammatic way economists represent potential growth.

(Total for Question 2 is 3 marks)

- 3** Explain the difference between a positive output gap and a negative output gap in terms of actual and potential GDP for a UK-style economy, and give one likely macroeconomic consequence of each.

(Total for Question 3 is 4 marks)

- 4** State two supply-side factors that can cause long-run potential growth in an economy such as the UK, and briefly explain how each increases productive capacity, using UK-style examples.

(Total for Question 4 is 4 marks)

- 5** Explain how technological progress can shift long-run aggregate supply (LRAS) to the right for an economy such as the UK, and state one reason why the effect may take time to appear in measured output.

(Total for Question 5 is 3 marks)

- 6** Define the 'output gap' in the context of the economic cycle for an economy like the UK and state briefly how policymakers might respond to a large negative output gap.

(Total for Question 6 is 2 marks)

- 7** Explain the distinction between short-run economic growth and long-run (trend) economic growth for a UK-style economy, giving one cause specific to short-run growth and one cause specific to long-run growth.

(Total for Question 7 is 4 marks)

- 8** Diagram task, AD/AS output gap. Draw a standard AD/AS diagram (price level vertical axis, real GDP horizontal axis). On the diagram show an economy with a negative output gap: draw and label the LRAS, SRAS and AD curves, mark the potential output and actual output, and indicate the negative output gap. In words, explain two policy options to reduce the negative output gap and how each works.

Figure (to be drawn): Student to draw vertical LRAS at potential output, upward sloping SRAS, AD curve to the left of LRAS showing actual output below potential. Label axes Price level and Real GDP; label potential output Y_p and actual output Y_a ; shade or mark the horizontal distance as the negative output gap.

(Total for Question 8 is 6 marks)

- 9** State and briefly explain the four main phases of the economic (trade) cycle: boom, downturn, recession and recovery, giving one characteristic for each phase in a UK-style economy.

(Total for Question 9 is 4 marks)

- 10** Explain two supply-side causes that could help move an economy from a period of slow growth into a sustained period of trend growth, with brief UK-style examples for each cause.

(Total for Question 10 is 4 marks)

- 11** Analyse briefly why a recession phase in the UK economy might be caused primarily by a fall in aggregate demand, rather than by shortfalls in productive capacity. Give two pieces of evidence or indicators that would support a demand-led explanation in practice.

(Total for Question 11 is 4 marks)

- 12** Evaluate the view that supply-side policies (improving education, investment in infrastructure and incentives for private R&D) are the most effective way to return the UK economy to sustainable long-run growth after a recession. Refer to advantages, limitations and consider alternative policies before reaching a supported judgement.

Evaluate the view that supply-side policies (education, infrastructure investment, R&D incentives) are the most effective way to return the UK economy to sustainable long-run growth after a recession.

(Total for Question 12 is 25 marks)

Mark scheme · ECO.MAC1 Economic Growth: Causes, Types and the Economic Cycle

Question 1

- **B1** an increase in real GDP or real national income over a period
- **B1** it measures a rise in the volume of goods and services produced, not just nominal values
- **Answer: An increase in real GDP or real national income over time, showing the economy is producing more goods and services.**

Question 2

- **B1** the long-run rate at which an economy can grow without generating rising inflationary pressure, based on growth in productive capacity
- **B1** determined by changes in factors of production and productivity such as labour, capital and technology
- **B1** often represented by a vertical LRAS or a trend line of actual output over time
- **Answer: The long-run rate of growth in an economy's productive capacity, determined by changes in factors of production and productivity, usually shown by a vertical LRAS or a trend line of output.**

Question 3

- **M1** positive output gap occurs when actual GDP exceeds potential GDP
- **A1** implication: the economy is overheating, causing upward pressure on prices and possible inflation
- **M1** negative output gap occurs when actual GDP is below potential GDP
- **A1** implication: spare capacity exists, with higher unemployment and downward pressure on inflation
- **Answer: A positive output gap is when actual GDP exceeds potential GDP and implies overheating and upward pressure on prices. A negative output gap is when actual GDP is below potential GDP and implies spare capacity, higher unemployment and downward pressure on inflation.**

Question 4

- **B1** identifies one supply-side factor, e.g. increased investment in physical capital such as machinery and infrastructure
- **A1** explains that more or better capital raises labour productivity and allows greater output for given inputs
- **B1** identifies a second factor, e.g. improvements in human capital through education and training
- **A1** explains that better skills increase labour productivity and the effective supply of skilled labour, increasing potential output
- **Answer: Examples: more investment in physical capital (e.g. new factory equipment, better transport infrastructure) raises productivity and output capacity; improved human capital from education and training raises labour productivity and potential output.**

Question 5

- **M1** technological progress raises productivity of labour and capital, allowing more output from the same inputs
- **A1** this increases the economy's productive capacity, shifting LRAS to the right
- **A1** the effect may take time because adoption requires investment, training and replacement of capital goods, causing long time lags before measured output rises
- **Answer: Technological progress makes labour and capital more productive, increasing productive capacity and shifting LRAS right. The effect may be delayed because firms need time to invest, adopt new technology and train workers, so measured output rises only after these lags.**

Question 6

- **B1** output gap = the difference between actual output (real GDP) and potential output (potential GDP), positive if actual > potential and negative if actual < potential
- **B1** policymakers might respond to a large negative gap with expansionary fiscal or monetary policy to stimulate AD and reduce unemployment
- **Answer: The output gap is the difference between actual and potential GDP; if actual is below potential it is negative. Policymakers may use expansionary fiscal or monetary policy to boost demand and reduce unemployment.**

Question 7

- **M1** short-run growth is changes in real GDP due to variations in aggregate demand or utilisation of existing capacity, often temporary
- **A1** example cause: a rise in AD from lower interest rates or fiscal stimulus can raise real GDP in the short run
- **M1** long-run/trend growth is a sustained increase in productive capacity, shown as an outward shift in LRAS or trend output
- **A1** example cause: increases in the quantity or quality of factors of production, such as investment in capital and improvements in education
- **Answer: Short-run growth is temporary changes in actual GDP from demand or capacity utilisation, e.g. a fiscal stimulus raising AD. Long-run growth is a sustained rise in productive capacity from supply-side improvements, e.g. increased investment and better human capital shifting LRAS right.**

Question 8

- **B1** correctly labelled axes (Price level vertical, Real GDP horizontal)
- **B1** LRAS shown vertical at potential output and labelled
- **B1** SRAS upward sloping and AD located to the left of LRAS so actual output is below potential, with both points labelled (Y_a and Y_p)
- **B1** negative output gap indicated or shaded as the horizontal difference between Y_p and Y_a
- **M1** policy option 1: expansionary monetary policy described, e.g. lower interest rates increase C and I, shifting AD right
- **M1** policy option 2: expansionary fiscal policy or supply-side policy described, e.g. higher government spending or tax cuts raise AD, or temporary investment in infrastructure raises potential output; explains how it reduces the gap
- **Answer: Diagram should show AD left of LRAS with $Y_a < Y_p$ and the horizontal gap marked. Policies: lower interest rates to boost C and I and shift AD right; or fiscal expansion/infrastructure investment to raise AD or raise potential output.**

Question 9

- **B1** boom: high output above trend, low unemployment and rising inflationary pressure
- **B1** downturn: growth slows, investment and confidence fall, employment growth weakens
- **B1** recession: significant fall in real GDP, rising unemployment and negative growth for at least two quarters
- **B1** recovery: GDP growth returns, employment rises and confidence begins to improve
- **Answer: Boom: output above trend with low unemployment and inflationary pressure. Downturn: slowing growth, falling investment and weakening jobs growth. Recession: falling real GDP and rising unemployment (often two quarters of negative growth). Recovery: GDP growth resumes, employment and confidence start to rise.**

Question 10

- **M1** identifies supply-side cause 1, e.g. increased investment in R&D and capital equipment
- **A1** explains that this raises productivity and potential output, example: firms adopting automation and new machinery in manufacturing
- **M1** identifies supply-side cause 2, e.g. improvements in education and training to raise human capital
- **A1** explains that a more skilled workforce increases labour productivity, example: vocational training programmes raising productivity in services
- **Answer: Investment in R&D and capital raises productivity and potential output (e.g. automation in factories). Better education and training increase human capital and labour productivity (e.g. vocational training improving service sector efficiency).**

Question 11

- **M1** states mechanism: a fall in AD (C, I, G or net exports) reduces planned spending, causing firms to cut output and employment
- **A1** explains why this is distinct from supply-side shortfalls: capacity exists but is unused, so output falls without damage to LRAS
- **M1** gives evidence indicator 1: a rising unemployment rate and falling capacity utilisation indicating spare capacity
- **A1** gives evidence indicator 2: weak consumer confidence/retail spending and falling business investment pointing to lower AD
- **Answer: A demand-led recession occurs when AD falls so firms cut output and jobs despite spare capacity. Evidence would include rising unemployment and falling capacity utilisation, plus weak retail spending and falling investment**

Question 12

- **Level 1** (1-5): Basic statements about supply-side policies with little development, or an answer that lists policies without evaluating their effectiveness. Limited or no attempt to consider alternatives or provide a reasoned conclusion.
- **Level 2** (6-10): Some analysis of how supply-side policies raise potential output, with developed advantages such as higher productivity and competitiveness. Some consideration of limitations, such as time lags, funding constraints and possible crowding out; limited evaluation of alternatives.
- **Level 3** (11-15): Clear, sustained analysis and evaluation. Explains mechanisms by which supply-side policies raise LRAS and sustainable growth, weighs strengths (durability, addressing structural barriers) against weaknesses (long time lags, funding costs, distributional impacts), and compares to demand management or mixed approaches. Reaches a balanced, supported judgement that recognises context and trade-offs.
- **Level 4** (16-20): Comprehensive analysis with well-developed evaluation. Integrates real-world considerations such as the state of spare capacity, the fiscal position, institutional constraints, and political feasibility. Assesses when supply-side policies dominate, when demand-side stimulus is preferable, and the roles of complementary policies. Offers a qualified judgement grounded in analysis.
- **Level 5** (21-25): Excellent, insightful evaluation. Provides detailed, balanced arguments on both sides, considers magnitude and timing of effects, distributional consequences and measurement challenges, and uses clear reasoning to justify a nuanced conclusion about the relative effectiveness of supply-side policies in restoring sustainable long-run growth after a recession.
- **Indicative content:**
 - How supply-side policies increase LRAS: improving human capital (education, training), raising capital stock (infrastructure investment), stimulating innovation (R&D incentives), deregulation improving productivity
 - Advantages: raise productive capacity, durable effects on trend growth, improve competitiveness and potential exports, can reduce structural unemployment
 - Limitations: long implementation and impact lags, high fiscal cost and opportunity cost, political and practical constraints, possible short-run ineffectiveness if economy lacks demand
 - Distributional effects: benefits may be concentrated among skilled workers or capital owners unless policies are targeted, transitional unemployment during reallocation
 - Alternatives: demand-side policies such as monetary stimulus or fiscal stimulus can boost short-run recovery when spare capacity exists, but risk inflation if near potential output
 - Complementarity: sequencing matters, for example combine short-run demand stimulus with long-term supply reforms to avoid persistent underemployment while raising potential output
 - Contextual factors: state of public finances, inflation expectations, global economic conditions, and speed needed for recovery
 - Judgement: a supported view that supply-side policies are essential for sustainable long-run growth, but in many recession contexts they should be complemented by temporary demand management, and the case depends on timing, fiscal capacity and the nature of the recession