



ECO.MAC18 The Costs and Benefits of Economic Growth

AQA 7136 · Calculators not allowed · about 90 minutes

Total Marks

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Name: _____ Date: ____ / ____ / ____

Answer all questions. Write full sentences for the levels-marked essay question only. Time guidance: 90 minutes in total.

- 1** Define the term 'economic growth' as used when measuring an economy's performance over time, naming the usual statistical measure.

Define the term 'economic growth' as used when measuring an economy's performance over time.

(Total for Question 1 is 2 marks)

- 2** Explain one benefit of economic growth for government finances in a UK-style context, naming specific taxes that might rise and how the government could use the extra revenue.

Explain one benefit of economic growth for government finances in a UK-style context.

(Total for Question 2 is 2 marks)

- 3** Define the Human Development Index (HDI) for a country and explain briefly how it differs from GDP per capita as a measure of wellbeing.

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(Total for Question 3 is 3 marks)

- 4** Explain one environmental cost of rapid economic growth, using a UK-style example such as increased CO₂ emissions from manufacturing expansion, and state one direct consequence for people or ecosystems.

Explain one environmental cost of rapid economic growth, using a UK-style example such as increased CO₂ emissions from manufacturing expansion.

(Total for Question 4 is 3 marks)

- 5** Define 'structural unemployment' in the context of sectoral change, and state why rapid growth concentrated in one sector may raise structural unemployment elsewhere in a country.

Define 'structural unemployment' and state why rapid growth in one sector may raise structural unemployment elsewhere.

(Total for Question 5 is 2 marks)

- 6** Explain one way in which economic growth can improve average living standards, using GDP per capita and a concrete channel such as higher real wages or better public services.

Explain one way in which economic growth can improve average living standards.

(Total for Question 6 is 3 marks)

- 7** State two reasons why rapid economic growth might increase income and wealth inequality in a country, giving a brief development for each reason.

State two reasons why rapid economic growth might increase income and wealth inequality in a country.

(Total for Question 7 is 3 marks)

- 8** Define 'economic development' as distinct from economic growth and give one non-GDP measure besides HDI that governments use to assess development, explaining briefly what it measures.

Define 'economic development' and give one non-GDP measure besides HDI that assesses development.

(Total for Question 8 is 3 marks)

- 9** Data for the fictional country Northmarch, 2015 to 2019: Table shows annual GDP growth rate (%) and the Gini coefficient (income inequality index, 0 to 1). Year: 2015 GDP growth 1.2 Gini 0.32; 2016 GDP growth 2.8 Gini 0.34; 2017 GDP growth 4.1 Gini 0.37; 2018 GDP growth 3.5 Gini 0.38; 2019 GDP growth 2.0 Gini 0.36. Using this table for Northmarch, explain how the data show a possible trade off between higher growth and rising inequality over this period.

(Total for Question 9 is 9 marks)

- 10** Explain briefly how demand-pull inflation can arise when economic growth is very rapid and the economy is near full capacity, naming the mechanism linking growth to rising prices.

Explain how demand-pull inflation can arise when growth is very rapid and the economy is near full capacity.

(Total for Question 10 is 3 marks)

- 11** State two policy responses a government could use to try to make economic growth more inclusive and reduce unequal outcomes as growth occurs, and give a brief explanation of how each reduces inequality.

State two policy responses to make growth more inclusive and reduce inequality.

(Total for Question 11 is 3 marks)

- 12** State and briefly explain one environmental policy a government could adopt to reduce the environmental costs of growth, such as CO₂ emissions, naming the policy instrument and how it changes incentives.

State and briefly explain one environmental policy to reduce environmental costs of growth.

(Total for Question 12 is 2 marks)

- 13** Evaluate the view that the benefits of economic growth always outweigh its costs for a modern economy such as the UK. In your answer, consider effects on living standards, employment, public finances and the environment, show understanding of the distinction between growth and development, use relevant diagrams where appropriate and reach a supported judgement. Evaluate the view that the benefits of economic growth always outweigh its costs for a modern economy such as the UK.

(Total for Question 13 is 25 marks)

Mark scheme · ECO.MAC18 The Costs and Benefits of Economic Growth

Question 1

- **B1** a real increase in the value of goods and services produced by an economy over a period
- **B1** usually measured by real GDP or real GDP per capita, removing the effect of price changes
- **Answer: A real increase in the value of goods and services produced, usually measured by real GDP or real GDP per capita over time.**

Question 2

- **M1** growth raises incomes and profits, increasing tax revenues such as income tax, corporation tax and VAT
- **A1** this gives the government more revenue to spend on public services or to reduce borrowing, improving fiscal space
- **Answer: Higher growth raises incomes and profits, so tax receipts increase (income tax, corporation tax, VAT) and the government gains more revenue to fund public services or reduce borrowing.**

Question 3

- **B1** HDI is a composite index combining life expectancy, education (mean and expected years of schooling) and national income per person
- **M1** it differs from GDP per capita because it includes health and education outcomes as well as income
- **A1** therefore HDI captures broader aspects of wellbeing and human development, not just average income
- **Answer: HDI is a composite index of life expectancy, education and income per person. Unlike GDP per capita, HDI includes health and education outcomes and so measures broader wellbeing, not just average income.**

Question 4

- **M1** rapid growth can increase production and energy use causing higher CO₂ and other pollutant emissions
- **A1** this can lead to local air pollution and contribute to global climate change, imposing costs on health and the environment
- **A1** example reference: expansion of heavy manufacturing in a region raises emissions and cleanup or health costs for local communities
- **Answer: Rapid growth can raise production and energy use, increasing CO₂ and other pollutant emissions. This causes local air pollution and contributes to climate change, imposing health and environmental costs; for example, expansion of heavy manufacturing raises emissions and cleanup costs.**

Question 5

- **B1** structural unemployment arises when there is a mismatch between workers skills or locations and the jobs available
- **B1** rapid growth concentrated in one sector can change demand for skills and locations, leaving workers in declining sectors unemployed because they lack the required skills or cannot move
- **Answer: Structural unemployment is unemployment caused by a mismatch between workers skills or locations and the jobs available. Rapid growth concentrated in one sector can change the pattern of demand for labour so workers in other sectors lose jobs but lack the skills or mobility to move into the growing sector, raising structural unemployment.**

Question 6

- **M1** growth raises national income and, if shared, raises GDP per capita and average incomes
- **A1** higher incomes can increase real wages and household consumption, improving material living standards
- **A1** governments may also have more tax revenue to spend on health, education and infrastructure, further improving wellbeing
- **Answer: Growth raises national income and, if shared, GDP per capita and average incomes. Higher incomes can increase real wages and household consumption, and governments can fund better health, education and infrastructure, improving living standards.**

Question 7

- **B1** growth concentrated in skill-intensive sectors benefits higher skilled workers more, increasing wage inequality
- **B1** asset price rises during growth (property, shares) increase wealth for those who own assets, widening wealth inequality
- **B1** returns to capital can rise faster than wages, so owners of capital gain disproportionately
- **Answer: E.g. if growth is concentrated in skill-intensive sectors, higher skilled workers gain higher wages, increasing wage inequality. Also, asset price rises during growth benefit those who own property and shares, widening wealth inequality. Returns to capital can grow faster than wages, so capital owners gain disproportionately.**

Question 8

- **B1** economic development refers to improvements in standards of living, health, education and economic welfare, not just increases in output
- **M1** one non-GDP measure e.g. Gini coefficient, poverty headcount ratio, life expectancy or access to clean water
- **A1** brief explanation of the chosen measure, e.g. Gini measures income inequality between 0 and 1, poverty headcount shows proportion below a poverty line
- **Answer: Economic development means broader improvements in living standards, health and education, not just higher output. Example: the Gini coefficient measures income inequality across the population, with higher values meaning more inequality; or the poverty headcount ratio shows the percentage of people below a defined poverty line.**

Question 9

- **M1** identifies that GDP growth rose from 1.2% in 2015 to a peak of 4.1% in 2017 and remained above 2% in 2016 to 2018 before falling to 2.0% in 2019
- **M1** identifies that the Gini coefficient rose from 0.32 in 2015 to 0.38 in 2018, indicating increasing income inequality
- **A1** links the timing: the period of faster growth 2016 to 2018 coincides with a steady rise in the Gini, suggesting growth was associated with rising inequality
- **M1** notes that in 2017 growth peaked at 4.1% while Gini increased to 0.37, providing a specific data point showing high growth with higher inequality
- **A1** explains a plausible mechanism from the data: growth may have been concentrated in capital intensive or skill intensive sectors, benefiting higher income groups and raising inequality
- **M1** acknowledges counterevidence in the table: in 2019 growth fell to 2.0% and Gini fell slightly to 0.36, suggesting the relationship is not perfectly stable
- **A1** evaluative point: correlation does not prove causation and other factors such as policy, taxation or changes in labour market institutions could have driven inequality independently of growth
- **A1** concludes that the data are consistent with a trade off in this period, but the evidence is suggestive rather than definitive
- **B1** uses figures accurately from the table in support of arguments

Question 10

- **M1** when growth increases aggregate demand beyond the economy's spare capacity, firms bid for limited resources
- **A1** this bidding raises input costs such as wages and material prices
- **A1** firms pass on higher costs as higher output prices, causing general price level to rise, i.e. demand-pull inflation
- **Answer: If growth pushes demand above spare capacity, firms bid for limited resources, raising input costs which are then passed on as higher prices, causing demand-pull inflation.**

Question 11

- **B1** progressive taxation, which redistributes income from higher earners to fund public services or transfers
- **B1** targeted education and training programmes, which improve skills of lower income workers and increase their employability and wages
- **B1** minimum wage increases or in-work support, which raise incomes at the bottom and reduce wage inequality
- **Answer: Examples: progressive taxation to fund services and transfers; targeted education and training to raise low earners skills; minimum wage increases or in-work support to lift the incomes of the poorest.**

Question 12

- **B1** names a policy instrument, e.g. carbon tax, emissions trading scheme, regulation or subsidies for renewables
- **B1** explains mechanism, e.g. carbon tax raises the price of emitting CO₂ so firms reduce emissions or invest in cleaner technology
- **Answer: Example: a carbon tax that raises the price of emitting CO₂, creating an incentive for firms to reduce emissions or invest in cleaner technology.**

Question 13

- **Level 1** (1-5): Basic assertions about benefits or costs of growth with limited explanation, minimal use of evidence or examples, little or no attempt at evaluation
- **Level 2** (6-10): Clear explanation of some benefits and some costs of growth with relevant examples or mechanisms, limited evaluation and partial use of the growth versus development distinction
- **Level 3** (11-15): Well developed analysis of multiple benefits and costs, including distributional and environmental considerations, good use of examples and diagrams, strong evaluation weighing the evidence and a supported conclusion
- **Level 4** (16-20): Comprehensive analysis integrating theoretical mechanisms, empirical examples and diagrams, balanced evaluation considering time horizons and magnitude, policy mitigations and distributional impacts, leading to a well justified judgement
- **Level 5** (21-25): Excellent, coherent argument addressing multiple perspectives, detailed analysis of conditions under which benefits outweigh costs, evaluation of assumptions, strong synthesis of evidence and policy alternatives, and a convincing, nuanced final judgement
- **Indicative content:**
 - Benefits: higher GDP per capita can increase material living standards, raise real wages, reduce absolute poverty and generate employment
 - Benefits: increased tax revenues from growth allow greater public spending on health, education and infrastructure improving development outcomes
 - Costs: environmental degradation, CO₂ emissions and resource depletion, and the risk of irreversible damage or long term costs
 - Costs: growth can increase income and wealth inequality if gains concentrate among capital owners or high skilled workers
 - Costs: structural unemployment can rise during rapid sectoral change, and demand-pull inflation can occur if growth exceeds capacity
 - Distinction: economic growth is an increase in real GDP, economic development covers broader wellbeing outcomes such as health and education, so growth alone may not deliver better development
 - Evaluation: consider magnitude and time horizon, e.g. short run boosts to living standards versus long run environmental costs, and distributional questions about who benefits
 - Evaluation: policy mitigations such as redistribution, environmental regulation, green investment and training can make growth more inclusive and sustainable
 - Diagrams: an AD/AS diagram to show growth raising output and possibly price level; Lorenz curve or Gini discussion for distributional effects
 - Consideration of empirical evidence and caveats: correlation between growth and HDI improvements, but counterexamples where growth did not reduce poverty or where environmental damage offset welfare gains
 - Conclusion: a balanced judgement that benefits often outweigh costs when growth is well managed and inclusive, but not always; context, policy choices and timescale determine the net effect