Can you think of two markets in your economy in which supply is likely to be price inelastic and two markets in which demand is likely to be price inelastic?

Remember that price inelastic supply means that the quantity supplied is not especially sensitive to price changes. Price inelastic demand means that the quantity demanded is not especially sensitive to price.

1. If the equilibrium value of £1 changes from US$1.5 to US$1.1, is the pound getting weaker or stronger?

Pound is getting weaker against the dollar as it is cheaper in terms of this foreign currency.

2. What would happen to the price of a £200 product in dollars if the exchange rate were to change in this way?

Would have sold for $300; now sells for $220 i.e the price in dollars falls.

3. What would happen to the price in pounds of a US product that was priced at $200?

Would have been £133.33; now will be £181.82. With a weaker pound imports have become more expensive in pounds other factors unchanged.

4. If the pound gets weaker would exporters prefer the demand for exports to be price elastic or price inelastic? Why?

Would prefer demand to be price elastic so the lower price (in foreign currency) leads to a bigger increase in sales of exports.

5. What is the value of your currency? Do you know how much it has changed in value against another currency in the last year? Two years? Do you know if it has got stronger or weaker?

Over to you!

Your handmade designer furniture sells for around £3,000 per piece in the UK. Your main export market is the USA, where you sell 500 units a week.

1. If the value of the UK currency were to change from US$1.2 to US$1.4, what would happen to the price of your products in the USA, other things unchanged?

Price would rise from $3600 (ie £3000 * $1.2) to $4200 (ie £3000* $1.4)
2. What actions could you take to prevent your sales from falling in this situation?

- Could discount to offset the exchange rate change but this would hit profit margins.
- Could stress the benefits of the product to justify the high price.
- Could try and improve elements of the service to justify the price increase e.g. delivery times.

3. If the price elasticity of demand for your products in the USA is −1.5, what would happen to your sales and your revenue following the increase in the exchange rate?

Price has increased by \((\frac{600}{3600})\times 100 = 16.6\%\)
Sales will fall by \(1.5 \times 16.6 = 24.9\%\)

4. If your business were to keep the same price in dollars following the exchange rate change, how much would it earn in pounds for each item?

It would sell at $3600; if the exchange rate is $1.4:£1 this means you earn £3600/\(\frac{1.4}{1}\) = £2571

p210.
Data Analysis 8.3

The price of a bottle of Italian olive oil is €12. The exchange rate is £1 : €1 and you import 30,000 bottles a month.

1. What is the price of the product in pounds?

£12

2. How much do you spend in pounds a year on this product?

£12 \times 30,000 = £36,000

3. The exchange rate rises to £1 : €1.2 and you import 40,000 bottles a month. What is the price in pounds of the product now?

12 euros/1.2 = £10

4. How much do you spend in pounds a year on this product now?

40000*£10 = £40000

5. Calculate the price elasticity of supply for this product. Given an increase in the exchange rate, has the supply of pounds risen or fallen?

The percentage change in the quantity of demanded = \((\frac{40000-30000}{30000})\times 100 = 33\%\)
Percentage change in price of pounds = -20%
Price elasticity of demand for the product = 33/-20 = -1.65 Price elastic.
The price of pounds has increase making the products cheaper in pounds; this has led to a more than proportionate increase in the amount bought increasing spending. With a higher exchange rate more pounds are therefore supplied.

p212-3.
Data Analysis 8.4

1. Assume that the exchange rate changes from £1: US$1.5 to £1: US$2 and that a UK product sold in the USA sells for £100 in the UK. What is the price in dollars before and after the change in the value of the pound?

Price was $150; now $200

2. Originally, 500 units were sold. If the price elasticity of demand for this product is -2, what will the new level of sales be? What was the original spending in pounds on the product? What would it be after the change in the exchange rate?

Original spending in pounds was 500 * £100 = £50,000
Price has now increased by (50/150)*100 = 33.3%
Given the price elasticity of demand sales will change 33.3 * -2 = - 66.6%
66.6% of 500 is 333 so sales will fall to 167 units
New revenue = 167 * £100 = £16,700

3. The exchange rate changes from £1: US$1.5 to £1: US$2 and a UK business buys a US$300 product from the USA. What is the price in pounds before and after the change in the value of the pound?

Price before = 300/1.5 = £200
Price after = 300/2 = £150

4. Originally, 200 units were bought.

A: How much was originally spent in pounds buying these products?

Spending = £200 * 200 = £40000

B: If the price elasticity of demand for the product is -2, what will be the new sales and the new level of spending in pounds? Has the spending increased or decreased, and what does this mean in terms of the supply curve for pounds? Will it be upward- or downward-sloping?

The change in price is (-50/200)*100 = -25%
Given the price elasticity the change in sales will be -2*-25 = 50%
Sales will rise from 200 units to 300 units (i.e. a 50% increase)
New revenue = £150 * 300 = £45000
Spending has increased; although the price fell the increase in sales is more than proportionate leading to more spending on this product overall.
C: If the price elasticity of demand for the product is –0.2, what will be the new sales and the new level of spending in pounds? Has the spending increased or decreased, and what does this mean in terms of the supply curve for pounds? Will it be upward- or downward-sloping?

The change in price is \((-50/200) * 100 = -25\%\)

Given the price elasticity the change in sales will be \(-0.2 * -25 = 5\%\)

Sales will rise from 200 units to 240 units (i.e. a 5% increase)

New revenue = £150 * 240 = £36000

Spending has decreased; the price fell and the increase in sales is less than proportionate leading to less spending on this product overall.

5. Illustrate the effect of an inward shift in the demands for a currency and an outward shift of the supply of a currency on the equilibrium price and quantity in a currency market.

An inward shift in demand would lead to a lower exchange rate and lower quantity.

An outward shift in supply would lead to a lower exchange rate and higher quantity (this assumes a downward sloping demand curve and upward sloping supply curve).

p213.
Business Analysis 8.1

Using supply and demand explain how:

The equilibrium price and quantity of a currency traded might both increase; Increase in demand

The equilibrium price and quantity of a currency traded might both decrease; Fall in demand

The equilibrium price might increase but quantity decrease; Decrease in supply.

The equilibrium price might decrease but quantity increase; Increase in supply.

p.214
Data Analysis 8.5

1. Briefly summarize the changes in the value of the pound against the US dollar in the period 2008-12 shown in figure 8.5

Over the period the pound has fallen in value from around $2 to $1.6. Major fall in value at the end of 2008.

2. Explain, using supply and demand diagrams, what might have caused the changes in the value of the pound.

The fall in the pound’s value may be due to lower demand for the currency (e.g. due to less demand for UK goods and services) and/or increased supply (e.g. more demand for US goods and services).
3. Discuss the possible effects of such changes for UK businesses.

It may make UK exports more competitive as cheaper in dollars; may make imported supplies more expensive as the pound is weaker. We would also need to consider e.g. income and demand levels from the US and UK and other factors affecting competitiveness such as inflation, quality and innovation.

p217. Think About It 8.2

1. What do you think the effects on the domestic economy of an increase in interest rates might be?

Higher interest rates may encourage saving and discourage borrowing by households and firms. This might reduce demand in the economy.

2. How could a government reduce the value of its currency? Illustrate your answer using supply and demand diagrams.

It could sell its own currency in return for foreign reserves. This would increase supply and bring the price down.

p218. Business Analysis 8.2

How do you think being a member of the ERM might have helped UK businesses?

In theory might provide stability - managers know what the value of the currency will be when trading with other members. This can encourage investment and trade.

Was the collapse inevitable, do you think?

May have been given the rate at which is was set; the pressure on the currency was so enormous that it had to collapse.

p219. Think About It 8.3

Which of the following statements are true and which are false?

A: An increase in the demand for a currency is likely to increase its value: True

B: Higher interest rates in an economy are likely to reduce its value: False; will encourage savings to flow into the country and increase demand and value.

C: An appreciation of the currency occurs when it decreases in value: False; occurs when it increases.
D: A stronger currency is usually beneficial for importers, rather than exporters:
True; gives you more purchasing power abroad so imports are cheaper.

p221.
Data Analysis 8.6

1. What happens to the dividend if the share price increases, all other things being equal?
Nothing happens to the dividend; this is decided by investors annually. However with a higher share price the dividend yield falls.

2. Why might an investor hold on to a share even if the dividend yield is low?
May be expecting higher returns in the future, May be happy with the share price i.e. if share price has increased this reduces the yield but had made the investors better off).

3. Why will the dividend yield change many times daily?
Because the share price is changing all the time.

Think About It 8.4

1. If the supply of shares is fixed at any moment, what is the price elasticity of supply? Explain your answer.
It is perfectly price inelastic because whatever the price the supply is the same.

2. What would make you decide to invest in one company rather than another?

Answers might include:
- Expectations of future profits
- Expectations of share price changes
- Expectations of dividends

3. What determines the price that you should be willing to pay for a share?
- Expected returns
- The value of the company
- The proportion of shares you would own i.e power you gain

4. Draw a diagram showing the effect of an increase in demand on the price of a share.
Would shift demand to the right leading to a higher price for shares.
p222. Business Analysis 8.3

Why do you think that Facebook was valued so highly despite being such a new business?

- Expectations of future growth and increases in value and profits
- Competition for the shares fuelled by heavy media coverage

p226. Business Analysis 8.4

Given the Governor’s statement, what do you think is likely to happen to investment? Why?

Likely to reduce investment; affects confidence and expectations of future profits. With lower expectations there is less incentive to invest. This would shift the MEC inwards.

p227. Think About It 8.5

1. How do you think a government could influence the level of investment in an economy?

Answers might include:
- Through the interest rates
- Through taxation policy e.g. tax on profits
- Through its own investment
- Through its policies affecting the stability of the economy

2. Governments are often keen to talk about the investment that they are putting into areas such as education and health. Is all investment desirable?

Depends on costs, returns and risk. May be a high opportunity cost - money may have been better used elsewhere.

p230. Business Analysis 8.5

1. Do you think that to increase productivity employees need to work harder? What else might help?

May be to do with training, investment, management not just motivation.

2. Why might trade union reforms have helped reduce unemployment?

- May have reduced the control over supply; may have increased supply leading to more people employed.
- May have reduced upward pressure on wages leading to less excess supply.
3. Why might a cap on benefits help reduce unemployment?

- May encourage people to look for work rather than stay on benefits.
- May increase the supply of labour.

Data Analysis 8.7

Look at Figure 8.13. What can you deduce about the relative size of the income and substitution effects when the following wage rate changes occur?

A: From W1 to W2. Substitution effect is bigger
B: From W2 to W3. They equal each other
C: From W3 to W4. The income effect outweighs the substitution effects

Think About It 8.6

Illustrate the effect of an increase in the supply of labour, and show its effect on the equilibrium wage and quantity employed.

Will shift the supply curve to right; This should lead to lower equilibrium wages but a higher quantity.

Business Analysis 8.6

1. How would you decide on the reward to give to senior managers?

Answers might include:
- What they earn for the business
- How easy to replace
- What others earn
- Cost of living
- Company profits
- What other companies are paying

2. Can the very high levels of pay of some senior managers, such as the chief executives of the major banks, be justified?

May be justified by supply and demand conditions (although there is debate over this!). However may still be perceived as unfair.

Think About It 8.7

In which of the following industries is the supply of labour likely to be most wage inelastic? Explain your reasoning.
A: Doctors  
B: Plumbers  
C: Stockbrokers  
D: University lecturers  
E: Airline pilots  
F: Cleaners

To be debated but will depend on skills needed and training period e.g. takes time to gain qualifications to become a pilot and more skills relative to cleaner. Similarly a doctor requires intense training over a period of time so likely to be inelastic.

Using supply and demand analysis what could lead to:

A: higher equilibrium wages and quantity of labour employed: Increase in demand

B: lower equilibrium wages and quantity of labour employed: Decrease in demand

C: higher equilibrium wages and lower quantity of labour employed: Fall in supply

D: lower equilibrium wages and higher quantity of labour employed: Increase in supply

p239.  
Business Analysis 8.7

How might these changes in the global labour market affect a firm’s human resources function?

Answers might include:
May lead to HR functions recruiting from India and China far more. May affect recruitment and selection processes, training, reward packages motivational approaches; will affect all aspects of HR as dealing with different economies, cultures etc.

p242.  
Think About It 8.8

Which of the following statements are true and which are false?
A: An increase in labour productivity shifts the supply of labour outwards: False; affects demand for labour
B: An increase in demand for the final product shifts the demand for labour outwards: True; it is a derived demand
C: An increase in the supply of labour should increase the equilibrium wage and quantity of people employed: False; should decrease the wage and increase the quantity
Suggested Answers to Short Answer Questions

1. Demand for UK goods and services from abroad.
2. Demand for overseas goods and services.
3. The pound is relatively expensive in terms of other currencies.
4. It may buy up its own currency using its foreign currency reserves; it may increase the interest rate attracting savings from abroad.
5. To vote, to gain dividends, to gain from a share price increase.
6. The total value of the company’s shares.
7. It is marginal revenue multiplied by marginal product; it measures the additional revenue generated from the output of an additional employee.
8. Depends on wage rates, training, qualifications, number of people in working population, skills required.
9. Measures how sensitive the demand for labour is in relation to changes in the wage rate.
10. Derived from demand for the final product.