Examiners' Report

Principal Examiner Feedback

January 2019

Pearson Edexcel International IAS in Economics (WEC11)
Unit 1 Markets in Action

Edexcel and BTEC Qualifications

Edexcel and BTEC qualifications are awarded by Pearson, the UK's largest awarding body. We provide a wide range of qualifications including academic, vocational, occupational and specific programmes for employers. For further information visit our qualifications websites at www.edexcel.com or www.btec.co.uk. Alternatively, you can get in touch with us using the details on our contact us page at www.edexcel.com/contactus.

Pearson: helping people progress, everywhere

Pearson aspires to be the world's leading learning company. Our aim is to help everyone progress in their lives through education. We believe in every kind of learning, for all kinds of people, wherever they are in the world. We've been involved in education for over 150 years, and by working across 70 countries, in 100 languages, we have built an international reputation for our commitment to high standards and raising achievement through innovation in education. Find out more about how we can help you and your students at: www.pearson.com/uk

Grade Boundaries

Grade boundaries for all papers can be found on the website at:
https://qualifications.pearson.com/en/support/support-topics/results-certification/grade-boundaries.html

January 2019
Publications Code WEC11_01_1901_ER

Introduction

This is the first series which this unit Markets in Action (WEC11) has been assessed. The standard of work seen in this series has been impressive considering that this unit is being assessed for the first time. A number of new concepts were assessed and different ways to assess the work were used. But this did not have a negative impact on the performance of candidates.

In Section A, the multiple choice section, candidates performed best on the production possibility frontier and functions of the price mechanism questions. The question on consumer incidence of a subsidy was the least well done question in the section and may need attention in centres. Questions on government failure, price elasticity and income elasticity all typically saw candidates perform well. In nearly every case candidates crossed the correct box and when they changed their mind they crossed through this in the correct way and offered a replacement answer.

Section B, the short answer section, saw some very mixed performance on the questions. Candidates performed best on the question requiring the drawing of a diagram to show the impact of an indirect tax. Most moved supply in the correct direction and had both the original equilibrium and new equilibrium to access 3 marks. Many missed the fact that a 5% tax was an ad valorem tax so many missed the mark as they did not pivot the supply curve to access full marks. When asked in the question to draw it is important to note that it is fine just to draw a diagram to access full marks. Question 9 on free goods and economic goods saw most candidates able to access a couple of marks. However, there was some confusion between free goods and public goods so a little more focus on lessons on looking at goods and considering whether they are economic or free goods might be useful. However, it was question 10 that students performed least well. Very many could not access any marks as they were unable to identify the impact on the quantity demanded of the advertising campaign. Others could calculate the impact to gain 2 marks but struggled to calculate the equilibrium price. Candidates will need practice at this style of question. Question on the division of labour and producer surplus saw candidates typically perform well.

Section C, the data response section is based on information provided in the source booklet. Unlike on the legacy unit (WEC01) there is no choice in the question candidates' answer. Candidates could typically access at least one mark on 12a to show knowledge of substitutes with better candidate able to offer examples or more precise definitions. 12b needed an explanation of 2 factors and a typical response would gain one mark for knowledge for defining price elasticity of supply and a mark for application by making reference typically to the four to five years for cocoa trees to mature. Better responses defined the specific elasticity and explained why the factor led to the elasticity stated. 12c saw most able to correctly draw the diagram to show supply increasing. They also accessed application marks commonly making reference to the increased supply in Cote d'Ivoire. On 12d most

were able to define external costs, many candidates drew a diagram accurately as part of their response although this was not required to access full marks. Many examined two external costs from Extract B. Better candidates were able to analyse these in terms of explaining who and how the third party was affected. Many offered evaluation but this was often underdeveloped. On 12e a number of candidates looked at the introduction of a minimum price rather than reduction that the question required. Most could define minimum price and draw the diagram and it was impressive how many drew the minimum price falling accurately. Those able to achieve a higher score used their diagram in their analysis for example explicitly looking at how much quantity demanded or supplied fell or the change in surplus. Better responses would also look explicitly at how consumers, producers and governments would be affected.

Section D, the essay section offered candidates the opportunity to choose between two questions. The section was more demanding and this is reflected in the mean scores on both questions. Candidates tended to perform better on Question 13 on why consumers do not switch energy supplier than on Question 14 on the under investment in flood defences. In both cases questions the knowledge of the Economics was sound but candidates struggled in applying it to the context of the question. Another challenge was the level of analysis. They often struggled to fully develop the chain of reasoning. Evaluative comments were often made and whilst some offered supporting evidence and linked to the context many were unable to offer a logical chain of reasoning.

Diagrammatic analysis on the work from the better candidates was accurate and was integrated with their written analysis. So they would not only draw the diagram accurately but talk about what they learn from it in their written explanation. This enabled them to consistently achieve within the top level. This was particularly true for those drawing the correct minimum price diagram to show the impact of reduced minimum price.

Most candidates were able to complete the paper in the time available. We did however see several unfinished or very brief essays suggesting that some candidates had not planned their time well.

The performance on individual questions is considered in the next section of the report. The feedback on questions shows how questions were well answered and also on how to improve further.

Section A: Multiple choice

Question 1

The question had a series of diagrams with candidates having to identify which illustrated a 90 000 increase in the population of Singapore. Many correctly identified that the PPF would shift right and that both x and y would be on the PPF curve as the firm operates at its maximum productive potential. A common error was to identify C as the correct answer. This is not correct as point Y is unobtainable as it is above the PPF.

Question 2

The next question looked at the functions of the price mechanism. The correct answer is C as the price mechanism provides a signal. Commonly A and D were selected as they identified the other functions. For A the incentive would be to increase production when the price increases. For D when demand increases the price will rise to ration the price.

Question 3

Candidates tended to struggle more with this question on government failure. A was correct as the introduction of regulations would lead to excessive administration costs. The other responses were examples of market failures.

Question 4

This question caused an issue for some as they struggled to identify that the producer subsidy was on top and consumer subsidy on the bottom. This meaning a number incorrectly identified A as correct which was producer and not consumer subsidy. Some incorrectly identified C as correct but this is in fact the total cost of the subsidy to the government. To correctly identify B candidates needed to do 194 minus 135 which is 59. This gives you the unit subsidy. The unit subsidy is then multiplied by the 2 100, which is the quantity sold with the subsidy in place.

Question 5

This question tested candidates understanding of how price elasticity of demand varied along a downward sloping demand curve. Whilst many successfully identified that the PED would be unitary at point B. Many mistakenly identified one of the other points. At point A the PED would be infinity, at D zero and at C between zero and -1. It would be useful to ensure students can draw a diagram and show how the PED varies along it.

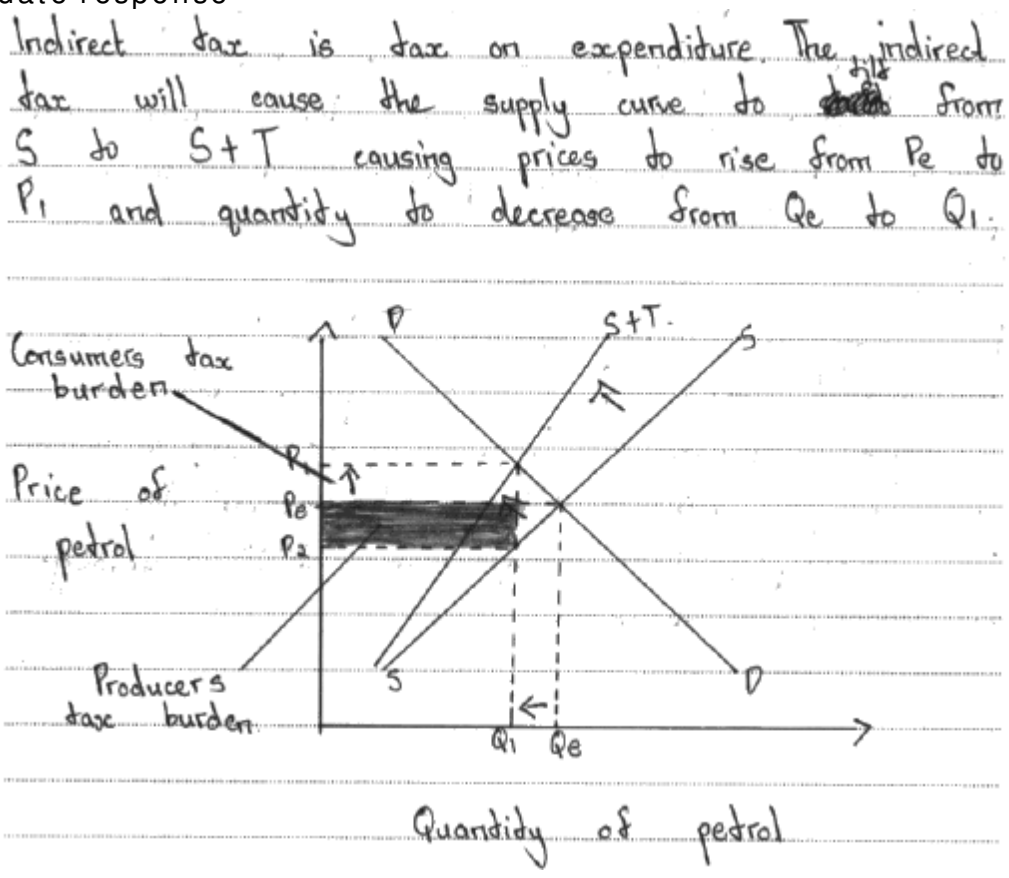
Question 6

The question clearly identified that the elasticities were income elasticity of demand. Unfortunately the distractor A caught a number out as this related to PED. Most though could identify that with an increase in income the demand for motor cars would increase more than proportionally.

Section B: short answer questions
Question 7

Candidates were asked to draw a diagram to illustrate the impact of the introduction of an indirect tax. They were told that it was charged at 5%. Whilst most correctly drew the original equilibrium and the leftwards movement of supply and the new equilibrium for 3 marks, many missed the final mark. The 5% identified this is an ad valorem tax but many drew a specific task with a parallel shift. It tended to be candidates accessing the highest grade that were able to pivot the supply curve to access full marks. It would be worth giving examples of specific taxes and ad valorem taxes and getting them to draw whether it would be a pivot or shift. Many candidates offered extensive supporting written explanation but this is not needed as all marks can be awarded for the diagram alone. Some candidates who failed to do the diagram or drew it inaccurately defined indirect tax for a knowledge mark.

Candidate response



Principal Examiner's commentary

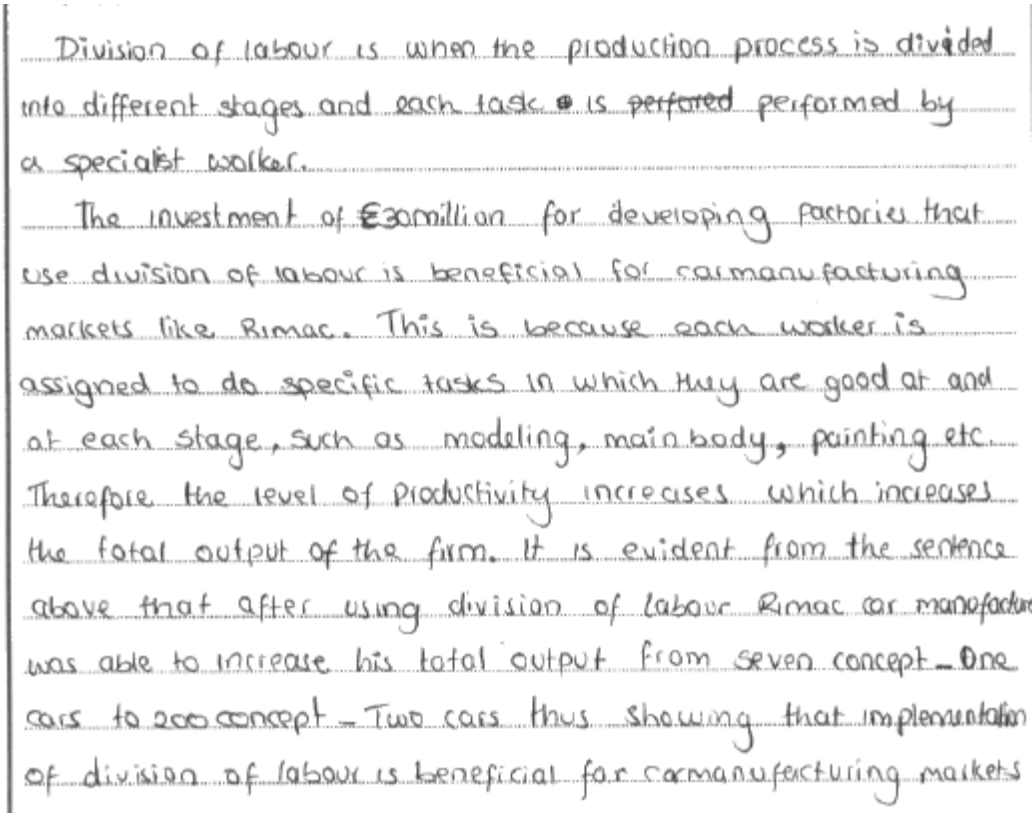
This response gains a mark for accurately defining indirect tax. No other credit for the written explanation.
The diagram gains a mark for the original equilibrium, shift in supply to the left and the new equilibrium to pick up 3 marks. One of these marks is the

same mark as already awarded for the definition of indirect tax. The final mark is achieved as they have correctly identified it as an ad valorem tax and pivoted supply.
No credit for producer and consumer burdens as not answering the question.

Question 8

It was impressive that nearly all candidates could define the division of labour accurately. Most made reference to breaking down the production process into stages and each worker focuses on a task. Most could also identify a relevant advantage with most picking up on improved productivity or lower unit costs. It was common for candidates to access full marks for knowledge. However, many struggled to access application marks. Better candidates tended to refer to the fact Rimac used division of labour and production went from 7 to 200. Very rarely did candidates look at how they could divide labour in car manufacturing. When this was done full marks tended to be awarded.

Candidate response



Division of labour is when the production process is divided into different stages and each task is ~~perfored~~ performed by a specialist worker.

The investment of €30million for developing factories that use division of labour is beneficial for carmanufacturing markets like Rimac. This is because each worker is assigned to do specific tasks in which they are good at and at each stage, such as modeling, main body, painting etc. Therefore the level of productivity increases which increases the total output of the firm. It is evident from the sentence above that after using division of labour Rimac car manufactur was able to increase his total output from seven concept - One cars to 200 concept - Two cars thus showing that implementation of division of labour is beneficial for carmanufacturing markets

Principal Examiner's commentary

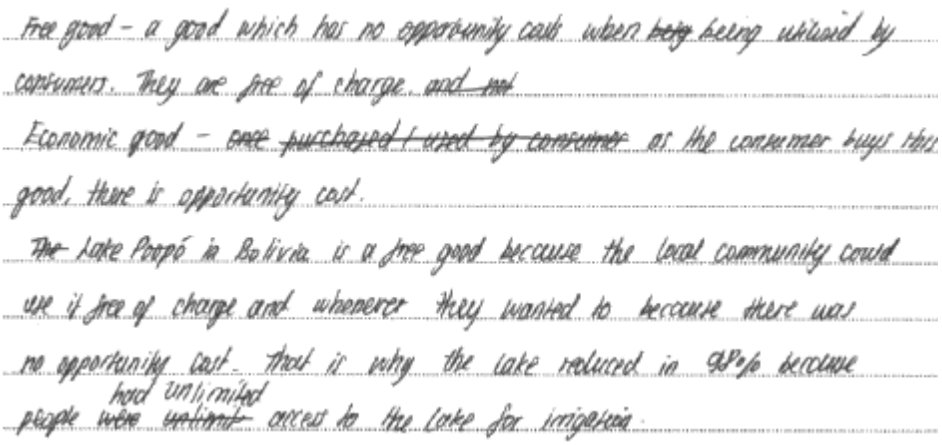
The first knowledge mark is awarded for accurately defining the division of labour.
The second mark is awarded fir referring to different tasks different workers will specialise in which is relevant to car manufacturing. They can the

second knowledge mark for making reference to higher productivity. They also gain an application mark for referring to production increasing from 7 to 200.

Question 9

Understanding of free goods and economic goods was tested in this question and the average performance was below that of other questions in this section. There was some confusion amongst candidates who spoke about public and private goods rather than free goods and economic goods. Most commonly where they did access marks they defined free goods as those which do not suffer from opportunity cost, are abundant in supply or not scarce. Likewise economic goods were defined with reference to scarcity, limited supply and experiencing opportunity costs. A number of candidates were only able to access application marks by making reference to it as a free good when supply was abundant and water was used for irrigation. Or they made reference to it being 98% of its original size and in limited supply making it an economic good. This is an area that candidates would benefit from looking at goods and describing when they are free goods and economic goods.

Candidate response


Free good - a good which has no opportunity cost when ~~beig~~ being utilised by consumers. They are free of charge and ~~no~~

Economic good - ~~once purchased / used by consumer~~ as the consumer buys this good, there is opportunity cost.

The Lake Poopó in Bolivia is a free good because the local community could use it free of charge and whenever they wanted to because there was no opportunity cost. that is why the lake reduced in 98% because people were ~~unlimit~~ had unlimited access to the lake for irrigation.

Principal Examiner's commentary

The definition of free goods as having no opportunity costs gains a mark. The economic good definition is also fine linked to having opportunity costs but there is only one mark for either definition. They make reference to the 98% reduction to gain an application mark. They gain one analysis mark for acknowledging that in using the lake there was no opportunity costs. To improve they need to make the link to it being abundant when used for irrigation.

Question 10

The question looked at being able to calculate a new equilibrium given changes in demand following an advertising campaign. Many could calculate the change in quantity demanded. Better candidates could identify that the new equilibrium was at ¥13. Where candidates could not complete the calculations they commonly achieved a mark for defining equilibrium.

Candidate response

Price per bottle (yuan)	Original quantity demanded per week	Original quantity supplied per week	Quantity demanded after increase
¥10	700	200	800
¥11	600	300	700
¥12	500	400	600
¥13	400	500	500
¥14	300	600	400

Using the data in the table, calculate the equilibrium price for bottled water after the advertising campaign. Show your workings. You may wish to use the last column in your calculation. 4 Q10

Equilibrium price is the market clearing price which means that the quantity demanded of a commodity is equal to the quantity supplied of a commodity.

Therefore an advertising campaign resulting to an increase n quantity demanded for bottled water led to the equilibrium price to be ¥13 where the quantity demanded increased from 400 bottled water to 500 bottled water per week which is the same as the quantity supplied for bottled water per week.

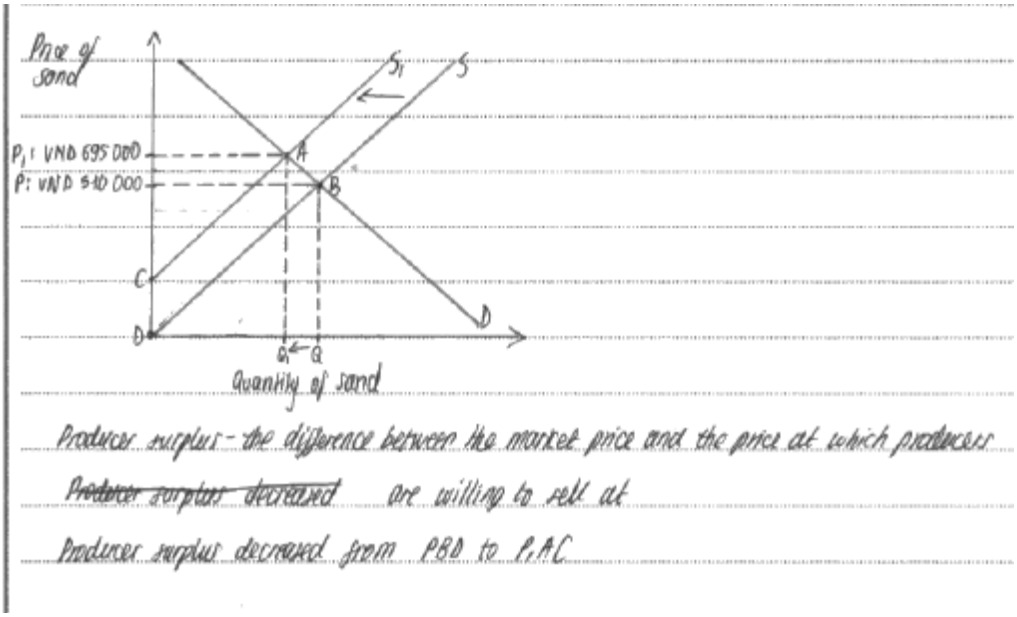
Principal Examiner's commentary

The annotation of the table to add in the calculations of the new quantity demanded gains two marks. The definition of equilibrium is also awarded. They then gain a mark for identifying the new equilibrium price at ¥13. Full marks achieved.

Question 11

The question considered the reduction in supply of sand and how it would impact producer surplus. Most defined producer surplus. Many drew the diagram and correctly shifted supply leftwards. Better candidates then identified the original and new producer surplus. A common mistake was to confuse consumer and producer surplus.

Candidate response



Principal Examiner's commentary

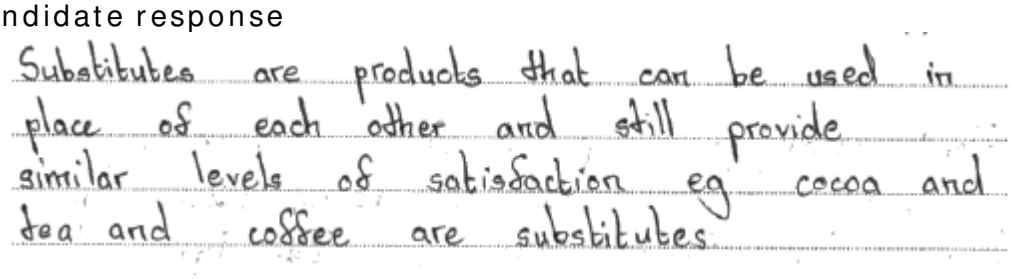
Here the diagram is drawn accurately for one mark with supply shifting left. The producer surplus is defined accurately. The final marks are awarded for making reference to the correct original and new producer surplus.

Section C: data response

Question 12a

Candidates were required to define the term substitutes. There was typically a good quality of response with most being able to access at least one mark. Most made reference to the goods meeting the same need. It was also common for candidates to give an example. This was usually referring to cocoa, tea and coffee as per the source booklet but other examples were awarded credit. Better candidates often referred to the fact the cross elasticity of demand would be positive.

Candidate response


Substitutes are products that can be used in place of each other and still provide similar levels of satisfaction eg cocoa and tea and coffee are substitutes

Principal Examiner's commentary

The candidate gains a mark for making reference to being able to use the products in place of each other for similar satisfaction. They gain a further mark for the example in terms of cocoa, tea and coffee.

Question 12b

The question required candidates to explain a factor that is likely to influence the price elasticity of supply. For a small number they did not read the question closely enough and discussed price elasticity of demand. Most though did focus on price elasticity of supply and could define or offer the relevant formula. When defining price elasticity of supply it is important that students make reference to the responsiveness of quantity supplied to a change in price. Most were able to demonstrate an understanding of price elastic or price inelastic. To gain the two available application marks candidates needed to make reference to specific factor from the Extract. These included stocks, it was important to develop this by linking to how this makes it easier for supply to respond when price rises, so elastic. Another example commonly explained was the four to five years for the cocoa trees to reach maturity so it will take a long time to increase supply, thus inelastic. Fewer identified that cocoa only grows near the equator in a few countries suggesting few areas can grow it making supply more inelastic.

Candidate response

Price elasticity of supply is responsiveness in the change in quantity supplied of a ~~commodity~~ product as a result of a unit change in price of a product

According to extract A the PES of cocoa beans is likely be affected due to the gestation period of coffee. With reference to extract A cocoa trees take four to five years to mature and produce cocoa pods. This suggests that the producers of cocoa will not be able to respond to the increase in prices of ~~coca~~ cocoa by supplying more which means that the PES for cocoa beans is likely to be price inelastic. thus implying that a change in price of cocoa will lead to a less than proportionate change in quantity supplied of cocoa.

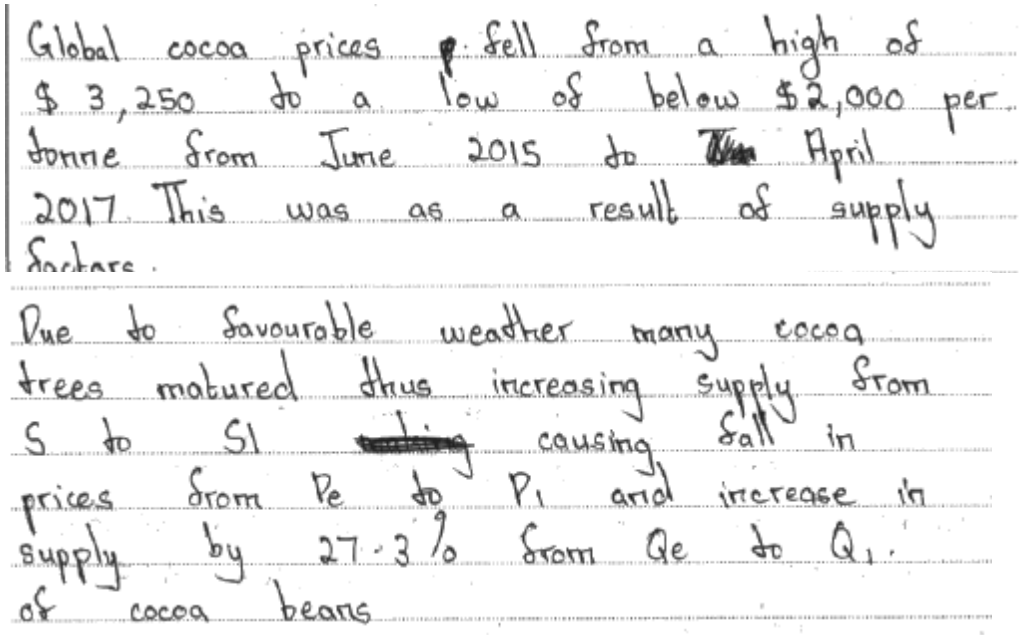
Principal Examiner's commentary

The definition offered here is awarded one mark. They then gain a mark for reference to the gestation period and the four to five years to mature. They develop this for another application mark by making reference to not being able to increase supply when price increases. The final mark is for making the point that price inelastic is where a change in price leads to a less than a proportionate change in quantity supplied.

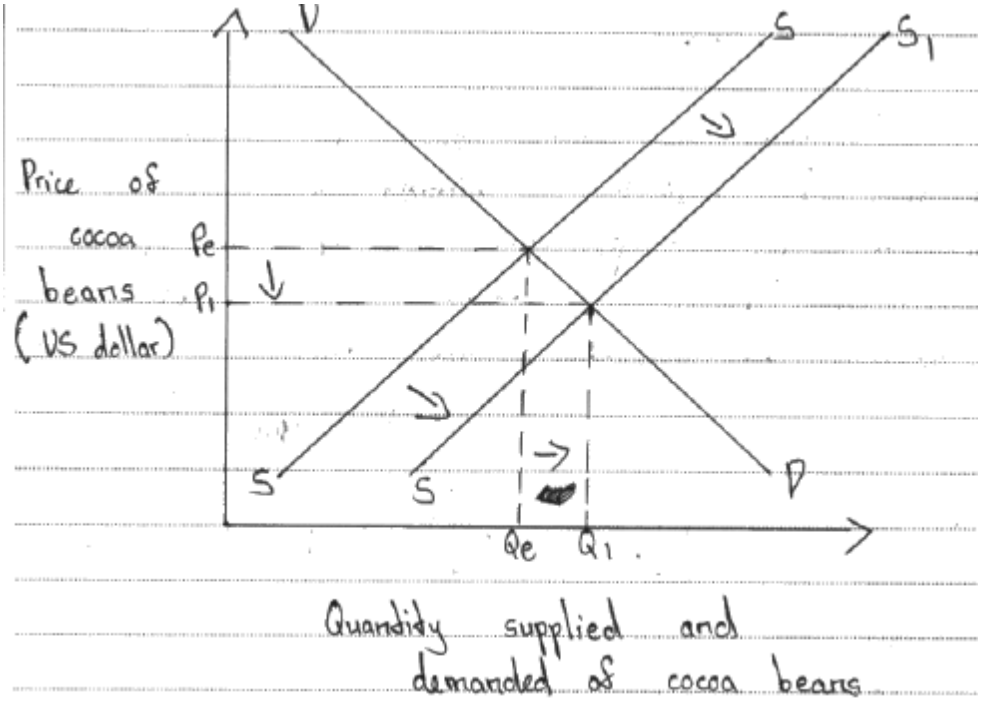
Question 12c

This six mark analysis question had 2 marks available for each of knowledge, application and analysis. In this question they needed to analyse one reason the price fell. For the data reference many stated that the price fell below $2 000. This was not credited as this was stated in the question. There was however a mark for showing the price above $2 000 before April 2017. A number of candidates annotated their own diagram with the actual prices which was also rewarded. Candidates offered a range of reasons and the question asked for one. The reasons included production rising in Cote d'Ivoire from 1.45m tonnes to 1.93m tonnes, stocks being 27.3% higher, new trees maturing and a good harvest. The diagrams normally shifted supply right and had correctly labelled original equilibrium and new equilibrium. In doing this they would gain three marks for the diagram. Where students struggled most is getting the final analysis mark. Here they needed to explain why the price falls. For example a good harvest leads to excess supply at the original price, so causing a downward pressure on price. Or that with more trees maturing the firms can supply more cocoa at a lower cost enabling the price to fall.

Candidate response


Global cocoa prices fell from a high of $ 3,250 to a low of below $2,000 per tonne from June 2015 to April 2017. This was as a result of supply factors.

Due to favourable weather many cocoa trees matured thus increasing supply from S to S1 causing fall in prices from Pe to P1 and increase in supply by 27.3% from Qe to Q1. of cocoa beans



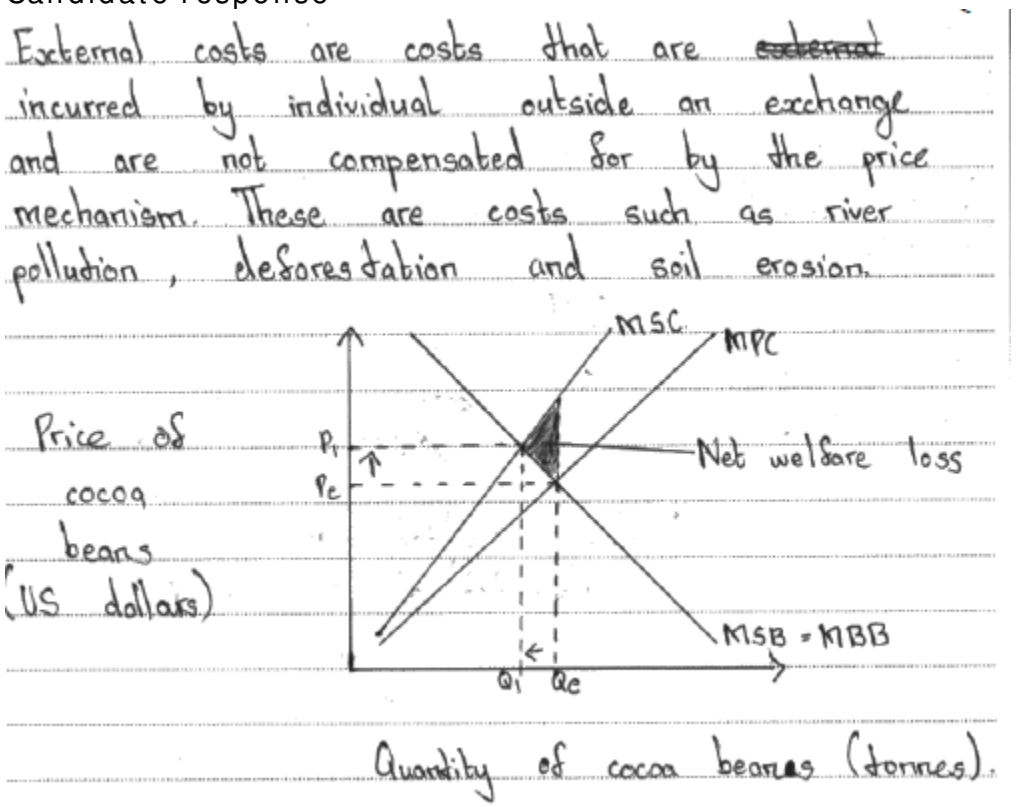
Principal Examiner's commentary

On the diagram they have the original equilibrium, correct shift in supply and new equilibrium to gain three marks. They make reference to the higher price to gain a mark. They gain mark for identifying that many trees matured. They also make reference to the 27.3% increase in supply. The latter gained no additional credit as they already had two for application. Overall they score 5 and would need to analyse how the reason leads to a lower price.

Question 12d

The question required candidates to examine the external costs associated with the production of cocoa beans. Most candidates defined accurately external costs. Better responses typically picked up a second mark for accurately drawing an external costs diagram. Key was showing MSC to the left of MPC.
It was pleasing the numbers who looked at two external costs. The question states costs so looking at more than one is a sensible strategy employed by most. Positively most applied to the Extract and identified relevant external costs with most looking at lost rainforests, fertiliser and soil erosion. Where candidates were able to access analysis marks they would analyse who the third party was and how they were affected. One common mistake was to talk about how rainforest destruction would reduce the size of the cocoa crop but this would not be an external cost as a third party is not affected.
Examine requires some evaluation. The most common evaluation point offered linked to how the Rainforest Association could reduce external costs. This was often awarded one mark with better responses that developed how the training provided would help better techniques to emerge that reduced the damage. It was also common to consider the difficulty in measuring external costs although again this could have been better developed in terms of considering issues of measuring the impact on the fishing industry or measuring the benefit from better health. Candidates could either offer two evaluation points undeveloped to access the two marks or offer one and develop this.

Candidate response



Due to cutting down of trees to plant cocoa bean trees the amount of rainforest in Indonesia has decreased by 15 % thus causing alot of pollution as trees that absorbed carbon dioxide are cut down therefore making the atmosphere polluted [redacted] which may cause health issues like breathing problems to the citizens of Indonesia.

Moreover, some farmers are using fertilisers that cause river pollution thus creating health hazards of waterborne diseases to the people who consume the [redacted] water from polluted rivers ~~making their less productive~~ which ~~may lead to slower economic growth~~ thus increased medical bills for these people.

However, due to the existence of the Rainforest Alliance cocoa production has increased by 14 % with less environmental damage therefore minimizing the effect of the external costs of deforestation and pollution by training farmers to be environmental friendly.

In conclusion, if [redacted] more organizations like the Rainforest alliance train farmers to produce cocoa without [redacted] harming the environment, there will be less external costs as a result of production of cocoa beans.

Principal Examiner's commentary

They accurately define external costs and accurately draw the diagram to achieve both knowledge marks.

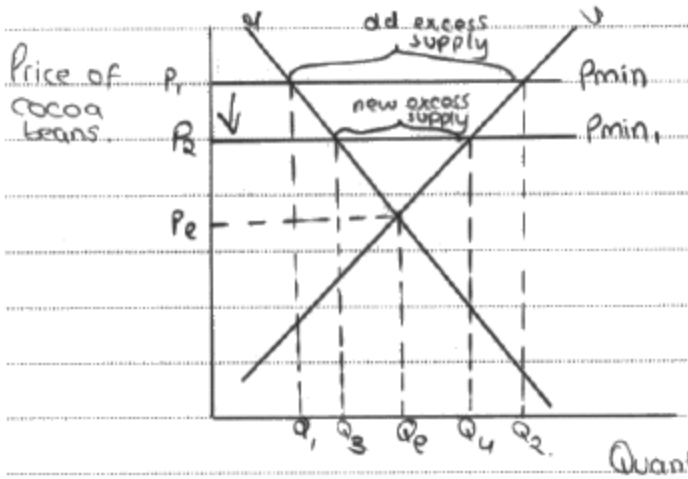
They identify that rainforests have decreased by 15% and link this to less carbon dioxide being absorbed and links to health issues. This gains one application and one analysis mark.
They identify fertilisers and link to people who consume polluted water and associated medical bills. Again one mark is awarded for application and one for analysis.
The evaluation links to the Rainforest Alliance and how they will train to help minimise environmental damage. This developed evaluation point gains two marks. The final paragraph adds nothing as it is a repeat about the impact of the Rainforest Alliance.

Question 12e

The 14 mark question required a discussion of the likely effects of the reduction in the minimum guaranteed price for cocoa. This question caused a problem for some who did not read the question closely enough. Some looked only at the impact of introducing a minimum price. This was only able to access Level 1 as it was not answering the question. There was also some confusion between minimum and maximum prices, in marking scripts a number of maximum price diagrams were drawn.
Most were able to define minimum price and explain why it was introduced in terms of protecting producers from very low prices. Most made reference to the size of the reduction, some in their evaluation in terms of making reference to the magnitude.
Diagrams that were able to achieve Level 2 had the original minimum price above the equilibrium price and then shifted the minimum price down to closer to the equilibrium price. They would then illustrate on the diagram the changes in the quantity demanded and quantity supplied. Key to ensuring they moved this to Level 3 was that the used the diagram in their analysis. For example, in their written explanation making reference to the quantity demanded, quantity supplied, changes to the size of the surplus/ excess supply and the impact on government spending.
Whilst most could explain that the quantity demanded would increase and the quantity supplied would decrease the better response spoke about extending demand and contracting supply. Better responses would also be more likely to look at the change in surplus and the change in government spending. A number of very successful candidates looked at the impact on a number of economic agents, consumers, producers and government.
In terms of evaluation, up to 6 marks are available across 3 levels. There were candidates just offering generic and undeveloped evaluation points that achieved only Level 1. Others offered more development to access Level 2 but lacked context. Others made points in context that needed further development to achieve Level 2. Those achieving Level 3 not only identified evaluative points and developed these but they were fully in the context of the question regards the minimum price for cocoa.
As mentioned earlier students commonly connected magnitude with 36% reduction in the minimum price. Some looked at the difficulty in measuring or setting what the correct minimum price should be. Many identified that many farmers would avoid the system but to gain further marks needed to link to why they would do this, often to ensure revenue is achieved earlier.

Candidate response

Minimum price is the price below which the producers cannot sell its products. It's the price above the equilibrium price. ~~and below~~



The reduction in minimum price of cocoa beans, by 36¢, will lead to reduction in excess supply of cocoa beans in the market as shown in the diagram above Q_3-Q_4. This will help the government to ensure that there is no misallocation of resources by using more resources to produce cocoa than required therefore preventing market failure.

Moreover the reduction on the quantity of cocoa beans will lead to less incomes for farmers and therefore it will worsen the lifestyles of farmers producing cocoa as they will not be able to afford the basic products. Such as food, shelter.

In addition, the reduction in revenues means less workers are required leading to unemployment levels increasing in the country as less resources are required due to the reduction in quantity of cocoa beans produced.

However the reduction in minimum price from Pmin to Pmin, by 36% will not be effective if the magnitude is small and some farmers will still sell cocoa at prices below the minimum price therefore not reducing the quantity of cocoa beans produced by farmers therefore not effective ~~in~~ policy.

~~to conclusion~~ Moreover, since the producers earn more revenue by recieving payments quickly than from the government the reduction in the minimum price will not affect the producers by much and therefore they will not reduce the production nor they will lead to unemployment.

In conclusion, the government should ensure that it implements regulatory groups who will inspect whether the producers are seting prices above the Pmin or not to ensure that the policy is effective in reducing ~~the~~ government spending and reducing cocoa stocks.

Principal Examiner's commentary

The question is marked using levels based marking, the candidate accurately defined the term. The diagram offered is accurate and shows clearly the reduction in minimum price. They also explicitly identify the old and new excess supply. They move the response to Level 3 as they clearly refer to diagram and what it shows us in terms of excess supply. The candidate considers the impact on the farmers in terms of lost incomes. They develop this by looking at how this might affect the numbers employed. For knowledge, application and analysis the response achieves Level 3 but the breadth and depth offered is not sufficient to access full marks so they achieve the bottom mark in the level. 7/8 is achieved.
The evaluation looks at magnitude and applies this to the extract in terms of the 36%. They also evaluate that farmers may sell cocoa outside the minimum price and talk about the fact they will do this to receive more payments more quickly and how if they do this the market will not be affected so greatly. This candidate offers a conclusion about the need to inspect that adds to the response. There is not a conclusion required in the 14 mark question, this is only a requirement in the essays. The evaluation is Level 3 overall scoring 5/6.

Section D: essay

The candidates choose from the two essays. Question 13, on why many consumers do not switch energy suppliers was more popular than question 14, on why there is an under-investment in flood defences. 60% attempted question 13 and 40% question 14.

Question 13

Most responses focused on consumer behaviour and why consumers may not act rationally to switch to save money. Commonly discussion focused on habitual behaviour, inertia, poor computational skills, feeling valued and very often herding. There was sometimes confusion over inertia with people defining it as people being loyal to a brand which fits better with habitual behaviour. Computational skills was often linked to the difficulty in calculating the bills and was often linked to asymmetric information in the fact it was difficult to obtain the information required to know if you to switch. There was also a substantial emphasis in responses on how there may be asymmetric information making it difficult to obtain the information to know you should switch.

Most responses started with a definition of either rational or irrational behaviour. Some of the best responses explained why you would switch if you could save £200 and how utility could be gained by spending the money customers would save. As well as the reasons outlined earlier there as some interesting discussion of how some providers brand and advertise to keep customers and how loyalty schemes are used. There was also some strong work on how the £200 saving maybe a small proportion of the bill or of income meaning they do not need to switch. Some also questioned the reliability of the switching process and how this might put customers off. Where students did best they would identify the reason and analyse this by explaining how it leads to people not switching. The best responses really focused in on issues relevant to energy such as the complexity of the bills, the fixed term contracts and the activities undertaken to keep customers loyal.

Evaluation was often more limited compared to the quality of knowledge, application and analysis shown. Commonly evaluation focused on the fact that the situation was likely to improve. This was linked to businesses having to make it easier to understand the bill or compare the tariffs and to websites that make price comparison easier. Some linked to magnitude and the size of the £200 saving compared to the bills paid. They often looked at how people might not switch short term but may do so in the long term due to contracts coming to an end. Some made the points that in fact 50% have switched. Evaluation once gain was best when the point was made and developed in the context of the question.

Candidate response

Rational consumers are people who tend to maximise utility subject to their budget constraint. The UK consumers behaved irrationally by not switching to other gas and electricity suppliers even though they saved £200 per year by switching. This was because of hearding, poor computation skills, habitual behaviour and framing and bias.

Hearding is behaving according to what people say. As people say they don't use other gas suppliers because their service is poor also other people will not shift because of hearing this.

Habitual behaviour is the automatic and routine behaviour that feels comfortable and rewarding. As people use same energy suppliers throughout they get comfortable with this behaviour and therefore don't shift to other suppliers in UK despite the fact that they can save £200 every year. This makes the 50% of the

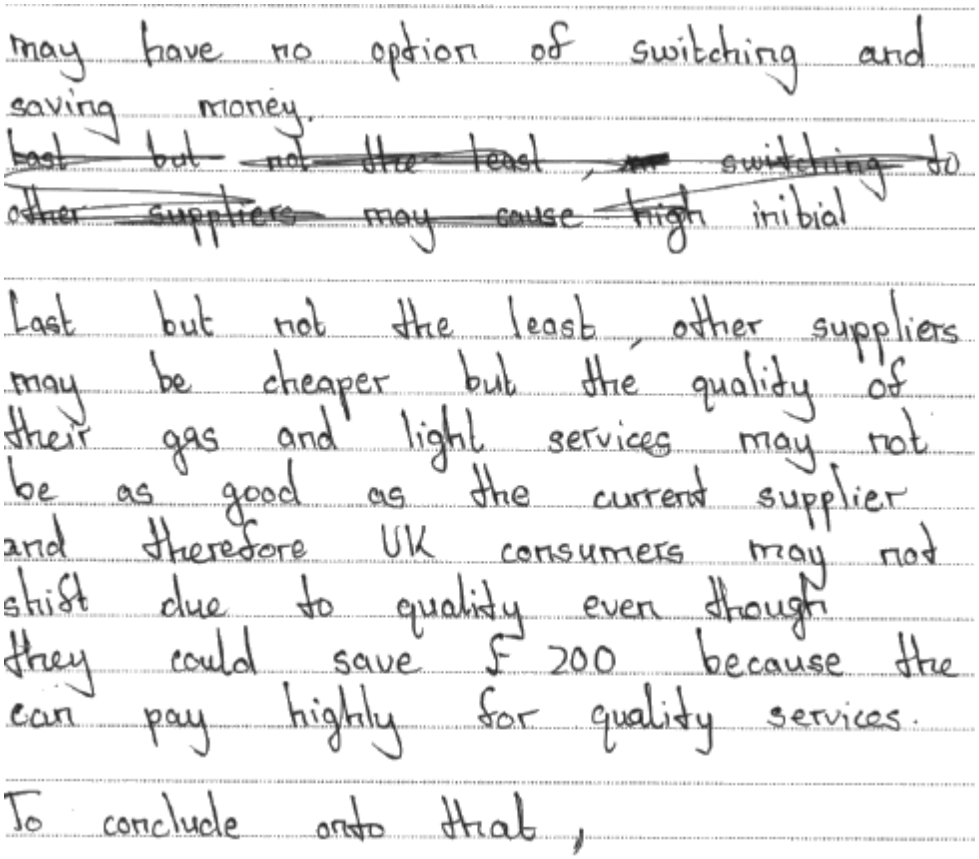
UK citizens irrational

Moreover, UK citizens may not switch energy suppliers due to poor computation skills. Some people in the UK may not be able to calculate whether they could save money by shifting therefore they stick to the same supplier.

In addition, framing and bias may cause UK consumers not to shift. This may be because the energy supplying company advertises its product by a celebrity and therefore people think they use the same energy supplies as the celebrity and therefore they don't shift. even though they can save £200 each year.

However, UK being a developed economy more of the citizens are likely to be educated and have better computational skills therefore may have switched to other energy suppliers in UK.

Moreover, some energy suppliers ~~may not be supplying to all areas in UK~~ that are cheap may not be supplying to all parts of UK therefore some consumers



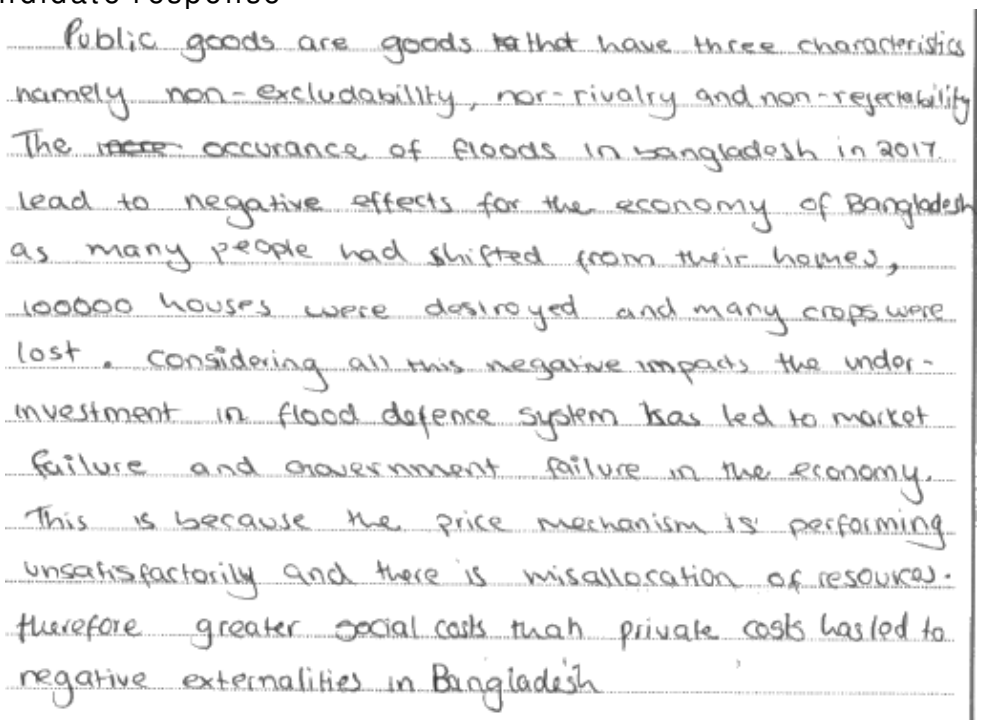
Principal Examiner's commentary

They start by showing knowledge of rational consumers in terms of maximising utility. They list a range of reasons and then go on to develop each. Herding is explained but the detail offered is brief so lacks analysis. Habitual behaviour is marginally better explained. Poor computation is again explained. No real explanation as to why they are poor at computation is offered. Generally the work could be placed in more context as the discussion could be talking about any market. There is an attempt in the work on advertising to put it in context but this is not strong.
For knowledge, application and analysis they have been awarded Level 2. They show elements of knowledge and understanding. There is only a limited attempt to link to the context of the question. The analysis is limited. The quality of the application and analysis limits them to the bottom of the level. They score 4/12.
They offer a series of evaluation points. The first looks at the UK citizens likely to have better computational skills making them more likely to switch. This was credited as there is an attempt to consider the context linked to the UK education system. There is an awareness that the cheaper deals may not be offered in all areas. They argue that there may be a difference in the quality of the goods provided. It is unlikely that the gas supplied would be any different in quality but the customer services may be. They were given credit for this. The evaluation is Level 2. They consider alternative approaches, offer some supporting evidence and there is a partially developed chain of reasoning. Further context and development would help improve further. They score 4/8.
4+4=8/20

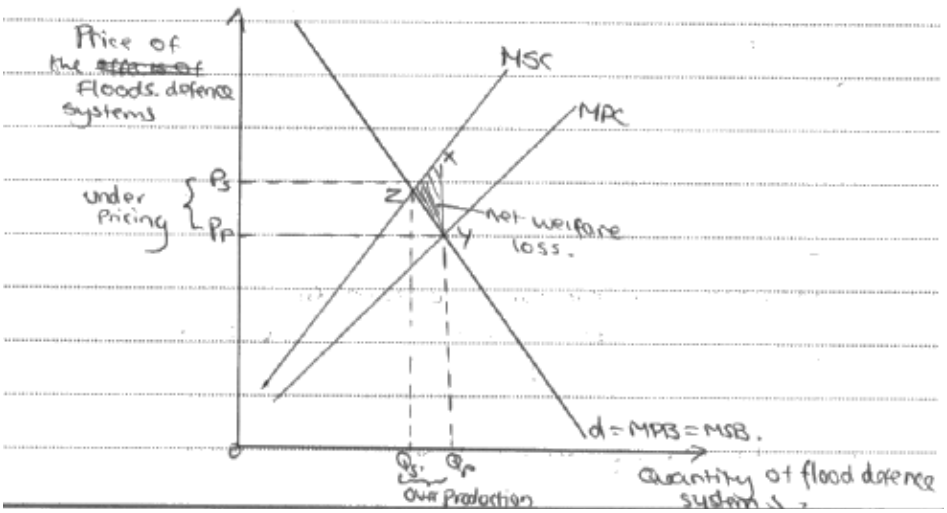
Question 14

Candidates typically started by defining public goods. The candidates would then explain why flood defences was non-excludable and no-rival. I was particularly pleased to see the numbers being able to explain the free rider problem in the context of flood defences. Where they went on to link this to why they cannot make a profit from it and why the private sector would not provide it enables candidate to perform well. Many good responses understood the context of Bangladesh and considered a lack of tax revenues, poorly managed funds, the low-income nature of the country, the lack of technology and engineers all contributing to limited spending on public goods.
Evaluation tended to be less good compared to the knowledge, application and analysis offered. Evaluation tended to focus on how information could be provide by the government to correct the information gap. Many discussed the difficulty in estimating the required amount of flood defences. The most common response focused on the opportunity costs. Others simply commented that the weather and floods are hard to predict so it in unlikely that the correct level of flood defence could ever be decided.

Candidate response



Public goods are goods ~~ta~~ that have three characteristics namely non-excludability, nor-rivalry and non-rejectability The ~~occ~~ occurance of floods in bangladesh in 2017 lead to negative effects for the economy of Bangladesh as many people had shifted from their homes, 100000 houses were destroyed and many crops were lost. considering all this negative impacts the under-investment in flood defence system has led to market failure and government failure in the economy. This is because the price mechanism is performing unsatisfactorily and there is misallocation of resources. therefore greater social costs than private costs has led to negative externalities in Bangladesh



First and foremost, the reason as to why there is under-investment of flood defence systems is because of the free rider problem. This is when the consumers are willing to consume the goods but none is willing to pay for them Therefore the government is the only way public goods such as flood defence systems could be implemented in bangladesh as private firms won't invest since they will not earn profits from the provision of such services.

Moreover, Bangladesh is a low income country and therefore funding expencive flood defence systems will be a challenge for bangladesh's government and therefore they would ~~prefer~~ not prefer implementing the defence systems which will lead to a under investma in the flood defences.

In addition to that, since implementing such systems in a country are very expensive it would be very costly for bangladesh and therefore they would prefer concentrating on the improvement in the production of its goods and services and encouraging economic growth of their country

Furthermore, Bangladesh is located in the floodplain of three rivers in india and this rivers provide fertile and, water for irrigation purposes and other useful activities that help bangladesh ~~can~~ boost its economy Therefore the implementation of flood defence systems will lead to loss of fertile land and loss of water

for irrigation purposes as the river banks will be widened and ~~this~~ with the heights of the banks will be increased. This will lead to farmers losing land for crops and therefore poor living standards for bangladesh citizens. Thus there is underprovision of flood defence systems.

However, Bangladesh could improve this ~~flood~~ by borrowing international funds for the flood defences. As the government would prefer safety of their people rather than destruction of the country due to floods. ~~Now~~ And also the costs of repairing the country after occurance of floods are greater than those of providing flood defences. Thus helping to increase the flood defences in the country.

The government could also increase the level ~~number~~ of symmetric information inorder to help in reducing the causes of floods in the country which will help the government to provide sufficient flooding systems in the country. as there will be less destruction caused due to flooding.

In conclusion bangladesh government should implement such defences and ensure there are no extra costs incurred with such measures

Principal Examiner's commentary

The start of the response accurately defines public goods. On the first page they discuss some of the negative impacts of the flooding but this is not answering the question. The discussion of negative externalities is not answering the question. The diagram is not credited.
On the second page they consider the free rider problem in that people will consume without paying. They link this to private firms not earning profit from the provision. A second credible reason offered is the fact Bangladesh is a low income country so funding flood defence will be a challenge. This is linked to them having other priorities in the paragraph that follows. There is an argument about the land being used for production and not wanting to give this up to flood defences. For knowledge, application and analysis the candidate has two strong arguments linked to the free rider problem and the nature of the Bangladesh economy. They achieve Level 3. They demonstrate accurate knowledge of economic terms and concepts. They are able to apply this to Bangladesh and why it may not have flood defences.

The analysis is developed. There is some unfocused discussion. They are awarded 8/12.
On the third page they offer evaluation. Firstly looking at being able to borrow to fund flood defences. They consider how better information may help reduce the causes of floods. Overall the quality of the evaluation is weak. The points are not well developed and focused on answering the question asked. Evaluation is awarded Level 1- 3 marks.
Overall 8+3=11 marks.

Paper summary

Based on their performance on this paper, candidates are offered the following advice:

Section A: Multiple Choice

- On PPF diagrams candidates need to understand that where the movement goes beyond the PPF it is unobtainable. This misconception meant many selected C in error.
- There is still some confusion between market failure and government failure which lead to a number of candidates selected B to D on question 3. Key for government failure is that candidates understand that it is where the government intervenes and leads to a worse outcome.
- Being able to identify and calculate the area of consumer incidence of the subsidy was a challenge for many and something centres should focus on in teaching. Many seemed to identify the producer incidence in error.
- It is important that candidates can identify how the price elasticity of demand varies along a demand curve. It may also be beneficial that they can not only identify the PED value but the different names that might be used including perfectly inelastic, unitary elastic and perfectly elastic.
- The distractor on price elasticity of demand caught too many out given the question clearly identified it was income elasticity of demand.

Section B: Short Answer Question

- Candidates generally understood that an indirect cost leads to a leftward movement of the supply curve. However, they need to be able to pick up that where it refers to a percentage change it is ad valorem and the curve needs to pivot and not shift.
- When asked to a draw a diagram all marks can be achieved through the diagram and no written explanation is required. The majority supported there response with a written explanation when in fact the diagram had achieved full marks.
- It is however worth noting that credit was given for a relevant definition on the draw question.
- A number of candidates drew more than was needed on the diagram for example identifying the tax revenue, or consumer or producer incidence.
- Whilst candidates were able to define division of labour and identify benefits to access both knowledge marks they often struggled to

access full application marks. They needed to talk about the division of labour in the context of car production. For example, how having one person paint cars they will not need to change tools and this will save time improving productivity.

- Candidates need to know how to define free goods and economic goods. Many confused these and offered definitions of public goods.
- It is worth giving examples of free goods and to get them to explain why they are free goods in terms of abundancy and there being no opportunity costs. This should also be done with economic goods.
- Question 10 caused significant problems. Practice this style of question with candidates and get them to make changes to supply and demand. Getting them to identify the old and new equilibrium will be useful. For some this was clearly an unfamiliar style of question and caused many a significant problem.
- Candidates need to pay attention to producer surplus and consumer surplus as many identified them the wrong way round on question 11.

Section C: Data Response

- Where candidates have to decide the elasticity of demand or supply it would be useful to define the relevant elasticity- elastic or inelastic.
- When asked to refer to two sources, for example in 12c, there will be marks available for making explicit reference to information from each source.
- When data is presented in the question for example in 12c to $2000 explaining that the price fell to $2000 would not be credited. Making reference to the price that it was previously would be rewarded.
- 12c required analysis and many struggled to access the second analysis mark. It is the need to analyse what causes the price to rise that is needed.
- When identifying the external costs it is important to explain who the third party is and how these are affected.
- In the 8 mark question there are two evaluation marks available. These can be accessed through making two evaluative comments or by developing one evaluation point.
- Candidates need to careful to read the questions carefully, in 12e a number answered a question about the introduction rather than about the reduction in the minimum price.
- When drawing the required diagram in 12e candidates did best where they annotated all the changes in the quantity supplied, quantity demanded and the surplus before and after the reduction. Key to access Level 3 was a requirement to use the diagram explicitly in the written explanation of the impact of the minimum price.

Section D: Essay

- Define the key terms relevant to the question
- Diagrams were not helpful in the particular essays set. This does not mean that diagrams will not be needed in future series.
- It is important to talk about at least 2 reasons in the questions as the question set is plural.
- Many candidates in fact looked at very many more reasons but what they gained in breadth they lost in depth as they did not move

through to access the analysis marks. Key is to analyse how the reason leads to either consumers not switching or flood defences not being provided.

- Candidates that did best were able apply to the specific question and use relevant examples that fitted with the energy market or Bangladesh.
- Evaluation points should be made and linked to the context of the question. These should have a chain of reasoning or sufficient development to be able to achieve Level 3.
- To achieve Level 3 for evaluation in the essay it is necessary to include an informed judgement.

Grade Boundaries

Grade boundaries for this, and all other papers, can be found on the website on this link:
http://www.edexcel.com/iwantto/Pages/grade-boundaries.aspx