

CSQ 1

(a)	<b>Using Table 1, compare the overall change in world commodity prices between 2005 and 2010 with that of 2010 and 2014.</b>	<b>[2]</b>
<p>World commodity prices between 2005 and 2010 generally increased while that of 2010 and 2014 fell.</p> <p>The rate of change during 2005-10 was greater than the rate of change in prices for 2010-14, [1] suggesting that prices were relatively stable in the later period [1].</p> <p>[Alternative] For the period 2005-10, world commodity prices dipped in 2009, while for the period 2010-14, it rose before falling.</p>		
(b)	<b>With the help of a diagram, explain how floods caused the prices of grains like corns and soybeans to soar in Extract 1.</b>	<b>[4]</b>
<p>[Analytical framework]</p> <p>An increase in the price of grains is likely to be due to a fall in supply, while the soaring of prices, which implies a huge increase in price, can be explained by elasticity concepts, in particular, the price elasticity of demand.</p> <p>In Extract 1, floods will cause waterways to be shut, threatening crops and lead to a <b>significant</b> fall in the supply of grains. Diagrammatically, the supply curve will shift leftwards from <math>S_1</math> to <math>S_2</math>.</p> <div data-bbox="469 904 1291 1469" data-label="Figure"> </div> <p>At the initial equilibrium price <math>P_1</math>, there is a shortage as quantity demanded, <math>Q_1</math>, is lesser than quantity supplied <math>Q_s</math>. The shortage of <math>Q_s - Q_1</math> units will put an upward pressure on price, causing prices to increase to <math>P_2</math>.</p> <p>As grain is considered a staple food, a necessity with no close substitutes, the demand for grains will likely be price inelastic. The fall in supply, ceteris paribus, will result in quantity demanded falling less than proportionate to the rise in price. Hence prices will 'soar' and increase to a larger extent as compared to the fall in quantity.</p>		
(c)	<b>Explain how the freeze on the carbon tax and more savings for polluting industries might benefit the UK economy in Extract 2.</b>	<b>[6]</b>
<p><u>Question interpretation</u></p> <ul style="list-style-type: none"> <li>• What is a carbon tax? What is the implication of a freeze?</li> <li>• What is the implication of more savings for polluting industries?</li> </ul>		

- How do they affect cost of production? Profits? And survival of firms? Attractiveness to stay in UK?
- How do we measure the impacts (benefits) on an economy?

**[Establish framework]**

The announcements of the 2 measures might impact the UK economy in terms of the macroeconomic goals of low unemployment, price stability, economic growth and a sound balance of payments.

**[Explaining effects of freeze in carbon tax]**

Carbon tax is a tax on fossil fuels, intended to reduce the emission of carbon dioxide. The freeze in carbon tax and more savings for polluting industries imply that it is cheaper to produce using cheap fossil fuel, and thus more savings for firms, leading to a decrease in cost of production. In turn, firms' expected profits increase. As Chancellor Osborne had hoped – "industry energy costs could be cut and this would help UK's manufacturing sector". (Extract 2).

**[Impact on output and employment]**

With lower cost, profits may also increase and firms may be able to re-invest or spend on R & D, either to be 'greener' or to develop new and better technology and products, increasing AD in the short run and AS in the long run. Respectively, actual growth could be realised in the short run if there is excess capacity in the economy, and potential growth.

These 2 measures may also provide a lifeline to industries which would have had to close down due to higher cost (higher carbon tax), and workers would have had to be retrenched leading to structural unemployment. As highlighted in Extract 2, workers in the manufacturing industry, which is likely to rely more on fossil fuel, is likely to benefit more.

**[Impact on price stability]**

Firms may even pass on the lower cost to consumers in term of lower prices or keeping prices stable.

**[Impact on BOP]**

Extract 2 highlighted that the measures could also prevent firms from leaving the UK due "lower costs" elsewhere (Extract 2) or even attract new foreign direct investments worthwhile. This reduces capital outflow, thereby improving UK's BOP position. The lower cost of production may also make UK exports more price competitive and this might increase exports, thereby improving UK's BOP.

These are short term policies to lift the UK economy; at the expense of the environment which could have provided economic benefits in the long run.

<b>(d)</b>	<b>Comment on how the climate and energy initiatives highlighted in Extract 2 could affect the UK's budget position.</b>	<b>[4]</b>
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Question interpretation

- What does a budget position mean? What are the components? G & T (govt. revenue)
- What are the initiatives?
- Would they impact on G? or T?
- Would budget position worsen?
- Would budget position improve?

The UK budget position is the overall difference between government revenue and spending.

**[Likely immediate change in budget position] – 2 marks**

The initiatives will result in a saving for industries and a cost to the government as the tax collected will be less than expected; (1 mark)

At the same time, the government will have to spend more especially for flood repairs as mentioned in the Extract 2, '£140 million in new funding'. (1 mark)

**[Addressing the command phrase – comment] – 1 mark**

However, given the new initiatives, if firms are able to thrive and be profitable, the government could collect more corporate taxes and if more people are employed, more income taxes will also be collected. Together with less spending on unemployment benefits, the budget position will improve in the long run.

However, with greater pollution in the long run, the government may have to spend more on health care.

**[Concluding statement to answer the question directly] – 1 mark**

Thus the budget position may worsen initially but whether it will eventually improve is hard to predict. (1)

(e)	(i)	<b>With reference to the data, to what extent do you agree with the statement that “out of all the market failures, public goods is the biggest”?</b>	<b>[6]</b>
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Question interpretation

- What is market failure? What are public goods? How does the market fail for public goods?
- How are public goods the biggest market failure?
- How are public goods not the biggest market failure?
- To what extent does the case context suggest flood defence being a public good with the biggest market failure?

**[Define Market Failure]**

Market failure occurs when the market fails to produce most efficient and equitable outcome. i.e. socially optimum output and price where societal welfare is maximised.

**Thesis: Public goods are significant sources of market failure**

**[Explain Public Goods]**

Explain non-excludability and non-rivalry, and how it would lead to the good not being produced at all by the free market – i.e. a missing market. → Therefore arguably a very significant source of market failure.

**[Significance of flood defence as source of market failure]**

- Scale of problem: If flood defence is not provided, size of damage due to flood is significant. GBP 1.1 billion worth of damage, 13% of UK GDP in 2013 (Extract 3).
- UK Prepared to spend GBP 140 million towards flood defence (Extract 2).

**Anti-thesis: Public goods are not the only source of market failure. There are other sources of market failures that are significant.**

**[Other sources of market failures exist]**

Extract 2 suggests that market failure also occurs due to negative externalities in production. Therefore there is a need to impose carbon tax.

**[Explain market failure due to –ve externalities in production (carbon emission).]**

**[Scale of problem in other sources of market failure]**

Scale is significant, given that carbon tax are imposed on firms at GBP 18 per tonne of CO<sub>2</sub> emitted (Extract 2). Policies designed to support renewable energy generation.

In Figure 2, government spending on flood issues within total spending on infrastructure seems to be small in proportion relative to other sectors e.g. transport, water and energy. This suggests that these other markets could have even larger market failures, requiring large scale government intervention.

**[Concluding statement]**

From data, it seems like while flood defence is a significant source of market failure, it may not be the biggest.

Level	Knowledge, Application, Understanding, Analysis	Marks
2	<p>Balanced commentary on the statement. Explains why flood defence as a public good is a significant source of market failure alongside at least one other source of market failure taken from the case materials.</p> <p>If other sources of market failure is taken from contextual knowledge, cap at 5 marks.</p> <p>Answers that explain two sources of market failure (including flood defence as a public good) without attempt to look at the significance of either would be capped at 4 marks.</p>	4 – 6
1	<p>Lop-sided commentary on the statement <i>OR</i> lacking in economic rigour. Such answers may assert that flood defence is a public good or that there is negative externalities in production without explaining why.</p>	1 - 2

**(e) (ii) Flood defence should be directly provided by the government. Discuss. [8]**

***Explain flood defence and direct provision.***

Direct provision of flood defence requires the use of the government's budget and are not the best way to spend scarce government resources if it does not help to alleviate inequity and increase society's welfare. There are opportunity cost involve.

**Thesis: Flood defence should be directly provided by the government.**

Characterisitcs of flood defence:

- non – excludability (explain)
  - Non – rivalrous (explain)
- } result in MISSING MARKET ( no need for detail if explained in e (i) )
- Explain why govt should provide
    - Missing Market – making flood control/defence available to everyone. This is the most effective way to correct a missing market situation.

- Direct provision of flood defence is the best way to spend scarce govt resources because welfare is maximised and ‘there are cost savings from large scale state provision’.  
(Extract 3: The areas hit by floods in the UK in 2013/14 accounted for 13% of the UK's economic output, hitting key economic heartlands, wiping up to £14bn off GDP. Disruption to transport links harms productivity)
- wider economic benefits and the hundreds of thousands of employment opportunities (cite evidence of damage)
- Multiplier from government spending, stimulating further economic growth

Limitations: Adds pressure to government budget.

Evaluation: (*Cost Benefit Analysis*- The benefits of providing the flood defences must exceed the costs of provision.)

**Anti-thesis: Flood defence should NOT be directly provided by the government**

- Flood defence can be provided by the private sector or subsidised by govt.
  - In small communities: entrepreneur can provide collective goods by consensual community agreements – ‘in small communities people can agree to split the cost of public goods.’
  - Govt. provision encourages moral hazard behaviour and an unwillingness to fund it collectively’.
  - subsidy to the private sector is another approach - explain
  - Risk of information failure for govt - leading to a sub-optimal outcome
- Opportunity cost of spending govt resource on flood defence
  - Expenditure on education; healthcare; infrastructure which may require more govt. support
  - ‘Flood defences by their nature are only a pure public good on a localised level, whilst on a national level, the benefits and costs are unequally distributed’ and thus should not be priority and this may then not be the best way to spend scarce govt resources

***Evaluative conclusion:***

Direct provision by govt. can help correct the market failure due to provision of flood control and the positive externalities generated; increase employment opportunities and a boost of the national economy of England. Hence the spending of such scarce government resources is justified.

However, direct provision, expenditure of govt funds incur trade-offs which can take the form of increased tax burden or less spending on other areas, it is imperative to do a cost-benefit analysis on the amount of spending on flood defence and for example, public education.

Level	Knowledge, Application, Understanding and Analysis	Marks
L3	<ul style="list-style-type: none"> <li>• Interpret and meet <b>all</b> the question requirements accurately.</li> <li>• Explain economic concepts, relationships and theories with <b>depth and rigour</b>, explaining clearly the market failure resulting from flood control.</li> <li>• Analyse arguments using a cost benefit analysis and <b>answer is well-organised</b>.</li> <li>• Show <b>good application to the given context by using relevant case materials</b> to support economic analysis.</li> <li>• Go beyond the case materials to bring in contextual knowledge <i>where necessary</i>.</li> </ul>	7 - 8

	<ul style="list-style-type: none"> <li>• <b>Evaluate arguments specific to case context, and use an appropriate criteria to synthesise a reasoned judgement.</b></li> </ul>	
L2	<ul style="list-style-type: none"> <li>• Did not meet all the question requirements e.g. answers may not be balanced.</li> <li>• Lack depth and rigour in the explanation of economic concepts, relationship and theories.</li> <li>• Did not show good organisation and structure of answer using an appropriate framework.</li> <li>• <u>Fail to apply sufficiently</u> to the given context (insufficient use of case materials to support analysis).</li> <li>• Did not go beyond the use of case materials <i>where</i> required.</li> </ul>	4 - 6
L1	<ul style="list-style-type: none"> <li>• Answer is largely descriptive with limited use of economic concepts.</li> <li>• <u>Did not utilise case materials</u> to support economic analysis or <u>lifted chunks of text without economic analysis.</u></li> </ul>	1 - 3