2.20 The Costs and Benefits of Economic Growth

Total Marks

AQA 7136 · Calculators not allowed · about 75 minutes · Write-in edition

Name: _____ Date: ____ / ____ / _____

Answer all questions. Write full sentences for the levels-marked essay question only. Time guidance: 75 minutes in total.

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

(Total for Question 1 is 2 marks)

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

(Total for Question 2 is 3 marks)

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

(Total for Question 3 is 3 marks)

4 Evaluate the view that the benefits of economic growth always outweigh its costs for a modern economy such as the UK.

(Total for Question 4 is 25 marks)

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

(Total for Question 5 is 3 marks)

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

(Total for Question 6 is 3 marks)

7 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 7 is 9 marks)

Mark scheme · 2.20 The Costs and Benefits of Economic Growth

Question 1

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	**B1**

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 2

rapid growth can increase production and energy use causing higher CO2 and other pollutant emissions	**M1**
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	**A1**

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 3

when growth increases aggregate demand beyond the economy's spare capacity, firms bid for limited resources	**M1**
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	**A1**

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 4

Level 1 Basic assertions about benefits or costs of growth with limited explanation, minimal use of evidence or examples, little or no attempt at evaluation	**1-5**
Level 2 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	**6-10**
Level 3 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	**11-15**
Level 4 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	**16-20**
Level 5 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	**21-25**

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

Question 5

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

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 6

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	**B1**

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 7

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	**M1**
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	**A1**
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	**M1**
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	**A1**
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	**M1**
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	**A1**
uses figures accurately from the table in support of arguments	**B1**