Examiners' Report

Principal Examiner Feedback

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Pearson Edexcel International Advanced Subsidiary
In Economics (WEC11)
Unit 1: Markets in action

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Introduction

This is the sixth series where this unit, Markets in Action (WEC11), has been assessed and it is the third January series. There were significantly more entries this January than in the previous January. Once again there were many cases where the standard of work has been impressive. Equally there were examples where learners struggled to perform consistently across the paper.

In Section A, the multiple-choice section, Q1 was on government failure. Most could correctly identify that the new environmental regulation leading to excessive administration costs was the example. A common error was to select speculators causing market bubble which is an example of market failure and not government failure.

On Q2 learners needed to identify that an economy with both government and price mechanism allocating resources was mixed. The mean score on this question was highest.

Q3 tested understanding of a forward market. It was a question that many did not identify the correct answer. Copper was the correct answer. The specification clearly identifies that financial markets role includes to provide forward markets for commodities. Copper being an example of a commodity. Perhaps more work with students on the types of items forward markets exist, which also includes currencies. A regular incorrect answer was houses which do not have a forward market.

Q4 was also a question that learners found challenging. Learners were provided with a table with glasses of milk and total utility. The correct answer was B in that diminishing marginal utility sets in at the fourth glass of milk. This is because the marginal utility falls to 2. Before this the marginal utility was 3. Many incorrectly selected C which is where decreasing returns have set-in but it was the previous glass where diminishing marginal utility occurs.

Q5 was a question many performed well. Most correctly identified that the diagram illustrated excess supply when a minimum price was introduced. Some incorrectly selected excess demand at Q_1Q_2. As can be seen the quantity supplied as at Q_2 and the quantity demanded at Q_1, thus excess supply exists.

For Q6, learners were provided with data on the estimated income elasticity of demand. The majority were able to calculate that a 5% increase in income lead to a 2.4% increase in demand. They multiplied the 5% by the income elasticity of demand (+0.48) to calculate the percentage change in demand. A and B were often selected but were wrong as the demand would increase in response to the increase in income as the YED (income elasticity of demand) was positive. For D the percentage change shown is correct but being an inferior good means demand would decrease in response to the 5% increase in income.

Section B, the short answer section, saw students able to access marks on most questions.

Q7, required the drawing of a diagram only, many however wrote at length. All marks are available for the diagram. Students were explicitly asked to draw an externalities diagram, so it was a surprise to a see so many supply and demand diagrams being drawn. It was also common to see external costs of production diagrams being offered. This is despite the example linking to the underconsumption of vaccinations. About half of students did not draw an external benefits diagram. Those that did draw an external benefits diagram did not always draw MSB (marginal social benefit) above MPB (marginal private benefit) although they could gain credit for clearly identifying the market equilibrium. When MSB was drawn above MPB most clearly identified the market equilibrium and social optimum quantity and price. Many frequently drew the welfare gain triangle. The mark that a significant missed out on was clearly identifying on their diagram the underconsumption which they were asked to show in the question.

Q8, required an explanation of what was meant by 'external costs of production'. Most could offer a definition of external costs with most referring to negative impacts on third parties for half the available marks. Pleasingly most referred to data in the table to identify the external costs in terms of identifying the quantity of greenhouse gases for one of the meats. Where learners struggled was in explaining what the external costs would be. That is few identified global warming or rising temperatures or rising sea levels that greenhouse gases might cause.

Q9, gave an example of where a group were offered health insurance and ended up visiting hospital more often than the group without health insurance. Learners were expected to explain why this was an example of moral hazard. It was pleasing how many understood that moral hazard occurs as the costs of persons actions are incurred by another economic agent. Most could identify from the data the result of the moral hazard in that insured had far more hospital admissions and emergency department visits. The two analysis marks were not as likely to be achieved. Better responses could explain that the health insurance means that people take more risks and get injured more often as they know that the health insurance will cover the costs.

Q10, involved calculating cross elasticity of demand and pleasingly the vast majority achieved full marks. A common error was to offer definitions of PED (price elasticity of demand) or YED (income elasticity of demand) and to divide rather than multiply the two numbers.

Q11 needed learners to explain the effect of the increase in the price of palladium on producer surplus. The majority were able to draw a diagram and show the original producer surplus. Many shifted supply on the diagram so could only gain one mark for the original producer surplus. Those that shifted demand correctly to the right and showed producer surplus before and after could access 3 marks. It was surprising how many did not offer a definition of producer surplus and many that did were not precise enough in the definition.

Section C, the data response section is based on information provided in the source booklet. The Extracts focused on the markets for oil and electric cars.

Q12a, asked for a definition of 'renewable resources', most made reference to one element of renewable resources. Only the best added the second element. Most made reference to the resource being used again and again, it being naturally replenished and not running out. It was also common to pick up the second mark by making reference to the example from the Extract, hydroelectricity. Other examples of renewable resources not in the Extract were not rewarded. The majority were able to achieve full marks.

Q12b, asked learners to explain what is meant by the term 'rational decision'. Most could accurately define rational decision making by identifying that consumers maximised utility. Many were able to identify the rational decision, to buy the electric VW Golf. Where students struggled was to identify why this was rational. Those that did tended to say that with the money saved from paying less on the car or fuel they will be able to gain utility by buying other goods and services to gain utility from.

Q12c, required learners to explain why the price of oil fell. Most could draw a diagram showing the original equilibrium. Many then shifted demand correctly to the left and gave the reason in terms of government restrictions or less need for transport. These responses were awarded three marks.

Many did not offer the second reason that is the supply factor which needed linking to Saudi Arabia and Russia increasing production. A significant number drew a second diagram and failed to achieve the final equilibrium as they had shifts on separate diagrams. It was surprising that a number failed to shift supply in the correct direction with many incorrectly drawing supply shifting to the left.

Q12d, asked students to examine the likely effects of high levels of indirect taxation on diesel and petrol in India. Most learners looked at two likely effects as requested in the question. It was common for learners to draw a diagram to show the impact on price and quantity. There were some good responses that explained the impact on the environment as quantity consumed falls. There were also some good attempts to explain how demand for petrol and diesel cars would fall and the demand for electric cars would increase. Evaluation was often focused on the fact the demand for petrol and diesel were highly inelastic meaning any change in quantity will be small and the large proportion of the price this makes up and how this results in only a small change in the price of petrol and diesel.

Q12e, a discussion of the effects of a subsidy for electric car manufacturers. Most could define key concepts, draw relevant diagrams and identify relevant effect in terms of on price, quantity, consumer and producer surplus and on government spending. Evaluation often focused on only 9 cars qualified limiting its impact. They also considered the lack of charging infrastructure limited the viability for many. The final common consideration was electric cars still generation emissions in electricity production and the energy producing the batteries.

Section D, the essay section offered students the opportunity to choose between two questions. Learners were significantly more likely to attempt Q13 than Q14. Approximately 15% opting for Q14. Learners tended to perform better on Q13 on why consumers may behave irrationally than on Q14 on why the supply of gold is price inelastic.

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

The performance on individual questions is considered in the next section of the report.

The feedback on each question shows how they were well answered and also how to improve further.

Section B

Question 7:

Learners were required to draw a diagram to illustrate the underconsumption of vaccinations. This required the drawing of an externalities diagram, specifically an external benefits of consumption diagram. Often students drew supply and demand diagrams or external costs diagrams. Only the latter was rewarded when the market equilibrium was clearly identified. Some that did draw MPB and MSB incorrectly had MPB above MSB. Those that correctly draw MSB above MPB did not always clearly identify the market equilibrium and social optimum and this was required. Some did manage to draw the welfare gain triangle to gain a mark. When students were unable to achieve the full marks, it was the omission of the underconsumption being labelled.

Many students continue to include extended writing defining terms and explaining the diagram. All the marks can be achieved through the diagram. A significant number did describe the market equilibrium quantity and price and the underconsumption in the write up and this was rewarded.

Question 8:

The question had a table with greenhouse gas emissions associated with 1kg of three different meats. Definitions of external costs were generally excellent with the most common response offered that these are negative impacts on third parties. Most could also identify relevant information from the table with many pleasingly explicitly using the numbers in the table for example, 60kg of greenhouse gases for beef. Where learners struggled was to explain the external costs associated with these greenhouse gases. Those that did made a connection to global warming, rising sea levels or rising temperatures. A well answered question.

Question 9:

The questions tested the understanding of moral hazard. It was not unusual for the questions to be left blank as the concept was clearly a challenge for some. Many defined moral hazard as being where the costs of any action by the consumer are incurred by another individual. Most could also identify that those with the insurance were more likely to end up with hospital visits and admissions. Learners often found it difficult to explain why they have more visits. Those that did this successfully explained that as people had the insurance, they knew that if they had an accident and ended up in hospital the health insurance policy would pay so people were willing to take more risks.

The concept of moral hazard is clearly a concept that needs some attention in the classroom. Giving examples where this problem exists including insurance and banking as listed in the specification would be useful.

Question 10:

The calculation question linked to the cross elasticity of demand, where students had to multiply the percentage change in price of coffee by the cross elasticity of demand to calculate the percentage change in the demand for tea. The question saw most students frequently access full marks. As soon as the correct answer was seen the full 4 marks were awarded. It was pleasing how many times this was achieved.

However, some did not arrive at this answer. Many offered the wrong formula. Others divided the percentage change in price of coffee by the cross elasticity of demand in error.

Question 11:

The stem of the question explained that the diesel scandal led to an increase in demand for palladium which is used in petrol engines. Learners needed to explain the effect of the increase in the price of palladium on producer surplus. The majority accurately drew a diagram to show the original producer surplus. Those that correctly shifted demand to the right gained a mark. Those that showed producer surplus before and after could access 2 further marks. It was surprising how many did not offer a definition of producer surplus and many that did were not precise enough in the definition.

Section C

Question 12(a):

Students could typically access at least one mark on Q12(a) to show knowledge of renewable resources. Most made reference to one element of renewable resources. Only the best added the second element. Most made reference to the resource being used again and again, it being naturally replenished and not running out. It was also common to pick up the second mark making reference to the example from the Extract, hydroelectricity. Other examples of renewable resources not in the Extract were not rewarded. There were very few who defined non-renewable resources in error. One common response was to say that renewable resources are renewable. Repeating the term alone is not enough. It would be better to make reference to what renewable means.

Question 12(b):

Learners were asked to explain what is meant by the term 'rational decision'. Most could accurately define rational decision making in terms of consumers maximising utility. Many were able to identify the rational decision, to buy the cheaper electric VW Golf. Where students struggled was to identify why this was rational. Those that did tended to say that with the money saved from paying less on the car or fuel they will be able to gain utility by buying other goods and services to gain utility from. It was not good enough to just say that the electric car was cheaper, so they have more utility.

Question 12(c):

The question required learners to explain why the price of oil fell in 2020. Most could draw a supply and demand diagram showing the original equilibrium price and quantity. Many then shifted demand correctly to the left and gave the reason in terms of government restrictions or less need for transport. These responses were awarded three marks. Some moved this to four marks by using the data to show the change in price during this period or by identifying the supply factor.

To access full marks the supply factor which needed linking to Saudi Arabia and Russia increasing production. If they shifted supply to the right and drew the final equilibrium, they accessed full marks. A significant number drew a second diagram and failed to achieve the final equilibrium as they had shifts on separate diagrams. It was surprising that a number failed to shift supply in the correct direction with many drawing supply shifting to the left. Once again finishing up at the wrong equilibrium.

Question 12(d):

This question asked learners to examine the likely effects of high levels of indirect taxation on diesel and petrol in India. It was surprising that many failed to achieve the application marks. Those that did made reference to the indirect taxation making up almost half of the price of petrol and diesel and that the significant fall in the global oil prices only resulted in a 7% decrease in the price of petrol and diesel. Most learners looked at two likely effects as requested in the question. It was common for learners to draw a diagram to show the impact on price and quantity. Most shifting supply accurately to the left. Better students also used this to show the government revenue or producer and consumer incidence. There were some good responses that explained the impact on the environment as quantity consumed falls. There were also some good attempts to explain how demand for petrol and diesel cars would fall and the demand for electric cars would increase.

It is important to understand that for each reason there is a mark for the identification and then a mark for the development of this in terms of analysis. Many gave two reasons but then offered a long chain of reasoning. There are only up to two marks for the development of each reason. This becomes an issue for learners completing the paper as they are spending too long on this question.

Evaluation was often focused on the fact the demand for petrol and diesel were highly inelastic meaning any change in quantity will be small and the large proportion of the price this makes up and how this would result in only a small change in the price of petrol and diesel. When offering evaluation learners can either develop one evaluation point or offer two evaluative points.

Question 12(e):

Required a discussion of the effects of a subsidy for electric car manufacturers in Canada. Most could define key concepts in terms of the subsidy. Most could draw a relevant diagram; this was a requirement of the question. It was only possible to access the top level for knowledge, application and analysis if a diagram was included. Better students drew the diagram and then in the written explanation they referred to specifics within the diagram to help explain their points. Most explained relevant effects in terms of on price, quantity, consumer and producer surplus and on government spending. Evaluation often focused on the fact that only 9 cars qualify which might limit its impact. They also considered the lack of infrastructure in terms of charging stations limiting the viability of electric cars for many. The final common consideration was electric cars still generate emissions in electricity production and in the energy used to produce the batteries.

Section D

Question 13:

For Q13 most defined irrational behaviour accurately. Most could identify multiple reasons and offer some analysis as to why the reason leads to irrationality. It was the development of the analysis which was often more limited. The stem gave the example of people not switching electricity suppliers and the majority of learners used this example through their work although it was fine to give any other reasonable example where consumers do not behave rationally. The stem identified that 30% do not switch because of the effort required and most successfully linked this to inertia. The stem also identified that 22% do not switch because they lack the necessary information with many linking to information gaps and an inability to calculate the benefits of switching. Other common responses linked to the influence of others behaviour and habitual behaviour.

The evaluation offered often linked to the fact high income earners would find AUS$1 000 a small proportion of their income, so not worth the effort. Others looked at the fact the quality of service may be more important than price or that loyalty schemes may be in place. Others identified that over time consumers may realise the benefits of and change electricity supplier.

Question 14:

A less popular question with many struggling to perform well. Learners tended to use the data about the change in price and the fact that it had limited impact on quantity supplied. Better responses actually attempted to calculate the price elasticity of supply. Most were able to offer a number of reasons as to why it was inelastic. Common reasons offered included the time it would take to set up a mine, the lack of mobility of factors of production, legal constraints in setting up mines and only 10 countries supplying gold. Evaluation was often limited but common evaluative arguments included the availability of stocks, new technologies and how over time the elasticity becomes more elastic.

A significant number did not put an x next to the question they had selected. It is helpful if students remember to put an x in the box of the question they select. It is also helpful if they change their mind to change the selected question by putting a line through the incorrect question number and replacing the question attempted.

Paper Summary

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

Section A:

Multiple Choice Questions

- Forward markets were not well understood with few accessing the mark. Learners need to know what a forward market is and in what markets it is used in terms of commodities and currencies. Ensuring learners know examples of commodities is useful.

- The topic of diminishing marginal utility was challenging for many with many identifying where decreasing marginal utility occurs rather than where diminishing marginal utility starts.

Section B:

Short Answer Questions

- When asked to a draw a diagram all marks can be achieved through the diagram and no written explanation is required. The majority of learners supported their response with a written explanation when in fact the diagram had achieved full marks.

- Q9 on moral hazard was challenging for many. Whilst some could define moral hazard and give an example of it related to the stem many struggled to offer analysis that is why did those with the health insurance end up in hospital more often.

- In Q10 it is important to offer a precise definition of the term. Many omitted this altogether

Section C:

Data Response

- On Q12(b) students need to explain why buying the cheaper alternative helps maximise utility. That is the money they save can be used to purchase other goods that add utility for the person.

- On Q12(c) students needed to show shifts in both supply and demand and it is important that they look for both on questions that ask them to analyse why prices change. The question asked them to analyse two reasons, so they need to look at two reasons. One of which links to increased supply and the other to falling demand.

- On Q12(d) two pieces of information from the Extract needed using and many missed these marks.

Section D:

Essay

- Define the key terms relevant to the question.

- Diagrams should be drawn where helpful and many students successfully incorporated a diagram to show lower demand when there is missing information or inelastic supply diagrams were rewarded. Stronger responses utilised their diagram to explain their points.

- It was common on Q13 for learners to consider many examples of why consumers act irrationally. It is better to look at fewer in more detail than to look at many in limited detail.

- Too frequently students make reference to policy solutions. For example, in the question on why consumers do not make rational decisions many said the government could provide information, but this does not answer the question on the reasons consumers are irrational.