

Mark Scheme (Results)

Summer 2015

Pearson Edexcel GCE in Economics (6EC01) Paper 01

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General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

NB: candidates may achieve up to 3 explanation marks even if incorrect key is selected.

NB: candidates may achieve up to 3 marks for explaining three incorrect options (provided three different reasons are offered and each option key should be explicitly rejected).

Question Number	Answer	Mark
Q1	Answer C (1 mark)	(4)
	 Definition of opportunity cost (the value of the next best alternative foregone). (1 mark) 	
	 Definition of production possibility frontier (maximum output combinations an economy can achieve when all resources are fully / efficiently employed). (1 mark) 	
	 Explicit use of figures: constant opportunity cost of 1 capital good to 1.5 consumer goods (accept variations of this such as 20 capital goods forgoes 30 consumer goods OR 1 consumer good forgoes 0.66 capital goods) / Accept reference to the gradient / straight line being constant and so indicating a constant opportunity cost. (1 mark) 	
	NB: this may be shown by annotation of the diagram NB: no marks available for definition of economic growth	
	Rejection marks > Option A is incorrect since the opportunity cost of 90 consumer goods is 60 capital goods. (1 mark)	
	Option B incorrect as the rate of economic growth will increase since there are more capital goods. NB: Must refer to an increase in capital goods. (1 mark)	
	 Option D incorrect since moving to point Z means there are less consumer goods available for the current period and so living standards will fall. (1 mark) 	

Question Number	Answer	Mark
Number Q2	 Answer B (1 mark) Explicit reference to the data depicting the fall in price of gold e.g. \$1,730 per ounce to \$1,290 per Troy ounce (accept approximate figures) (1 mark) Demand and supply diagram depicting an increase in supply / and original and new equilibrium for price and quantity (1+1 marks) OR A written explanation that the central banks sale of gold will increase the supply curve and pushing price down / development such as the release of gold 	(4)
	reserves has caused excess supply in the market. (1+1 marks) Price gold \$ Pe P1 Qe Qe Quantity	
	 Rejection marks Option A is incorrect since an increase in demand for gold jewellery will increase the demand for gold, so price increases. (1 mark) NB: do not double award for rejection of options A and D Option C incorrect as increased costs of machinery will increase production costs for extracting gold, so price will rise / supply will shift inwards / left. (1 mark) Option D incorrect since speculative buying of gold will increase demand and increase its price. (1 mark) 	

Question Number	Answer	Mark
Q3	 Answer C (1 mark) Definition of producer surplus (the difference between the price firms are willing to sell the good for and the market price it is sold at / the area above the supply curve and below the equilibrium price). (1 mark) Original producer surplus is P1XK. (1 mark) The loss of producer surplus is P1P2YX. (1 mark) The original and loss of producer surplus may be shown by annotation of the diagram but they must be labelled correctly. NB: do not double award here. (1+1 marks) 	(4)
	Rejection marks Option A incorrect as P2JY is the new consumer surplus area. (1 mark) Option B incorrect as LXP1 is the original area of consumer surplus. (1 mark) Option D incorrect as 0P2YQ2 is the new area of total revenue or total expenditure. (1 mark)	

Question Number	Answer	Mark
Q4	Answer A (1 mark)	(4)
	 Definition of price elasticity of demand or correct formula (the responsiveness of demand for a good due to a change in price, or, %ΔQD ÷ %ΔP). (1 mark) 	
	 Correct calculations: 25% ÷ -10% = -2.5 (1+1 marks) 	
	NB : If the calculation shows 2.5 rather than -2.5 but the correct option key is chosen, award 1+1 marks. If the incorrect key is chosen then award 1 mark.	
	NB : if the two percentage change calculations are correct (25% and -10%) but are placed upside down in the overall formula, award 1 mark.	
	Rejection marks > Options C and /or D incorrect since there is a negative or inverse relationship between price and quantity demand / a positive relationship refers to price elasticity of supply. (1 mark)	

Question Number	Answer	Mark
	 Answer B (1 mark) Definition of income elasticity of demand or correct formula (the responsiveness of demand for a good due to a change in income, or, %ΔQD ÷ %ΔY). (1 mark) Definition of normal good / has a positive income elasticity of demand OR inferior good / has a negative income elasticity of demand (1 mark) Application to fruit and vegetables and / or processed foods; this may be in a numerical form (1 mark) Diagram depicting fruit and vegetables a normal goods OR processed foods as inferior goods (1 mark) Real income	Mark (4)
	NB: do not double award here	

Answer D (1 mark) Definition subsidy (government grant to firms to increase supply / lower price). (1 mark) The effect of the subsidy is to act like a decrease in production costs. (1 mark) Annotation of diagram or stating the area of consumer subsidy is PeP1VZ and producer subsidy PeP2WZ. (1+1 marks) The total subsidy is the unit subsidy P1P2 multiplied by total quantity P1V (1 mark). Price f Total subsidy Rejection marks Option A incorrect since this is the total area of revenue in market. (0P2WQ1) (1 mark) Option B incorrect since this is the area of subsidy for producers (P2WZPe) (1 mark) NB: do not double award Option C incorrect since this is the area of subsidy for consumers (P1VZPe) (1 mark) NB: do not double award

 Answer A (1 mark) Definition of a minimum wage (the lowest wage that workers can be paid / a wage or price floor for labour). (1 mark) An increase in the minimum wage could cause a decrease in quantity demand for labour / decrease in employment. (1 mark) An increase in NMW will increase incentive to work and raise supply of labour / unemployment. (1 mark) Correctly labelled diagram depicting the original minimum wage (as long as it is clearly labelled as a NMW or \$38) / and an increase in the minimum wage for garment workers (1+1 marks) NB: the original NMW may start at the market equilibrium price. Accept use of \$38 and \$100 per month minimum wage if placed correctly on diagram. (1 mark)
W ₂ W ₁ W _e Min wage 2 Min wage 1 O N ₃ N ₁ Ne N ₂ N ₄ Quantity

Rejection marks

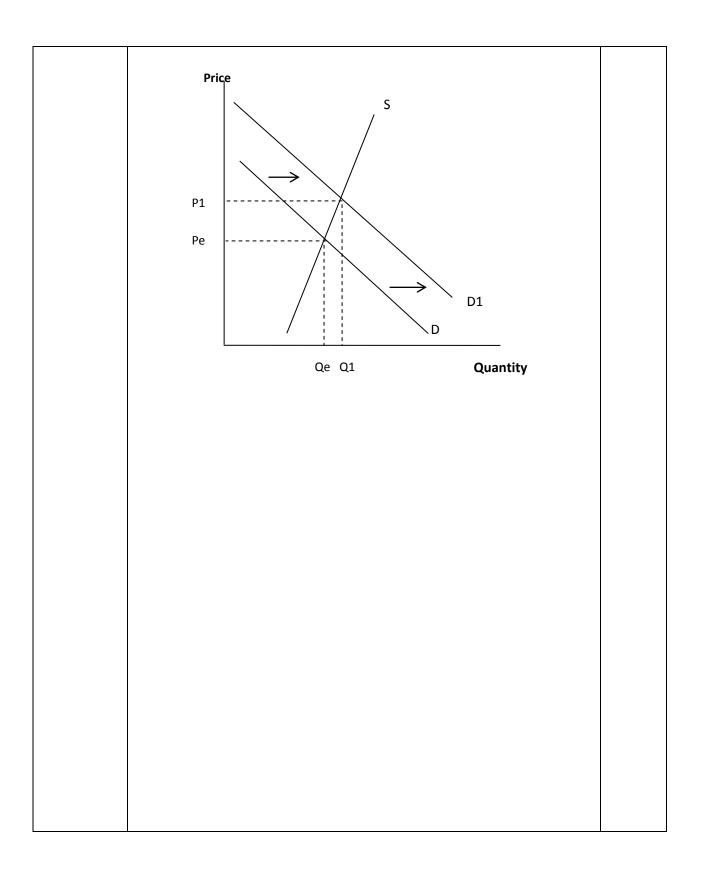
- Option B incorrect since the higher wage rate will provide an incentive for the supply of labour in the clothing industry to rise. (1 mark)
 NB: do not double award
- Option C incorrect since the higher wage rate will make it more expensive or less affordable for firms to employ labour in the clothing industry / replace with capital. (1 mark)
- Option D incorrect since higher wage rate will increase costs of production for clothing and less employment. (1 mark)

Question Number	Answer	Mark
Q8	Answer C (1 mark)	(4)
	 Definition of market failure: the price mechanism fails to allocate resources efficiently / leads to a misallocation of resources / leads to a net welfare loss). (1 mark) 	
	Definition of external benefits (benefits which the price mechanism fails to take into account / positive third party effects / benefits external to a market transaction / positive spillover effects from consumption / difference between private benefits and social benefits) (1 mark)	
	 Application to bus travel: external benefits include a reduction in road congestion / positive effects on environment as it may lead to less consumption of non-renewable resource). (1 mark) 	
	There may be under-consumption and under-provision of bus travel in an economy since social optimum output position exceeds the market equilibrium output position. (1 mark)	
	OR this may be shown by diagrammatic analysis depicting market quantity X and social optimum quantity Y / welfare gain or welfare loss or deadweight loss VRT (1+1 marks)	
	Costs/Benefits	
	Welfare gain VRT MPC=MSC	
	P _e MSB	
	0 X Y Quantity of bus journeys	
	 Accept supply and demand diagram showing a subsidy that attempts to correct market failure. (1 mark) 	

Rejection marks

- Option A is incorrect since this is the price mechanism operating efficiently to ensure demand equates with supply / profit motive for rail firms to raise price. (1 mark)
- Option B incorrect since government taxes on petrol help to reduce external costs and thus correct market failure associated with motor vehicle travel. (1 mark)
- Option D incorrect since loss making firms exiting the market show that the market is operating efficiently – there is a reduced incentive to supply if losses made. (1 mark)

Question Number	Answer	Mark
9(a)	 6 KAA marks Data reference to the increase in house prices such as 3.8% in the 12 months to August 2013 / average house price now at its highest ever level of £247 000. (1 mark) 	(6)
	 Identification of two reasons: sustained period of low interest rates / Government Help to buy' scheme or an increase in the availability of mortgages (1+1 marks). Also accept other reasons such as rising incomes / rising business confidence as economy recovers / increased purchases by foreign buyers. 	
	 Development of two reasons (2+2 or 1+3 marks). NB: do not double award for reasons which are the same, for example, more affordable property. 	
	Sustained period of low interest rates for borrowers: so monthly repayments are lower / mortgage repayments are more affordable.	
	Government 'Help to buy' scheme: it makes buying a property more affordable so enables people to borrow up to 95% of the value of the property / only need 5% cash deposit so easier to save up this money / banks are more willing to lend as the government guarantees up to 15% of the value of the house loan, so less likely to lose out from borrowers unable to repay.	
	Foreign buyers may purchase to diversify their assets / seen as a safe haven / long term investment.	
	 Award for diagram depicting an increase in demand for housing and a rise in price. (1 mark) 	



Question Number	Answer	Mark
9(b)	 4 KAA marks Reference to rising share prices (1 mark) Data reference e.g. all seven house builders experienced an increase in share prices / Persimmon has the highest share price rise / Berkeley Group experienced the lowest increase in share price of 29.6%. (1 mark) Higher revenue or profits or output for house builders. (1 mark) Long term investment in buying house builder shares (1 mark) Further development: for example, builders offer a higher dividend to shareholders / speculative buying of house builder shares / accept derived demand (1+1 marks) 	(4)

Question Number	Answer	Mark
9(c)	 6 KAA marks Definition or formula for price elasticity of supply (the responsiveness of supply of a good due to a change in its price or the %ΔQS ÷ %ΔP). (1 mark) 	(10)
	 Diagram showing price inelastic supply and / or price elastic supply, OR a written explanation of one of them (this could include the coefficient). (1 mark) 	
	 At least one factor input is fixed in the short run but all factor inputs become variable in the long run (1 mark) 	
	 Supply of new housing is likely to be price inelastic due to capacity / supply constraints (1 mark) since: 	
	Skills shortage in building following many people leaving the industry during the recession / difficult to get the skilled labour to build house e.g. plumbers, bricklayers, electricians, carpenters. (1+1 marks)	
	Building materials shortages such as bricks so difficult to get the materials to build housing / further development e.g. shortage of construction equipment or cement or timber. (1+1 marks)	
	Time required to build new housing such as many stages in production process / laying bricks tiling, roofing (1+1 marks)	
	 Securing planning permission / shortage of land to build on / green belt planning laws (1+1 marks). 	
	Evaluation (up to 2+2 or 1+3 or 1+1+2 marks) Note: candidates can take the view that supply is inelastic or elastic for KAA and the counterargument would be evaluation.	
	In the long run, supply is likely to be price elastic since: > Home Builders Federation point out that more people being trained / development of this point e.g. quality of trainees as still need experience on the job / plentiful supply of labour as unemployment is around 7% of workforce / discussion of immigration.	

- Home Builders Federation point out that brick making companies are re-opening brick plants / development of this point e.g. materials are being imported to alleviate shortages so they could be price elastic in short run.
- Danger of a property price bubble where house prices could crash in near future / this might make supply inelastic as firms reluctant to take risk of building more housing.
- ➤ The 'Help to buy' scheme is due to finish in 2016 and has limited funds available / so house builders might be reluctant to invest heavily into increasing capacity.
- Consideration of stocks of unsold new houses and so supply may be price elastic in short run / especially if recovery is slow.
- Consideration of regional differences in price elasticity of supply of housing.
- Consideration of different types of properties, for examples, flats and terraced housing, mansions, may have different price elasticity's of supply.
- Consideration of low interest rates and availability of credit for house building firms which could make supply price elastic.

Question Number	Answer	Mark
*9(d)	 8 KAA marks (3+3+2 or 4+4 or 2+2+2+2 marks) Data reference on average house prices in London (£437 000) and one other region such as the North East (£149 000). (1 mark). 	(14)
	 Accept use of a relevant demand and supply diagram with explanation. (1 mark) 	
	 Identification of up to four factors (1+1+1+1 marks) Extract 1 refers to London house prices rising rapidly due to purchases from foreign buyers. 	
	Differences in regional average earnings.	
	 Differences in regional unemployment rates / employment rates / in-migration. 	
	Differences in availability of land.	
	 Accept other factors, e.g. differences in wealth / immigration / cultural attractions. 	
	 Development of up to four factors Investment purposes of wealthy overseas buyers of property (and non-domiciles) in London which is regarded as relatively safe / spread their assets so less risk / immigration reason. (1+1+1 marks) 	
	Higher regional earnings mean people can afford to pay more for housing / so higher demand will push up average price / lower average earnings in some regions – so lower demand will mean lower average house price / housing is a normal good. (1+1+1 marks)	
	Lower regional unemployment rates may lead to higher regional house prices / due to stronger demand in the housing markets; the opposite occurs in regions with higher unemployment rates. (1+1+1 marks)	
	Availability of land in some regions is less than others where supply very limited average house prices will be higher / an explanation of green belt restrictions in London and South east. Also accept view of more availability of land in some regions. (1+1+1 marks)	

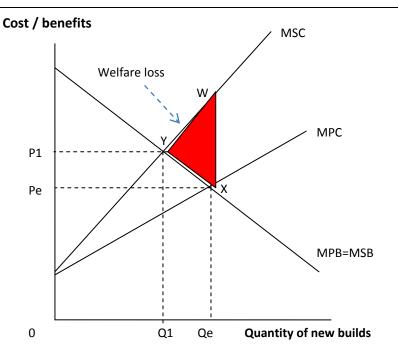
Evaluation (2+2+2 or 3+3 marks)

- Prioritise between the reasons offered, e.g. differences in the cost of land might be the major cause.
- Regional average earnings may not account for the differences in house prices. The disparities in regional earnings are significantly less than regional house prices / use figures (e.g. London to North East ratio of average earnings is 1.5 to 1; / but the ratio of average house prices is 2.9 to 1).
- Unemployment rates do not appear a significant determinant of regional house price differences / London's unemployment rate is above the national average.
- Time factor the major house building programme for south-east may reduce regional differences in house prices / ripple effect occurs where house prices will tend to increase outwards from London over time to the rest of the UK.
- Discussion of magnitude of the house price differentials / could be a combination of factors to justify the disparities.
- Geographical element could be involved. The further the region is from London the lower average house prices / this suggests access to London is major determinant of regional house price differentials.
- Discussion of variations in house prices within regions that might be greater than differences between regions.
- Quality of transport links influence the ability of people to commute to work across regions and impact on house prices.
- Data issues: more information required for example, regional wealth holdings / household earnings may be more appropriate than individual earnings / intraregional migration.

The quality of written communication will be assessed in this question based on the candidate's ability: To present an argument and conclude on the basis of that argument.

To organise information clearly and coherently. To use economics vocabulary appropriately. To use grammar, spelling and punctuation appropriately.

Question Number	Answer	Mark
*9(e)	8 KAA marks (2+2+2+2 or 2+2+2+1+1 or 3+3+2)	(14)
	Case for reducing carbon emissions from new- build homes include:	
	Data reference: for example more than 40% of carbon emissions in developed world are from buildings / cutting building emissions by 25% has same effect as removing cars from the roads so can make a big contribution to reducing pollution. (1 mark)	
	 To promote sustainable development or growth in use of renewable energy / improve quality of life and general environment. (1+1 marks) 	
	 To comply with government regulations or meet EU targets / this may reduce government expenditure on issues surrounding climate change in the long term. (1+1 mark) 	
	 To reduce market failure or external costs or benefits / definition of either concept / with suitable examples. (1+1 marks) 	
	Diagram (up to 2 marks) > Original market and social optimum equilibrium positions correctly labelled. (1 mark). > Shift of MSC curve downwards or MPC curve upwards. (1 mark) > Written explanation of diagram e.g. reducing carbon emissions means the social optimum position can be reached or moved towards in the market. (1 mark)	



- Note: Be prepared to award for an alternative approach which offers a positive externality diagram, referring to reduced use of fossil fuels and greater sustainability (up to 3 marks).
- Lower gas and electricity bills: the extract refers to the initial costs of reducing carbon emissions being paid for within 5 years / with development. (1+1 marks)
- Increase in value of property / development of this point e.g. better energy efficiency rating could make it easier to resell property. (1+1 marks)
- Employment creation in renewable energy sector / for example, triple glazing of windows, efficient energy boilers or solar heating. (1+1 marks)

Evaluation 6 marks (2+2+2 or 3+3 marks)

- Initial costs of energy efficiency schemes are high / so many households might not be able to afford to implement / discussion of who pays for energy efficiency schemes for social housing.
- House builders may pass on extra costs to buyers in the form of higher prices / depends on price elasticity of demand / house builders costs may increase and profits fall.

- Energy efficiency schemes may require government subsidies to be effective / implications for government borrowing and taxation.
- The scheme should be regarded as just one of many schemes required to tackle global warming and its associated problems / prioritisation.
- Difficult to measure the reduction in carbon emissions and external costs of the scheme / the level of success is difficult to work out / asymmetric information.
- The scheme is likely to have little impact unless other countries undertake similar measures to reduce carbon emissions for example China.

The quality of written communication will be assessed in this question based on the candidate's ability:

- To present an argument and conclude on the basis of that argument.
- To organise information clearly and coherently.
- To use economics vocabulary appropriately.
- To use grammar, spelling and punctuation appropriately.

Question Number	Answer	Mark
	4 KAA marks Explanation of positive statement: factual statement / can be tested as true or false / based on scientific or objective approach to the subject. (1 mark) Data reference to the title of Extract 1: a positive statement since possible to test whether London Crossrail is Europe's largest infrastructure project (1 mark). Explanation of normative statement: value judgement / cannot be tested as true or false / based on a non-scientific or subjective approach to the subject. (1 mark) NB do not accept use of term 'opinion'. Data reference to title of Extract 2: a normative statement since it refers to the term 'unfair'. (1 mark).	Mark (4)

Question Number	Answer	Mark
	6KAA marks Definition of occupational mobility of labour (the ability of labour to switch from one occupation / job to another occupation / job in order to take available work). (1 mark) NB: accept correct definition of occupational immobility of labour as an alternative approach. Example of a worker changing occupations, for example, a plumber becoming an electrician. (1 mark) Training reduces structural unemployment. (1 mark) Training programmes are likely to increase the occupational mobility of labour since:	(6)
	 An increase in skills or qualifications or human capital / so labour become more employable. (1+1 marks) The programmes can target areas where there are skills gaps / for example, tunnelling, where only 700 workers recruited to fill 1200 jobs in 2009 / many are set to retire in near future as the average age of these workers is 55 years. (1+1 marks) 	
	Reference to other training programmes, for example, the government New Deal for the long term unemployed / analysis of the success of such programmes, for example, reducing unemployment among young people. (1+1 marks)	
	 Training programmes enable workers to take jobs on other infrastructure projects such as HS2. (1 mark) Accept discussion of training programmes not being effective in increasing the occupational mobility of labour: 	
	 Financial costs of training programmes mean private sector firms or workers unable to fund them. (1 mark) 	

- Quality of training programmes varies / schemes have been criticised for not offering relevant skills. (1+1 marks)
- Time lag: it may take several years for workers to be trained in suitable skills such as plumbers and electricians. (1 mark)
- Trained workers may emigrate to take employment overseas. (1 mark)
- Concern over the specific nature of tunnelling skills which may not be easily transferrable to other occupations. (1 mark)
- Concern raised by boss of Crossrail over the availability of future projects as government spending on investment projects fell by 50% in the first Quarter of 2013. (1 mark)

Question Number	Answer	Mark
10(c)	6 KAA marks Candidates can argue either way: award the most effective explanation up to 6 marks (KAA) and the alternative view up to 4 marks (Evaluation).	(10)
	 Definition of geographical mobility of labour (the ability of labour to move from one area to another area in order to take available work). (1 mark) 	
	NB: accept correct definition of geographical immobility of labour as an alternative approach.	
	Example of geographical mobility of labour. (1 mark)	
	 Data reference: for example, 200 million passenger journeys per year on Crossrail / each train is 200 metres long and can carry 1500 passengers / 73 miles length (1 mark) 	
	Crossrail is likely to increase geographical mobility of labour since: Time factors / development of this. (1+1 marks)	
	Distance factors / development of this point (1+1 marks)	
	Capacity factors / development of this point (1+1 marks)	
	Reduce congestion on other forms of transport / further development such as road network and other rail lines. (1+1 marks)	
	Evaluation (up to 2+2 or 1+3 or 1+1+2 marks) Geographical mobility of labour may not increase by much since:	
	London's population is growing / so future demand for transport may exceed supply leading to over-crowding.	
	During construction the geographical mobility of labour might be reduced due to closure of rail stations and other delays from the building work.	

- > Another 3 years before Crossrail is completed so little impact in short term.
- It is likely to be expensive to travel on Crossrail / to pay for the high cost of building it / so many people may not be able to afford to use it.
- ➤ Increased property prices along the route may make it more expensive to live along it.
- ➤ It may not improve geographical mobility of labour for other parts of London e.g. north to south as implied by proposals for Crossrail 2 proposals / other regions of UK or overseas not affected as commute is too long.
- Other factors affect geographical mobility of labour, for example, family ties and job market information.

Question Number	Answer	Mark
*10(d)	8 KAA marks (3+3+2 or 4+4 or 2+2+2 marks) Demand factors include:	(14)
	 Price of Crossrail tickets - might be relatively cheaper or more expensive than other forms of travel / consideration of price elasticity of demand. (up to 4 marks) 	
	 Price or availability of substitutes / private motor vehicles are expensive and problems of parking / problems of congestion and long time period to travel / cycling in London is extremely dangerous / XED .(up to 4 marks) 	
	 Price of complementary goods with suitable development, for example, car parking or bicycle facilities at rail stations / development XED. (up to 4 marks) 	
	 Population growth in London / could be due to continued immigration. (up to 4 marks) 	
	 Extract 1 refers to the trend for companies to move back into London reversing a 20 year trend / increase in investment flows including from overseas. (up to 4 marks) 	
	 Growth in real incomes / development with YED / means more employment opportunities. (up to 4 marks) 	
	 Government economic policies such as low income and corporation taxes / attract labour flows and capital flows e.g. from France. (up to 4 marks) 	
	 Trends in fashion and tastes / London is a global city with various cultural attractions. (up to 4 marks) 	
	 Quality / Convenience or reduction in travelling times / some 38 railway stations / links with hub rail and tube stations e.g. Paddington. (up to 4 marks) 	
	 Marketing of Crossrail / increase in advertising could improve customer knowledge / generate some brand loyalty. (up to 4 marks) 	

6 Evaluation marks (2+2+2 or 3+3 or 1+1+1+1+2)

- Counterarguments to KAA points / qualification of their significance.
- Population growth may slow down especially if tighter immigration controls imposed by government / possible exit from EU.
- Economic development and growth could slow down / may be another recession / which reduces business confidence and investment.
- Price of Crossrail is likely to be very expensive in order to repay the high levels of government expenditure on project.
- > Prioritisation of determinants of demand.
- > Short run and long run influences.

The quality of written communication will be assessed in this question based on the candidate's ability:

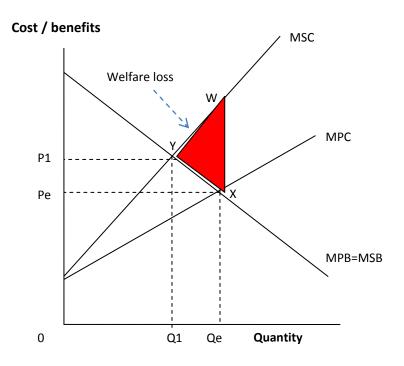
- > To present an argument and conclude on the basis of that argument.
- > To organise information clearly and coherently.
- > To use economics vocabulary appropriately.
- > To use grammar, spelling and punctuation appropriately.

Question Number	Answer	Mark
*10(e)	Candidates can argue either way: award the most effective explanation up to 8 marks (KAA) and the alternative view up to 6 marks (Evaluation).	(14)
	Candidates may refer to other transport projects, for example, HS2 high speed rail link between London and Birmingham or building of a new airport or runway or motorway.	
	Definition of Government failure (government intervention leads to an inefficient or misallocation of resources / welfare loss). (1 mark)	
	Government failure may result from a major infrastructure project since: (up to 2+2+2+2 or 3+3+2 or 4+4 marks)	
	 Use of taxpayers money: Extract 3 identifies use of taxpayers' money of £14.8 billion of money from London businesses / so may lead to higher tax bills / more government borrowing / cuts in government expenditure elsewhere / opportunity cost associated with project / unfair for taxpayers who do not use Crossrail. 	
	Government spending on infrastructure projects uncertain: Extract 2 refers to a 50% cut in government spending on infrastructure projects in the first quarter of 2013 / this creates uncertainty over future employment for specialist workers leading to structural unemployment and loss of skills / firms might reduce investment into workforce and capital.	
	• Impact on property prices: Extract 3 identifies that domestic and commercial property values along the Crossrail route have and are set to increase. These property owners gain far more than they are set to pay in taxes. This appears unfair for those taxpayers further away from the route / compensation may not be available for some households near to the route.	
	Negative externalities: these might arise from major infrastructure projects / impact on property prices very close by / increase in pollution / impact on wildlife / noise and air pollution / increase in congestion in London over the long term.	

Note: award for negative externality diagram (up to 2 marks)

Diagram (up to 2 marks)

- Original market and social optimum equilibrium quantities and price positions correctly labelled. (1 mark).
- Welfare loss area identified (1 mark)



- Increase regional inequality: the benefits are mainly for London and the south east and so may increase regional inequality / resources could be better to develop alternative infrastructure projects benefitting the whole UK or weaker regions.
- Accuracy of estimates and forecasts: construction costs may greatly exceed the original forecast costs / demand for Crossrail services may not reach the estimated number of users / problem estimating costs and benefits over the long term.
- Best to leave the whole project to the private sector to see whether viable / private sector managers more efficient than government managers.

Government failure may not occur since: (up to 2+2+2+2 or 3+3+2 or 4+4 marks)

- Improved transport infrastructure could lead to more inward investment / job creation rising incomes in long term (accept macro-economic arguments such as use of multiplier effects).
- Commercial property along route (and other properties such as residential) increase in value is a benefit to the owners not a failure of government.
- ➤ The project is being run by private sector managers and work done by private sector firms so not really a government failure / the project may never occur if left to private sector as the risk and time span of benefits is over a very long time period / so government intervention is to correct a market failure.
- Extract 2 indicates that other regions have directly benefited from the Crossrail project in terms of company orders and job creation.
- Accuracy of estimates: always an issue for projects which take a long time to build but benefits include reduction in congestion and faster journey times.
- The contract with builders may mean any cost overruns is paid by them rather than the government and tax payers.

The quality of written communication will be assessed in this question based on the candidate's ability:

- > To present an argument and conclude on the basis of that argument.
- > To organise information clearly and coherently.
- > To use economics vocabulary appropriately.
- > To use grammar, spelling and punctuation appropriately.