Edexcel (A) Economics A-level

A-level Paper 3: Micro and Macro Economics

Example answers

Specimen paper

1a) With reference to Figure 1, explain one possible cause of the forecast change in total energy use. (5)

From 1987 to 2013, there is an increase in gas use from 1,300 million tonnes to 2,600 million tonnes. All types of energy has increased in use. One reason for this is the growing incomes of the poorer countries. As these countries see a rise in their income, their demand for appliances such as refrigerators, cars and mobile phones increase. This means they require more energy use in order to use these appliances, and so more energy will be used. Individuals in emerging economies now have access to these services and goods which they may not have had before. Their higher incomes mean they can use more electricity as they can now afford it.

Teacher's comments: 4/5
Need another data point

b) With reference to Figure 4, examine the likely impact on the USA's circular flow of income of the trends in exports and imports of natural gas between 2000 and 2020. (8)

The circular flow of income is a model to explain how money flows around the economy from individuals to businesses as individuals receive rent, interest, wages and profit when allowing businesses to use their factors of production and businesses receive payment for the sale of goods and services. Injections are where money is added to the circular flow, in the form of investment, government spending and exports. Withdrawals are when money is removed, in the form of taxation, imports and savings. Figure 4 shows USA's exports are growing whilst their imports are falling for natural gas. As a result, the circular flow will shrink less as there are larger injections and smaller withdrawals, ceteris paribus. However, there are many other factors involved in determining the circular slow. Firstly, there are other imports and exports so the overall trend in these will be more important. Also, savings, investment, taxation and government spending will play a pat in the circular flow so it will depend what happens to them. If only natural gas changed, the circular flow would get smaller but just at a slower rate. However, it is quite an insignificant factor in the overall flow.

Teacher's comments: 7/8

c) With reference to the information provided, discuss the likely impact of a change in the price of gas on the markets for solar energy and nuclear energy. (12)

Gas and solar/nuclear energy are substitutes with a positive cross elasticity of demand. A fall in the price of gas will lead to a fall in demand for nuclear/solar energy. This fall in demand will reduce both consumer and producer surplus and will lead to a fall in revenue for products. As a result, they may be forced out of the market and thus there will be less availability of solar and nuclear energy. This is seen by the cancelling of solar projects.

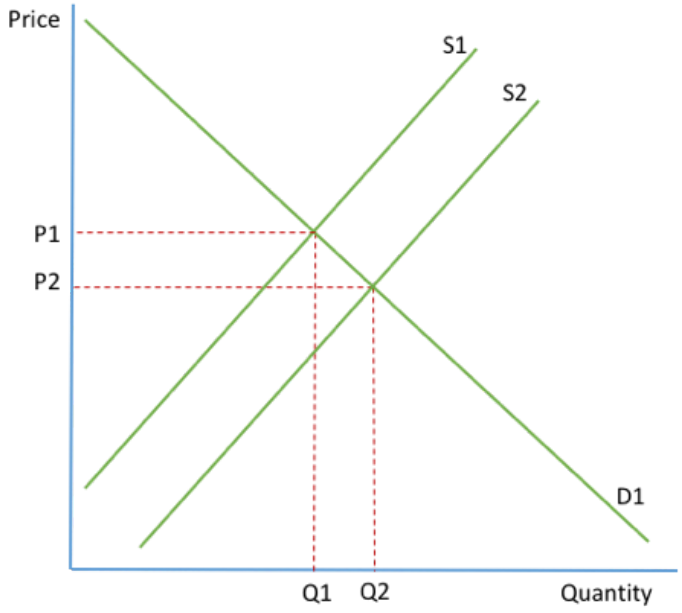
However, this may not be the case. Government commitments to renewable energy may mean that they increase subsidies to solar energy producers to keep them in the market. Education may shift

the demand curve for solar energy so the fall in gas prices has no effect on the environment-conscious consumer.
The impact of the fall in prices will depend on how much the price changes. A small fall in price will be unlikely to have a large impact on either market. It will also depend on how long term the fall in prices is. Demand tends to be relatively inelastic in the short term, as it will take time for consumers to switch over. However, if prices continue to fall then consumers will be more likely to switch and the impact will be larger.

Teacher's comments: 11/12

d) With reference to the information provided and your own knowledge, evaluate the possible microeconomic and macroeconomic effects on the UK economy of a decision by the government to encourage fracking. (25)

Government decisions to encourage fracking increase supply in the gas market and in the energy market as a whole. This means supply will increase from S1 to S2 and so prices fall from P1 to P2 whilst output increases from Q1 to Q2. The impact of this on producers will depend on the price elasticity of demand. If demand is elastic, the fall in price will cause an even greater rise in output and the revenues will rise. If demand is inelastic, the change will mean that revenues fall. Consumers will see an increase in consumer surplus.

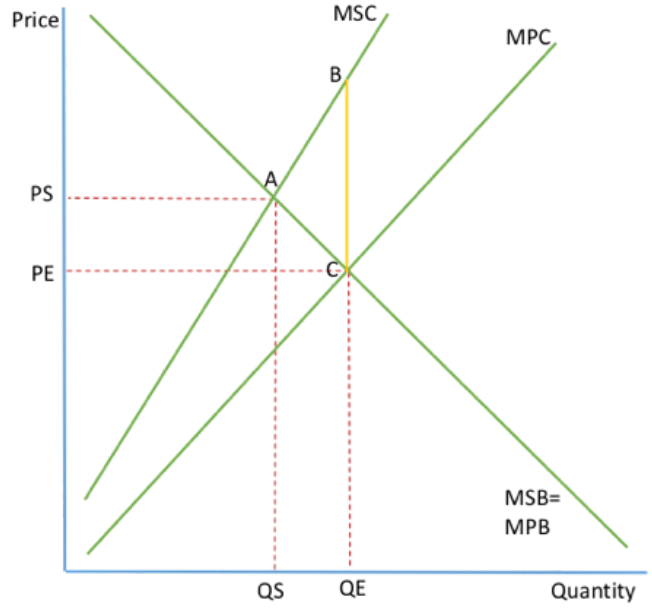


The fall in price will impact other businesses in the economy. Since gas and energy are important in production costs for the majority of businesses, a fall in price will reduce costs for them. This lower cost could increase profit and therefore increase investment, which will increase AD and bring about economic growth. It will also increase SRAS as businesses are willing to supply more due to lower costs, which will further increase economic growth. On top of this, consumers will see a rise in real disposable income as they have to spend less money on their energy bills. This may increase consumption and again increase AD. The increase in AD will lead to economic growth and will create jobs, reducing unemployment. Jobs will also be increased within the industry itself,

for example 3.6 million jobs created in the US. However, this increase may be negated if there is a subsequent fall in jobs in other energy markets as demand for their products fall. For example, there may be job losses in the coal industry as gas and coal are substitutes so a fall in the prices of gas will decrease demand for coal. The impact on AD will depend on how significant energy is as a proportion of total costs for businesses and of household consumption for consumers. The smaller the proportion, the smaller the change. It will also depend on how big the fall in price is, which depends on how much fracking is increased.

Another impact will be to improve the balance of payments. Since the UK produces more of its own gas, they will have to import less gas and thus the current account will improve. This assumes all other factors remain constant, which is unlikely to be the case and other factors may play a role in increasing or decreasing the current account. Perhaps more importantly, the decrease in costs due to a fall in gas prices will make UK goods more internationally competitive and thus will increase exports.

However, the increase in fracking will result in considerable externalities. The market will produce QEPE where MPB=MPC but the social optimum position is QSPS where MSC=MSB. The external costs exist due to the fact that earthquakes can become a result of fracking and due to increase natural gas emissions. As a result, there is market failure, a misallocation of resources, and social welfare loss of ABC. This will reduce quality of life both now and in the future and mean that growth is unsustainable. However, this may not be the case since in the US, there is reduced carbon emissions since gas is cleaner than coal. On the other hand, the increase in fracking will reduce the incentive to develop sustainable techniques and green energy and so in the long run will actually increase carbon emissions.



In the short term, there will be little impacts as it takes time for firms to be set up and increase supply. It will depend on how much fracking is done by firms on how much any impact will be.

Teacher's comments: 20/25

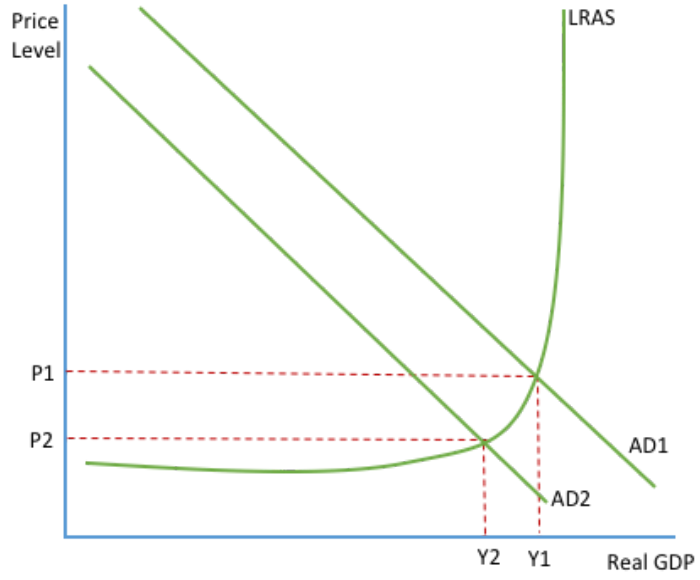
2a) With reference to Figure 5 and Extract C, explain one likely reason for the fall in the exchange rate of the Turkish lira. (5)

The Turkish Lira fell by 14%. One reason for this was the slowdown in economic growth in emerging economies, which Turkey is. This meant that panic set in amongst investors as they worried about not making a good return. When investing, individuals or businesses demand the currency and so the fall in investment will lead to a fall in demand and therefore a depreciation of the currency. Moreover, investors panic meant they sold off their Turkish lira so supply increased and thus price fell.

Teacher's comments: 4/5

b) Discuss the costs to the Argentine economy of an inflation rate "estimated by some economists to be over 25%". (Extract D, line 9) (12)

One problem of inflation is that it will reduce the value of savings. This will mean that individuals have less money to invest and so will experience the problems of a lack of savings outlined by the Harrod-Domar model. **Relevance?** The lack of investment will make it difficult for the country to grow. Individuals will also be less likely to save if they know inflation is high and they expect further inflation, so this means that the lack of investment will be a long term issue. The impact of this may be less extreme if other countries continue to invest in Argentina through FDI, as it will mean that investment will continue and productivity can continue to improve.



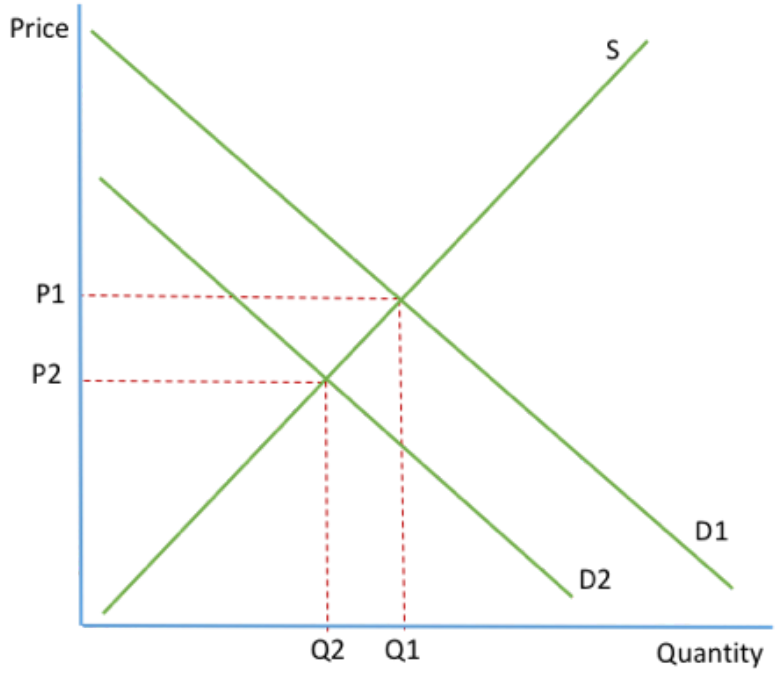
Another problem may be a fall in AD, reducing living standards. High inflation will reduce consumers' real incomes and so consumption will fall as they have less to spend and therefore AD will fall. It will reduce business confidence and thus there will be a fall in investment. It is unlikely foreign firms will want to invest and so this will also mean the savings gap remains an issue. The fall in AD will mean output falls from Y1 to Y2, and so living standards will fall. However, it also shows that prices will fall from P1 to P2 and therefore this fall in AD could end in inflation, which will end the long term issues of inflation.

The impact will depend on how long term the inflation is. Inflation may mean that people continue to expect inflation and so negotiate wage rises accordingly. This means that inflation will continue indefinitely and thus there is large impact on the Argentinian economy.

Teacher's comments: 6/12
Key point is impact on international competitiveness. Who will suffer the most?

c) With reference to Extract E, examine the impact of restrictions on beef exports on how Argentine farmers decide to use their land. (8)

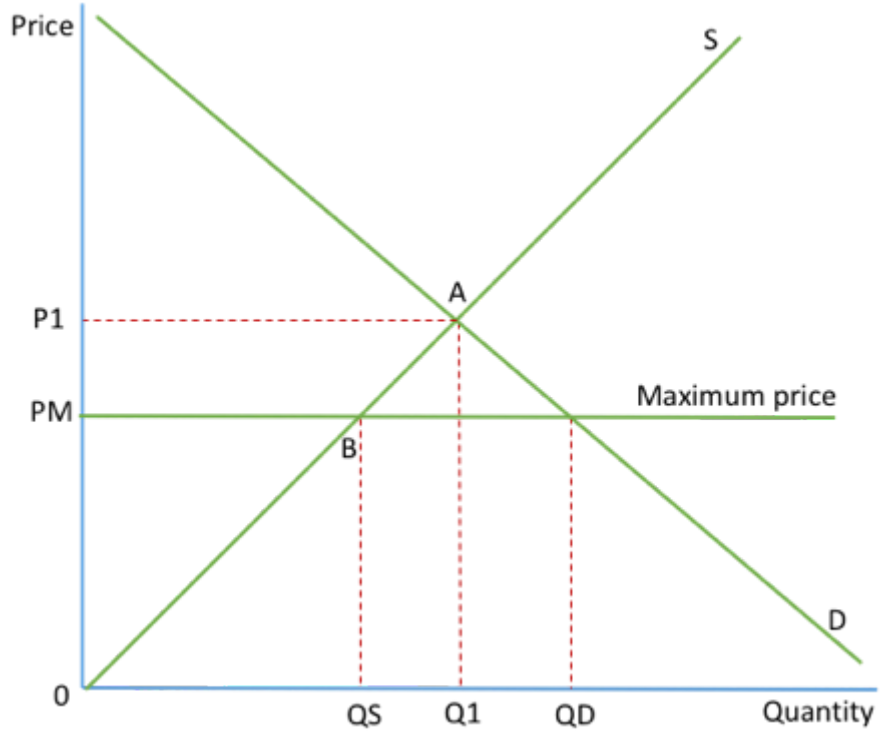
Restrictions on exports mean that there is less demand for beef from Argentina. As a result, demand is at D2 not D1 and so prices are at P2 rather than P1 and output at Q2 not Q1. This means there is a fall in revenue for businesses and lower producer surplus. This will mean farmers leave production of beef as they are making a loss or because they can make higher profit elsewhere. This has been seen in the fall of cattle from 48 million to 10 million since 2011. They will use their land for other purposes, which will depend on the market for these goods. For example, rising demand for soya means land is used for that instead. The export restrictions determine that land is not used for cattle, but play no role in determining what else it is used for- this depends on other things.



Teacher's comments: 6/8
Switch may depend on how easily farmers can grow soya.

d) With reference to the information provided and your own knowledge, evaluate the likely microeconomic and macroeconomic effects of the imposition of 'price controls' (Extract E, line 8) in Argentina. (25)

Price controls include maximum and minimum prices. In Argentina's case, the government is likely to introduce maximum prices in order to control inflation. They will set prices at PM, meaning that QP is demand but only QS is supplied so there is QP-QS of excess demand. This will mean that there has been government failure, where the government leads to a misallocation of resources.



Firstly, there is a fall in producer surplus from 0P1A to 0PMB. They will see a fall in profit and some producers may even be forced to leave the market. As a result, there could be job losses in the industry and thus a fall in income for this group. They will reduce their consumption and this will lead to a fall in AD, reducing employment in the economy as a whole. On top of this, businesses reduce their investment and this means AD will reduce further. On the other hand, instead of going out of business, maximum prices may encourage firms to become more efficient. It may lead to an end to organisational slack and end X-inefficiency. This will reduce costs for businesses, and therefore mean they can supply more so lead to an increase in supply. If this happens across a range of sectors then there will be a growth in output across the whole economy and thus increase LRAS. These will lead to long run growth and help to reduce inflation. It will not be possible for all businesses to become more efficient, and this will mean that many are forced out of business.

Additionally, the fall in price could have positive effects for consumers. Since price controls are mainly implemented on basic goods, they will ensure consumers can afford essential goods. This will help to reduce poverty and improve living standards. However, the problem occurs due to excess demand. Since the control removes the functions of the price mechanism, the government needs to find a new way to allocate resources. They may have to introduce rationing, which reduces freedom, or queue systems. This may increase inequality, as the richest are able to import goods from abroad or lead to the creation of a black market as people buy up stocks and sell them on at a higher price. This is associated with an increase in crime, for example in Venezuela.

On top of this, price controls may limit inflation. Prices are set at a maximum level and cannot go any higher which will limit the general rise in prices. The more prices are set on different markets, the more inflation will be limited. Low inflation will increase consumers' real income and allow them to maintain a higher living standard, particularly once the controls are removed. It will also increase confidence in the country, which will allow them to receive higher FDI and so the economy will be able to develop through higher investment, which creates more jobs and increase productivity- shifting both LRAS and AD.

The impact of price controls will depend on where they are set. If the maximum price is set above equilibrium price, then there will be little impact at all. It may be successful in preventing inflation expectations since prices can't rise above a certain price. As a result, workers may not demand such high wage increases to keep up with inflation and so inflation may not be so much of an issue. The impact will also depend on how well the policy is implemented: if the government is lax with dealing with it, the controls will have no impact.

Overall, price controls are likely to be successful at reducing inflation so improve stability in the long run, which will improve welfare. However, in the short run, it will cause an inefficient resource allocation which will initially decrease welfare.

Teacher's comments: 18/25