Chapter 1

Getting started:

- (a) In all of the photographs goods are being traded. In A, people are buying goods from market traders in a souq. In B, goods are being sold by auction. In C, shoppers are buying goods from a supermarket. And finally, in D, cars are being bought at a car lot.
- (b) In C, shoppers queuing at a checkout will pay the price that is displayed on the labels of products (or at the point of sale). Shoppers will either pay the price shown or choose not to buy the various products. In D, the price is determined through negotiation between the car salesperson and the buyer. There is likely to be a price displayed for the car but this is usually a starting point for negotiations to begin. The price a car is eventually sold for will nearly always be lower than the price displayed.
- (c) The locations in all of the photographs may be described as markets.

Question 1:

- (a) The prices of CDs in Tamer's shop have been falling recently. He has not been able to sell the CDs because people do not want to buy them. This is because many people prefer to download music from the internet and listen to it using an iPod. Tamer has lowered prices to encourage his customers to buy CDs. However, he has been unsuccessful and the shop is being closed down.
- (b) Market systems encourage resources such as raw materials, land, machines and workers to flow into the thriving markets and out of the declining markets. In thriving markets prices will be rising. This means that sellers will probably be making healthy profits. These healthy profits will attract more sellers and therefore more resources will be needed to make these 'popular' goods. On the other hand, in declining markets, prices will be falling. This will result in sellers leaving the market and the release of the resources that they would have used. In this case, Tamer is trading in a declining market. His CDs are becoming unpopular because customers are using iPods. As a result he is closing his shop down. This means that the resources used by Tamer, such as his premises, can be made available for other uses.

Economics in practice - eBay:

- (a) A market is said to exist when buyers and sellers communicate to exchange goods and services for money. A market is not necessarily a location. Trading between buyers and sellers can take place over the internet, through newspapers or over the telephone for example.
- (b) Buyers and sellers on eBay communicate online. A seller will add a description of a product to a set of listings in the relevant section on the eBay web site, and buyers will place their bids if they are interested.
- (c) eBay is an online auction site. As with all auctions, goods are sold to the highest bidder. The prices of goods sold on eBay are usually equivalent to the highest bid made in the time period allowed.
- (d) The market system has two main functions. One is to determine the prices of goods and the other is to allocate the resources in an economy. Therefore B is the correct answer.

Economics

- (e) In any market, sellers will try to sell goods at the highest possible price. In complete contrast buyers will do the opposite. They will try to buy at the lowest price. However, if sellers refuse to lower their prices sufficiently, buyers will go without or shop elsewhere. As a result a seller will be left with unsold goods. Stocks of unsold goods suggest to a seller that prices are too high.
- (f) The forces of supply and demand are responsible for setting prices in markets. The prices set on eBay are no different. The sellers on eBay are the people who list the products for sale. This represents supply. The buyers on eBay are the people who make the bids and they represent demand. They say what they are prepared to pay for a product by making a bid online. At the end of the time period set by the seller, the product is sold to the highest bidder.

If there are lots of bidders this means that demand is high and the price will be driven up. Demand is forcing up the price. On the other hand, if there are only a few bids this means that demand is low and the price of the product will also be low. If there are no bids at all this means that there is no demand and the product will go unsold. Clearly, the forces of supply and demand are entirely responsible for the prices set on eBay.

Chapter 2

Getting started:

- (a) According to the table, when the price of fleeces is \$50, 5,000 fleeces will be purchased per week.
- (b) As the price of fleeces goes up the number purchased per week falls. For example, when the price is increased from \$50 to \$70 the number of fleeces likely to be purchased falls from 5,000 to 3,000.
- (c) When the price of fleeces is lowered, the number purchased per week rises. For example, if the price is reduced from \$50 to \$40 the number of fleeces likely to be purchased rises from 5,000 to 6,000.

Question 1:

- (a) If the rugby union club charges 40 Euros for a fixture, the attendance would be 5,000.
- (b) To fill the stadium the price must be set at 10 Euros. At 10 Euros 30,000 spectators would be attracted. This is full capacity.

Economics in practice – The Byron Bay Surf Shack:

- (a) Effective demand shows how much would be bought (i.e. how much people can afford to buy and would actually buy) at any given price. It does not mean how much people would like to buy if they had an endless amount of money. Effective demand is demand backed by the ability to pay.
- (b) D is the correct answer. If the price rises demand will not rise, it will fall. All of the other statements about demand are true.



Demand curve for the performer 500 400 325 300 **AUS** 200 125 100 800 850 1000 0 200 400450 600 Number of boards

- (d) According to the demand curve drawn in (c), if Wally charges a price of \$325 for the Performer he would expect to sell 450 boards.
- (e) If Wally wanted to sell 850 boards, he would have to lower the price to \$125.
- (f) There is an inverse relationship between the price charged for a product and the quantity demanded. This means that when price goes up demand goes down and when price goes down demand goes up. For example, in this case, if Wally charges \$300 for the Performer he would expect to sell 500 boards. However, if he increased the price to \$400 demand would drop to 300 boards.

Chapter 3

(c)

Getting Started:

- (a) The demand for Porsches may be affected by:
 - Consumer incomes
 - Advertising
 - Price of other high performance sports cars
 - Interest rates
 - Tastes and fashion
 - Price of petrol
- (b) During a recession demand for high performance sports cars is likely to fall. This is because during a recession consumer incomes are likely to fall. This means that it will be more difficult for many consumers to afford sports cars.

Question 1:

(a) The population of Australia has increased from 19.2 million to 20.4 million over the time period. The data in the graph shows that net migration is falling. However, there are still more people entering the country than leaving. In 2008, net migration was 3.72 per 1000. Consequently, the growth in Australia's population is due, at least in part, to growing numbers of immigrants.

- (b) As the size of Australia's population grows there will be an increase in demand for most goods and services. There will be an increase in demand for consumer goods and for government services such as education.
- (c) Many of the people moving to Australia are British. This might increase the demand for goods and services associated with British culture. For example, there may be an increase in demand for British style fast food such as fish & chips, British newspapers, British television programmes, English Premier League football shirts, and tea.

Question 2:

- (a) One reason for the increase in demand for computer games would be a change in tastes. An increasing number of parents are now buying them. Other reasons may be an increase in incomes, heavy advertising by manufacturers such as Nintendo and Sony and possibly a fall in price.
- (b) The demand for computer games increased by 45% in 2007. A shift in demand, caused perhaps by more parents buying them, will be shown by a shift in the demand curve to the right from D₁ to D₂. The numbers of games purchased will rise from q₁ to q₂.



Economics in practice – Demand for digital cameras:

(a) (i) An increase in the amount spent on advertising digital cameras will shift the demand curve to the right. More will be purchased at every given price. This is shown in the diagram by a shift from D_1 to D_2 . The numbers of cameras purchased will rise from q_1 to q_2 .



- (ii) A fall in incomes is likely to result in a fall in demand for digital cameras at every given price. This is shown by a shift in the demand curve to the left from D_1 to D_3 in the diagram. The numbers of digital cameras purchased would fall from q_1 to q_3 .
- (b) (i) A fall in the price of digital cameras would result in an increase in demand for digital camera accessories such as batteries and cables. This is because digital cameras and digital camera accessories are complementary goods. The demand curve for digital camera accessories would shift to the right from D_1 to D_2 as shown in the diagram. The quantity of accessories purchased would rise from q_1 to q_2 .



(ii) A fall in the price of digital cameras would result in a decrease in demand for conventional film cameras. This is because conventional film cameras are a substitute for digital cameras. The demand curve for conventional film cameras would shift to the left from D_1 to D_2 . The quantity of conventional cameras bought would fall from q_1 to q_2 .



(c) C is the correct answer. Digital cameras are not inferior goods. An inferior good is one for which demand will fall as incomes rise. A rise in incomes would cause the demand for digital cameras to rise. Digital cameras are therefore a normal good.

(d) When the price of a product falls there will be an increase in the demand for a product. This will be represented by a movement along a demand curve. In this case, there has been a fall in the price of digital cameras since they were first introduced. As a result demand has increased. This would be shown by a movement down the demand curve from A to B in the diagram. The price has fallen from p₁ to p₂ and the quantity bought has increased from q₁ to q₂.



Other factors also influence the demand for cameras. However, their affect is to shift the demand curve. For example, an increase in the amount spent on advertising digital cameras will shift the demand curve to the right. This is shown in the diagram above for (a) (i). For a price change and a price change only there is a movement along the demand curve. For a change in any other factor affecting demand, the demand curve will shift – to the right for an increase or to the left for a decrease.

Chapter 4

Getting started:

- (a) If the price was £10 Tam Kong-Pak would be prepared to supply 50 lime and coconut cheesecakes per week.
- (b) As the price of cheesecakes rise, the number of cheesecakes that Tam Kong-Pak is willing to supply also rises.
- (c) Sellers, such as Tam Kong-Pak, are willing to supply more at higher prices because they probably make more profit at higher prices.

Question 1:

(a) If the price of steel rises from \$500 to \$750 per tonne, the supply of steel will rise from 10 million tonnes to 15 million tonnes.

Economics in practice – the supply of wooden sun beds:



(b) At a price of £110 R G Edwards will supply 900 sun beds.

(a)

- (c) The price would have to be £150 for R G Edwards to supply 1,300 sun beds in the market.
- (d) According to the supply curve, at a price of £20 supply will be zero. This means that R G Edwards is not prepared to supply any sun beds whatsoever at this price. This is probably because firms are motivated by profit and at a price of £20 R G Edwards cannot make enough profit to make supply worthwhile.
- (e) The correct answer is B. If there is fixed supply the supply curve will be vertical not horizontal. This is explained in (f).
- (f) When supply is fixed the supply curve is vertical. This is because supply cannot be increased even if the price rises. In the diagram below supply is fixed at q₁, producers cannot supply any more. Even if the price rises from p₁ to p₂ supply will still be the same at q₁. Supply will tend to be fixed if all producers are running at full capacity and are unable to increase output.



(g) If the price of sunbeds was rising sharply in the market, RG Edwards may wish to supply more. This is because he could make more profit. However, there may be a limit to the quantity of sunbeds RG Edwards could supply. For example, whether he could treble the supply depends on whether he has the resources required to produce the extra quantity. Does the business have enough labour and machinery to produce the extra sunbeds? Is there enough room in the factory to increase production by so much? There is likely to be a limit to the quantity of sunbeds RG Edwards can produce in a

given time period. To increase production by so much may take time. Therefore, RG Edwards may not be able to treble production immediately.

Chapter 5

Getting started:

- (a) In this case, the main factor affecting supply is the costs of production. The owner of the business is reducing supply because costs are rising. Wages have increased significantly, gas has gone up by 30 per cent and the rent on the factory has just increased by £2,000. These rising costs have resulted in the business cutting back production.
- (b) The owner has asked the production manager to lay off four members of staff. This is presumably in response to rising wages and other costs. The business is cutting back on production by 10 per cent so the need for staff will be reduced. Consequently four people will be made redundant.

Question 1:

- (a) Subsidies are offered to encourage the production of a certain good. In this case, the US government is offering subsidies to the producers of biofuels. The government wants to increase the production of biofuels, such as ethanol and wood gas, to help protect the environment, make energy supplies more secure and to aid rural development.
- (b) If the government grants a subsidy to biofuel producers in the US, the supply of biofuel will increase. This is because subsidies will lower production costs and the production of biofuels will become more profitable. Producers will respond by producing more. This increase in supply is shown by a shift in the supply curve to the right from S₁ to S₂. At the price of p₁, output of biofuels will rise from q₁ to q₂.



Question 2:

- (a) The new design and simulation system for multi-raschel lace should help to improve efficiency in the design and production of lace products. For example, its ability to design difficult patterns helps shorten the product development cycle, improve the quality of design and increases design efficiency. The system is also user-friendly, intuitive, fast and accurate, which will help to reduce production costs.
- (b) The new design and simulation system should reduce production costs for Chinese lace producers. This will have an effect on the supply curve for lace products. The supply curve will shift to the right from S_1 to S_2 . This means that the amount supplied in the market at a price of p_1 will rise from q_1 to q_2 .



Economics in practice – The supply of rice:

- (a) Factors that are likely to affect the supply of rice include:
 - price
 - availability of resources such as land
 - the weather
 - costs of production such as land, fertiliser or labour
 - the prices of other agricultural products
 - subsidies granted to farmers.
- (b) The graph in Figure 5 shows a very sharp increase in the price of rice from around \$350 to about \$1,000 per tonne. According to the article this has been the result of a loss of land and water to industrialisation and urbanisation, and also, to meat and dairy production. In addition, flooding in Indonesia and Bangladesh and recent cold weather in Vietnam and China has also hurt production. Consequently there has been a fall in supply. This is shown in the diagram below. The supply curve for rice has moved to the left, from S₁ to S₂. At a price of P₁ the amount supplied in the market has fallen from q₁ to q₂.



(c) The supply of any product is influenced by the costs of production such as wages, raw materials, energy, rent and machinery. If production costs fall producers are likely to increase supply. This is because they may be able to make more profit. In this case, if production costs such as land, labour or fertiliser, were to fall, rice farmers are likely to make more profit. As a result they will probably want to grow more rice. This will increase supply in the market. In the diagram below, the supply curve for rice will move to the right from S_1 to S_2 . At a price of P_1 the amount of rice supplied will rise from q_1 to q_2 .



(d) Some farmers worldwide may be producing other agricultural products even though they have the resources to grow rice. Discuss how they might react to the 2008 rice price?

It is possible for some producers to switch production from one good to another. For example, in this case a farmer may be able to produce a number of different crops. A rise in the price of rice may encourage a farmer to produce more rice at the expense of other crops. This is because they may be able to make more profit growing rice at the higher prices. However, farmers can only switch to rice production if they have the 'right' sort of growing conditions. For example, some farmers might want to grow rice but are unable to because their land is not suitable.

The change in the price of rice will also affect the quantity of other agricultural products supplied to the market. This is because some farmers are now growing rice instead of these other products. Supply of these other agricultural products will fall and their price may rise as a result.

Chapter 6

Getting started:

- (a) The price of tomatoes usually falls in the summer because there is an increase in supply. This extra supply comes from tomatoes grown in the UK which are harvested during the summer.
- (b) The price of flowers rises sharply on Mother's Day because there is an increase in demand. This extra demand comes from children, many of whom do not normally buy flowers. However, Mother's Day is a special occasion and there is a surge in the demand for flowers.
- (c) After Mother's Day the price of flowers falls. Demand recedes to 'normal' levels and the price of flowers falls back to what they were before the run-up to Mother's Day.

Question 1:

- (a) The equilibrium price is $\pounds 2.50$ and the equilibrium quantity is 6,000,000 units.
- (b) In any market the price is set where the wishes of consumers are matched exactly with those of producers. This price, called the equilibrium price, is where supply and demand are equal. In Figure 2, the equilibrium price is £2.50. At this price consumers want to buy 6,000,000 units and producers want to sell 6,000,000. The wishes of buyers and sellers are matched. There is no other price where this happens.

(c) Total revenue is the amount of money generated by the sale of goods. At the equilibrium price of £2.50, 6,000,000 units are sold so total revenue is given by:

 $TR = P \times Q = \pounds 2.50 \times 6,000,000 = \pounds 15,000,000$

Question 2:

(a) The rise in house prices between 1996 and 2007 was the result of rising incomes and cheap and easy credit. This caused a significant increase in the demand for houses which forced up prices. In the diagram opposite, the increase in demand is shown by a shift in the demand curve from D_1 to D_2 . This caused prices to rise from P_1 to P_2 .



(b) The fall in house prices in 2008 and 2009 was the result of the recession. This caused demand for houses to fall and forced prices down. In the diagram below, the decrease in demand is shown by a shift in the demand curve from D₁ to D₂. This caused prices to fall from P₁ to P₂.



(c) If more houses are built in the UK there will be an increase in supply. This should cause house prices to fall. In the diagram opposite, the increase in supply is shown by a shift in the supply curve from S₁ to S₂. This causes house prices to fall from P₁ to P₂.



Economics in practice – The market for FA Cup Final tickets at Wembley

- (a) The equilibrium price is where supply and demand are equal. In Figure 7 the equilibrium price is P_1 .
- (b) The English FA are aware that they could charge more for FA Cup Final tickets. They know that the price they charge is below the equilibrium price. However, they choose to keep the tickets 'reasonably priced' so that genuine football supporters can afford to go to the match. This means that tickets are sold for less than the equilibrium price.
- (c) C is the correct answer. When the price set in a market is below the equilibrium price, demand is greater than supply. Therefore excess demand exists.
- (d) Total revenue = price x quantity

= £60 x 90,000

=£5,400,000

- (e) The current capacity of the new Wembley stadium is 90,000. If capacity could be doubled this would represent a significant increase in supply. An increase in supply on this scale would probably force ticket prices down.
- (f) Excess demand exists when, at the market price, demand is greater than supply. In this case supply is Q_1 and demand is Q_2 demand is greater than supply. The supply of tickets for the FA Cup Final is fixed at 90,000. However, there are never enough tickets for all the supporters that would like to go. There is always a shortage. This size of the shortage is reflected in the amount some people are prepared to pay on the 'black market'. For example, in 2007, tickets with a face value of £60 were being traded for £1000 a pair. The size of excess demand is likely to vary each year. For an attractive final featuring 'top' Premier League clubs, demand is likely to be much, much higher than 90,000. There has always been excess demand in this market and unless prices are set higher, or the stadium capacity is increased, this will always be the case.

Chapter 7

Getting started:

- (a) In this example, the price of petrol has increased by more than 20 per cent. However, this is not likely to affect demand very much. For example, Jenny Wong has only reduced her consumption by a very small amount.
- (b) (i) Demand for package holidays in Crete probably increased after the price change. The price decrease encouraged Tilly, Jasmine and Anuva to change their minds about their holiday destination. These packages, regardless of the destination, are attractive for very similar reasons and as a result they are good substitutes for each other. Holidays in either Crete or Spain can offer sand, sea, sun etc!
 - (ii) The demand for package holidays in Spain probably fell after the price of Cretian holidays fell. In this case, Tilly, Jasmine and Anuva decided against going to Spain in favour of Crete.
- (c) Jenny uses her car to go to work every day. Even though petrol prices have increased sharply she still has to drive to work. Petrol may be regarded as a necessity by Jenny. She cannot easily reduce her consumption of petrol.

Question 1:

- (a) If the price rises from \$5 to \$6, demand for the product in Figure 2 will fall from 3,000 units to 2,000 units.
- (b) Demand for goods that are price elastic are responsive to price changes. In this case, price has been increased by 20 per cent, from \$5 to \$6. However, the change in demand has been even greater. Demand fell by a massive 50 per cent. This is what would be expected for goods with elastic demand. A change in price brings about an even bigger percentage change in demand.

Question 2:

- (a) The value of price elasticity for product A is -0.4. It is less than -1 and therefore price inelastic.
 - The value of price elasticity for product B is -2.3. It is greater than -1 and therefore price elastic.
 - The value of price elasticity for product B is -6.5. It is greater than -1 and therefore price elastic.
- (b) Products which are price inelastic tend to have a steep demand curve. In this case, demand for product A is price inelastic. Therefore the demand curve for product A will be the steepest.
- (c) Demand for product C is the most price elastic. This means that demand is very responsive to price changes. If there was a sharp increase in the price of product C there would be an even greater decrease in demand.

Economics in practice – price elasticity of demand for oil:

- (a) Price elasticity of demand measures the responsiveness of demand to a change in price.
- (b) The demand for oil is price inelastic. It will therefore have a steep slope as shown in the diagram below.



- (c) The correct answer is B. A perfectly inelastic demand curve has a price elasticity value of 0.
- (d) The formula for calculating price elasticity of demand is given by:

Price elasticity of demand = <u>Percentage change in quantity demanded</u> <u>Percentage change in price</u>

(e) During 2007 and for half of 2008, there was a huge increase in the price of oil. It rose by about 200 per cent from around \$50 per barrel to \$150. However, the demand probably did not fall by very much. The demand for oil is very price inelastic (about -0.1).

In the second half of 2008 and at the beginning of 2009, the price of oil fell all the way back to less than \$50 a barrel. However, again it is unlikely that the demand for the product rose by very much as a result of the huge price decrease. When demand for a product is very inelastic, price changes do not have very much impact on demand.

(f) Oil is in demand worldwide. It has many uses. For example, it is used as a fuel and burnt to provide heat. It is converted into petrol, diesel and aviation fuel to power vehicles and other engines. And it is used by a range of different industries to produce paints, plastics, lubricants and many other substances. In some cases there may be substitutes for oil. For example, cars can be run on gas and increasingly on other fuels. However, in many countries these fuels are not well established and car drivers are not yet in the habit of changing their cars to those which run on other fuels. Also, someone with an oil central heating system could switch to gas, but this is not easy, it takes time and will cost money. Consequently, it could be argued that there are no good substitutes for oil at the moment, particularly in the short term.

Chapter 8

Getting started:

- (a) The supply of antiques cannot be increased. This is because antiques cannot be reproduced. As a result the supply of antiques would remain unchanged if there was a sharp increase in their price.
- (b) There is no reason why cornflake producers could not increase supply of cornflakes at short notice. Providing producers are not all running at full capacity (which is highly unlikely) the resources needed to step up production should be freely available.
- (c) If producers can hold large stocks of goods they should be able to respond very quickly to increases in demand. In this case, if cornflake producers hold large stocks of cornflakes, they would be able to increase supply to customers at very short notice.

Question 1:

- (a) When the price of the good rises from £20 to £30, the amount supplied rises from 5,000 units to 6,000 units.
- (b) In this example, the price increases by 50 per cent from £20 to £30. However, the percentage increase in supply is much smaller. The increase in supply is only 20 per cent (from 5,000 to 6,000 units). Since the change in supply is less than the change in price, it could be argued that the change in supply is insignificant.
- (c) Goods which have inelastic supply will not be very responsive to changes in price. The percentage change in price will be greater than the percentage change in supply. In this case the change in price is 50 per cent and the change in supply is 20 per cent. Therefore, the product has inelastic supply.

Question 2:

- (a) Supply is said to be price elastic if price elasticity of supply is greater than 1. In this case the price elasticity of supply for products X and Z are 2.4 and 5.1 respectively. Therefore, the supply of product Z (5.1) is the most price elastic.
- (b) The supply of product Y is price inelastic. Therefore the slope of the supply curve for this product will be steep.
 Supply curve for product Y



(c) The supply of product Z is very price elastic at 5.1. This means that a change in price will cause an even bigger change in supply. The amount supplied is very responsive to a price change.

Economics in practice – the supply of gold:

- (a) Price elasticity of supply measures the responsiveness of supply to a change in the price of a good.
- (b) The supply curve for gold shown in Figure 5 is perfectly inelastic. The value of price elasticity will therefore be 0.
- (c) When the price of gold rises from P₁ to P₂ in Figure 5, there is no change in the quantity of gold supplied. The supply of gold in this case is perfectly inelastic. This means that it is not possible for producers to supply more gold when the price rises.
- (d) The correct answer is A. If a supply curve passes through the origin, the value of price elasticity of supply will be 1. This means that the percentage change in price will be the same as the percentage change in quantity supplied.
- (e) The formula for calculating price elasticity of supply is given by:

 $Price elasticity of demand = \frac{Percentage change in quantity supplied}{Percentage change in price}$

(f) In this case the supply curve for gold is shown to be perfectly inelastic. This means that producers cannot increase supply when the price increases. Gold is scarce and there are few sources of the raw material around the world. It is also expensive and very time-consuming to produce, as a result it is difficult to increase supply at short notice. However, given more time, gold producers may be able to supply more. For example, they may be able find new viable reserves and employ more resources to mine it profitably.

Chapter 9

Getting started:

- (a) The demand for restaurant meals is the most responsive to changes in income. When Ed Winchester lost his job, Cindy and Ed stopped going to the restaurant for their lunch. They bought takeaways from fast food outlets instead. The demand for milk did not really respond to the change in income in the second example. Both Randy and Cindy Tebow enjoyed significant increases in income but their demand for milk was fairly stable.
- (b) The main reason why the demand for restaurant meals is more responsive to changes in income than milk is because restaurant meals are more of a luxury item. Consumers do not have to eat out at restaurants on a regular basis – for many it would be regarded as a luxury. Therefore when incomes fall, demand for restaurant meals is also like to fall significantly. On the other hand milk is what many would call a 'basic' food. Households buy roughly the same quantity of milk each week. As the example shows, demand for milk is not very responsive to changes in income.
- (c) There are many goods that might respond to changes in income like restaurant meals. Other luxury or non-necessity goods such as holidays abroad, new cars, fashion clothes and accessories and many forms of entertainment, would be responsive to changes in income.

Question 1:

- (a) (i) Inferior goods have negative income elasticity. The table shows that margarine has an income elasticity of -0.37. Therefore, margarine is an inferior good.
 - (ii) Many people regard margarine as an inferior good. This is because it does not taste as good as butter. Margarine is a cheaper substitute for butter and when incomes fall, demand for margarine is likely to increase. Most people would probably prefer butter if they could afford it. However, in recent years some people have preferred margarine to butter because it is less unhealthy.
- (b) Only one product in the table is income elastic. This is medical care in Japan. The value of income elasticity for health care in Japan is 1.24. Since the value is greater than one, demand for medical care in Japan is income elastic.
- (c) The value of income elasticity of demand for coffee is 0.16. Therefore demand is income inelastic. This means that if incomes rise the increase in demand for coffee would be insignificant. The demand for coffee is not very responsive to changes in income.

Economics in practice – Income elasticity in New Zealand:

 (a) (i) During this time period, weekly median household incomes in New Zealand rose from \$992 to \$1271. This is an increase of \$279. The percentage increase is given by:

 $\frac{\$279}{\$992} \times 100 = 28.1 \text{ per cent}$

- (ii) If the demand for a good is income inelastic, demand will not be very responsive to a change in income. In this case, the percentage increase in income over the time period is 28 per cent. However, the percentage increase in demand for the good is only 12 per cent. Therefore, because the percentage increase in demand is less than the percentage increase in income, demand for the good is income inelastic.
- (b) (i) Goods which are income inelastic have an income elasticity of less than 1 (i.e. a decimal or a fraction). There are two goods in the table which fall into this category clothing and footwear at 0.907 and food, beverages and tobacco at 0.394. The product group with the lowest value has the most inelastic demand with respect to income. Therefore, demand for food, beverages and tobacco is the most income inelastic.
 - (ii) One would expect the demand for food, beverages and tobacco to be income inelastic. This is because goods like food and beverages are necessities. Most consumers will spend roughly the same on these basic goods even if income were to rise or fall sharply. In the case of tobacco, this can also become a necessity if users become addicted. Consequently, the demand for this product group is not very responsive to changes in income.
- (c) The correct answer is C. The explanation is given in (d).
- (d) Figure 2 shows that incomes have increased by about 28 per cent over the time period. Garden furniture is the only product for which demand is likely to increase significantly as a result of this increase in income. The demand for garden furniture is likely to be income elastic. The other three products, milk, gas and rice, are all products for which demand is likely to be income inelastic.
- (e) Pak'n Save is a 'no-frills' supermarket which means it might be attractive to consumers living on relatively low incomes. During a recession average incomes in an economy are likely to fall. As a result, a supermarket like Pak'n Save might experience an increase in demand for its products. This suggests then that Pak'n Save provide a range of inferior goods goods for which demand increases when incomes fall.

Chapter 10

Getting started:

(a) (i) Before the price increase: $TR = E800 \times 500 = E400,000$

After the price increase:

- TR = E900 x 480 = E432,000
- (ii) The increase in green fees from E800 to E900 has resulted in a fall in membership from 500 to 480 but total revenue has increased by E32,000 (from E400,000 to E432,000).

(b) In this example, demand is said to be price inelastic. The price increase has resulted in an increase in total revenue. Therefore it could be suggested that if demand is inelastic a price increase will result in an increase in total revenue.

Question 1:

- (a) Demand for Crackles is elastic. The value of price elasticity for the product is -1.5, i.e. greater than 1.
- (b) If demand for a product is elastic, a price reduction will result in an increase in total revenue.

(c) Total revenue before the price change is given by:

 $TR = 25p x 5,000,000 = \pounds 1.25m$

Total revenue after the price change is given by:

 $TR = 20p \ge 6,500,000 = \pounds 1.3m$

(d) The price reduction from 25p to 20p has resulted in an increase in total revenue of £50,000 (from £1,250,000 to £1,300,000). This was to be expected since demand for Crackles is elastic.

Question 2:

- (a) (i) There are two taxes on petrol in the UK. Excise duty is 50.35p per litre and VAT is 17.13p per litre. Therefore the total tax is 67.48p. This represents 58.7 per cent (67.48/115 x 100) of the total price per litre.
 - (ii) More than half of the money generated from the sale of petrol is taken by the government. Most would agree that this seems rather a lot!
- (b) The government imposes indirect taxes on a range of goods and services. However, certain goods are targeted very aggressively. These will be goods which have inelastic demand. This is because consumers will avoid heavily taxed products if demand for them is elastic. Therefore, governments target goods like petrol which are either necessities or have no substitutes. However, most governments do not target goods such as food and water, which are essential to human survival.

Economics in practice – MaxiPop:

- (a) If MaxiPop raises the price of MaxiCola there will be a decrease in total revenue. This is because demand for MaxiPop is elastic. According to the data in Figure 2, if demand is elastic and price is increased, total revenue will fall.
- (b) (i) The total revenue before the price increase is given by: $TR = 0.30 \times 3 \text{ million} = 900,000 \text{ Euros}$ The total revenue after the price increase is given by: $TR = 0.40 \times 2 \text{ million} = 800,000 \text{ Euros}$
 - (ii) The increase in price from 30 cents to 40 cents results in a fall in total revenue. Consequently this may not be the correct action to take.
- (c) A government is not likely to impose a heavy indirect tax on a product like MaxiCola. This is because demand for MaxiCola is elastic. If goods with elastic demand are targeted by governments consumers will just avoid buying them. Goods with elastic demand are not necessities and probably have many substitutes. The government must impose taxes on goods which have inelastic demand if they are to be successful at raising revenue.

(d) A company like MaxiPop is able to produce a wide range of different drinks. So switching production to a new luxury soft drink would not be a problem. However, a new luxury soft drink with a premium price is probably not a good idea. This is because incomes are expected to fall in the future and therefore demand for such a product is also likely to fall. Luxury products tend to be income elastic and when incomes fall demand will also fall significantly. The firm might need to postpone such a launch until incomes start to rise again. If MaxiPop is keen to launch a new product they may benefit from developing a 'no-frills' brand of fizzy drink. Demand for such a product might rise when incomes fall.

Chapter 11

Getting started:

- (a) All countries have resources such as water, minerals, soil, plants, animals and people. Resources shown in the images include crops growing to provide food, coal being extracted to provide fuel, fresh food products and fish being taken from the sea to provide food.
- (b) The problem we face is that there does not appear to be enough resources to go around. Some people are starving and rely on aid others cannot find a home. Many people have to live in slums. A lot of the land on the planet is infertile and the resources on the planet are not evenly distributed. Some countries are richly resourced while others are lacking.

Question 1:

(a) Needs are the basic requirements for human survival. Some of these needs are physical and include water, food, warmth, shelter and clothing. The people in the first photograph are satisfying their needs. They are cooking their food on an open fire which is a very basic way of preparing food.

In addition to basic needs, humans also have other desires. These are called wants and may include more holidays abroad, more weekends away, a better house, meals out, a bigger car, more status and a cleaner environment. These wants are unlimited. People want more whatever their current circumstances. It is human nature. In the second photograph the people are satisfying a want. Eating out at a restaurant is not a basic need.

(b) All countries have resources such as water, minerals, soil, plants, animals and people. However, in any country there is a finite quantity of these resources. This means there is only a limited quantity. Most of the resources cannot be replaced once they have been used up.

Question 2:

(a) When making choices, individuals, firms and governments will face a cost once their choice has been made. This is called the opportunity cost. This cost arises because a sacrifice has to be made when making a choice. In this example a firm has placed its spending desires in order of preference. Therefore the opportunity cost can be identified. According to the list the bank will allocate the 7 billion rupees to opening up 50 new branches. The opportunity cost will be the benefit lost from the next best alternative. In this case it will be the benefit lost from not buying the insurance company.

Economics in practice – Production possibility curves:

(a) A production possibility curve (PPC) shows the different combinations of goods that can be produced if all resources in a country are fully used. In this case the two sets of goods are agricultural

goods and non-agricultural goods. The country is currently positioned at point X on the PPC. This means that 17.5 million units of agricultural goods and 8 million units of non-agricultural goods are being produced.

- (b) Decision-makers in this case have to decide which combination of agricultural and non-agricultural goods to produce. There are many different combinations. For example, it could be decided to produce all agricultural goods in which case 20 million units could be produced. However, the decision-makers have opted for point X on the PPC. This means that 17.5 million units of agricultural goods are being produced and 8 million units of non-agricultural goods.
- (c) Point T represents a combination of 15 million units of agricultural goods and 16 million units of non-agricultural goods. This is not attainable by the country because it does not have the resources required to produce this combination. Only points on the PPC are obtainable because by definition these are the maximum production possibilities.
- (d) A country can change the combination of goods it produces by moving along the PPC. However, if it does so there will be an opportunity cost. In this case, a movement from X to Y means that production of non-agricultural goods will rise by 4 million units from 8 million to 12 million. However, production of agricultural goods will fall by 2.5 million units from 17.5 million to 15 million. The 2.5 million units of agricultural products sacrificed is the opportunity cost of increasing production of non-agricultural goods.
- (e) C is the correct answer. When to produce is not a recognised part of the basic economic problem.
- (f) A country cannot produce combinations of goods that lie to the right of the PPC, like point T in the diagram. However, over a period of time an economy would expect to raise the production of all goods. This is because over time resources are used more efficiently or new resources are discovered. In this case, some new oil reserves have been discovered. This might mean that with the extra fuel, for example, more of both goods could be produced. The effect of this would be to shift the PPC out to the right. This is shown in the diagram opposite by a shift from PPC₁ to PPC₂.



Chapter 12

Getting started:

(a) The goods and services shown in the first set of photographs are likely to be provided by the government. In most countries it is the government that organises and provides military goods, roads and motorway construction, emergency hospital treatment and policing.

The goods and services shown in the second set of photographs are likely to be provided by businesses. Electrical goods, cars, fruit and vegetables and holidays are all examples of consumer goods. Such goods are usually provided by privately run business organisations.

(b) The goods and services shown in the first photograph are essential to the security and well being of the country. They are also very expensive to provide. As a result it is only the government, by collecting taxes from people and businesses, that can afford to provide them. Consumer goods can be produced by privately owned businesses. Production of these can be managed and funded by sole traders, partnerships and companies, for example.

Question 1:

- (a) The pie chart shows that social protection is the largest item of expenditure for the UK government. At £161 billion it represents more than a quarter of all government spending.
- (b) The provision of hospital services is the responsibility of the National Health Service (NHS). This is organised by the Department of Health, so health spending would have to be increased if new hospitals were to be built.
- (c) Most government expenditure is funded from taxation, direct charges for services or borrowing. Obviously if the government borrows money it must pay interest. Therefore the £30 billion debt interest is the interest paid by the government on the amount it has borrowed.

Question 2:

- (a) Before 1991, and the break-up of the Soviet empire, the Ukraine had a planned economy. During this time large and inefficient state-owned factories, enterprises, and collective farms wasted resources and emphasised quantity over quality. Prices were set by the state and consumer goods were often in short supply. There was also heavy spending on military goods at the expense of consumer goods. These problems are typical of those faced by planned economies.
- (b) When the Ukraine broke away from the Soviet empire, it adopted a mixed economy approach to resource allocation. To help the development of markets, the government took a number of measures. It reduced the number of government organisations so the public sector is now smaller. It improved the tax system and created a legal environment to encourage entrepreneurs, which will help businesses to flourish. It also reduced military production and converted military factories so that they can produce consumer goods. These measures will encourage the production of consumer goods in the private sector.
- (c) In an open economy there is international trade. This means that a country both exports and imports goods. The graph in Figure 2 shows that both exports and imports for the Ukraine have more than doubled in recent years. The growth in international trade has been consistent since breaking away from Soviet control. Also, for the first time in 2006, imports (\$43.8bn) exceeded exports (\$42.2bn).

Economics in practice – Mixed economies:

- (a) A mixed economy relies on both the public sector and the private sector to provide goods and services. It recognises that consumer goods are best provided by the private sector and public goods and merit goods are best supplied by the public sector. Consumer goods are distributed by the market system and public sector goods are generally provided free to everyone.
- (b) Figure 3 shows government expenditure as a percentage of national income for a selection of countries which all have mixed economies. According to the graph the Hungarian government spends about 60 percent of its national income. Therefore, this suggests that the public sector plays the greatest role in Hungary. However, the Icelandic government is also very close to spending 60 per cent of national income.
- (c) Figure 3 shows that government expenditure in India is lowest of the group at 20.4 per cent. Since government spending is relatively low this suggests that the majority of goods and services are

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produced in the private sector. Since it is the market system that distributes private sector goods, it follows that most goods in India are distributed by the market system.

- (d) Government spending, as a percentage of national income, is at its highest in Hungary and Iceland. Since high levels of government spending have to be funded mainly from taxation, it would be expected that these two countries have the highest taxes.
- (e) A is the correct answer. The construction of motorways is most likely to be provided by the public sector in a mixed economy. Cars, PCs and books will be provided by the private sector.
- (f) An economy should aim to produce goods and services as efficiently as possible. This means that goods should be produced at the lowest cost possible and that the quantity of resources needed to produce goods should be minimised. Efficiency in markets also means goods should only be produced that are needed by people.
- (g) It would appear that some firms in India are ignoring some of the costs of production. In Ahmedabad, where air pollution is a very serious problem, some firms may be may polluting the atmosphere during production. They may be discharging some untreated waste into the atmosphere smoke and other gases for example. This imposes a cost on society such as poor air quality which might cause ill health or other problems. This is an example of market failure because the market system has resulted in costs that are not being met by those who impose them. Therefore, air pollution may well be a problem of market failure in Ahmedabad.

Chapter 13

Getting started:

- (a) The three workers for Dublin Construction Company are all specialists. They all focus on one particular job for the company. Brendan is a bricklayer, Mary is an electrician and Ahab is a plumber. Each of them possesses specialist skills which are needed to do their jobs. These have taken time to develop.
- (b) Dublin Construction Company will benefit from employing specialists. This is because the quality of work is likely to be better. Specialist workers are usually better trained and more experienced in the specific tasks they undertake. This means the company can operate more efficiently and offer customers a higher level of workmanship.

Question 1:

- (a) Valencia is the only region in Figure 2 that produces toys.
- (b) The Rioja region specialises in the production of food and wine. This means that most people in the area will be farmers or wine producers. People may be employed as labourers on farms or in vineyards. A minority are likely to be specialists, such as tractor drivers or tasters and carry out some specialised tasks for farm owners and winemakers.
- (c) The main reason why the Rioja region only specialises in the production of food and wine is because the resources there, land in particular, are favourable for such production. The soil type and climate may be very suitable for growing crops and producing wine. Another reason may be that the region is not able to produce anything else. It may be starved of the necessary resources, to produce cars, for example.

Economics in practice – AF Devereux:

- (a) Most firms specialise in the production of a narrow range of products and AF Devereux is no exception. AF Devereux is a boat maker and produces one distinct style of boat catamarans. It is therefore a very specialised producer.
- (b) Like all highly specialist firms, AF Devereux is vulnerable to a fall in demand. If there is a significant fall in demand for catamarans, AF Devereux might struggle to survive. The company may have struggled, for example, after 2008, during the global recession. Demand for luxury items like catamarans is likely to be affected.
- (c) In many businesses the production process is broken down into small parts and each worker is allocated a specific task. This is called the division of labour. It allows people to concentrate on the task or skill at which they are best. The division of labour is evident at AF Devereux. Four production workers are employed in each production area. For example, a worker entering the moulding department received two years training and then remained in that particular area. They became specialists in that area of production. There was also a division of labour in the office. A specialist marketing manager was employed and a specialist designer.
- (d) Two disadvantages of AF Devereux's employees specialising are:
 - Boredom
 - Over-specialisation if made redundant, i.e. they may not be able to find a new job if their skills are no longer required.
- (e) B is the correct answer. Boredom is likely to be the result of repeating tasks over and over again.
- (f) One of the main advantages to AF Devereux of the division of labour is that workers can perform tasks quickly and accurately. There are fewer mistakes and productivity will rise. There may be a greater use of specialist tools, machinery and equipment when workers specialise. Production time is reduced because workers do not have to waste time moving from one task to another. This often involves moving around the workplace collecting tools, changing workstations and resetting machinery. Specialists are likely to remain at the same workstation repeating their task without the need to move around. This is certainly the case at Devereux in the Trimming department.

However, there are disadvantages to the division of labour. One problem is that if tasks are too repetitive and boring people become dissatisfied and poorly motivated. This might result in poor quality work, poor punctuality, increased absenteeism and high staff turnover. Problems can also occur if one stage of production depends on another stage. If one stage breaks down all other stages may also have to be halted. Specialisation may result in a loss of flexibility in the workplace. For example, if a moulding worker is absent, and there is no-one else with those skills, production may be disrupted.

To conclude, AF Devereux must be happy with the level of specialisation because there is no information in the case which suggests otherwise. They must be happy with high levels of specialisation because there are no plans to increase flexibility.

Chapter 14

Getting started:

(a) The demand for labour at Royal Mail looks set to fall quite dramatically. Around 30 per cent of all jobs in the letters division are expected to be lost over the next four or five years.

In contrast, the demand for labour at Morrisons is rising. The supermarket chain plans to employ a further 5,000 people as it expands.

(b) Royal Mail is laying off staff because it is automating some of its operations. Machines are replacing people and new, more efficient, ways of working are being implemented. The company is also facing stiff competition and possibly losing some business.

Morrisons is employing more staff because it is expanding. Despite the global downturn the supermarket is increasing its floor space. It will need more people to staff the new butchery, bakery and fish counters that are being added to stores. The company is also enjoying more business – sales were up 9 per cent in December 2008. This might also mean they need more staff.

Question 1:

- (a) The demand for labour is said to be a derived demand. This means that the demand for labour is derived from the demand for the goods and services supplied by businesses. In this case, BHB Billiton is having to lay off workers due to the falling demand for its products. The falling demand for its products is resulting in a falling demand for labour.
- (b) The fall in demand for BHB Billiton's products means that the firm's demand for labour will also fall. This will cause the demand curve for labour to shift to the left. In the diagram below the demand for labour has shifted to the left from DL₁ to DL₂. At the wage rate W₁, the demand for labour by Billiton has fallen from QL₁ to QL₂.



Question 2:

- (a) (i) The proportion of women employed in the Australian economy has increased from 48.3 per cent in 1982 to 67 per cent in 2005.
 - (ii) In the last 40 years, in many countries, there has been a change in the role played by women. An increasing number of females have abandoned the traditional role of housekeeping and child rearing. Instead they have opted to work and pursue careers. This has increased the size of the working population in many western style economies like Australia.

(b) The increase in the number of women entering work has increased the supply of labour in Australia. This will shift the supply curve for labour to the right. In the diagram below, the supply curve for labour moves from SL₁ to SL₂. As a result, the number of workers employed at a wage of W₁ has increased from QL₁ to QL₂.



Economics in practice – Wages in Norway:

- (a) The demand curve for labour slopes downwards, from left to right. This is because the wage rate and the demand for labour are inversely related. This means that when wages rise firms demand fewer workers and when wages fall they demand more. One of the reasons why the demand for labour falls as wages rise is because higher wages leads to higher production costs. As a result, firms reduce their supply and therefore need fewer workers.
- (b) There will be a relatively plentiful supply of workers in jobs which require no skill, training, qualifications, experience or special talent. As a result, wages for construction labourers will be relatively low. Since almost anyone can do these jobs, supply is high, which forces wages down. In contrast, it takes many years to train as a teacher and there are certain entrance qualifications. For example, in the UK a teacher must have a degree. As a result, the supply of teachers is much lower than that of construction labourers which forces teachers' wages up.
- (c) D is the correct answer.
- (d) If the government raises the retirement age in Norway, people will have to work longer before they are entitled to a state pension. Therefore people will remain part of the working population for longer. Most people will have to work to earn money to support themselves.
- (e) The construction boom in Norway will result in an increase in demand for construction workers. This will cause the demand curve for labour to shift to the right, from DL₁ to DL₂ in the diagram below. This will force up the wage rate for construction workers from W₁ to W₂.

Demand for construction workers



(f) The Norwegian government has tried to encourage immigration into the country. The affect of this is to increase the supply of workers in Norway. This is shown in the diagram below by a shift in the supply curve from Sl₁ to Sl₂.



Chapter 15

Getting started:

- (a) Minimum wages are designed to raise the incomes of low paid workers.
- (b) Minimum wages are set by regional authorities in China. For example, Guangdong, China's richest province, said it plans to raise minimum wages by as much as 18 per cent in some cities in 2008.
- (c) The aim of minimum wages in China is to protect labourers and benefit low-income labourers working at factories, particularly migrant workers who have left rural farming areas for the city.
- (d) Since last year, Chinese residents have seen prices of food and other basic goods increase more than their pay. As a result some have said that this could lead to social unrest. Minimum wages are being increased to help Chinese residents meet rising living costs and hopefully avoid the social unrest.

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Question 1:

- (a) The equilibrium wage in this labour market is \$8. This is where the supply and demand for labour are equal. At this wage rate 250,000 workers are employed in this market.
- (b) The minimum wage is \$10 per hour in this case. The minimum wage is set above the equilibrium and as a result the number of people employed falls from 250,000 to 200,000. This is because the demand for labour falls at higher wage rates.
- (c) The government might impose a minimum wage for a number of reasons. One of the main ones is to help reduce poverty. This is because in many countries minimum wages are often part of a broad strategy to end poverty. Minimum wages can also benefit disadvantaged workers. It is argued that people such as women, ethnic minorities and low income families benefit from minimum wages. Finally, minimum wages can benefit businesses. A minimum wage should promote greater equality and fairness among workers. As a result, workers will be better motivated. This should reduce staff turnover, reduce absenteeism and raise productivity.

Question 2:

- (a) Trade unions have a number of roles but their main one is securing better pay and conditions for their members. In this case the Bustamante Industrial Trade Union has secured wage increase for the clerical and accounting staff at the Jamaica Teachers Association's office. The two year contract period spans April 1, 2008 to March 31, 2010. There will be an increase of 22 per cent in year one and 8 per cent in year two.
- (b) It is argued that interference in labour markets by trade unions can have an adverse effect on the level of employment in a market. When a union secures higher wage rates, it may be at the expense of jobs. This is because when wages are higher the demand for labour falls. Therefore, after the wage increases secured by the Bustamante trade union in this case, employers might react by laying off some staff.

Economics in practice – Minimum wages in Japan and the UK:

- (a) Figure 6 shows an international comparison of minimum wage levels. The highest minimum wage, as a percentage of the average wage, exists in Ireland where it is nearly 60 per cent. The lowest is in Korea where it is less than 30 per cent. However, Japan is the third lowest at around 30 per cent. So it could be argued that Japan is due for an increase in the minimum wage.
- (b) The increase in the minimum wage in Japan is part of the government's efforts to close the gap between the rich and the poor and to boost economic growth. The Prime Minister has been under pressure recently to improve the livelihood of low-wage workers amid growing public outcry that the gap between the rich and the poor is increasing despite the current economic recovery.
- (c) Minimum wages are enforced in Japan by a system of fines. Employers who are caught paying workers below the minimum wage will face financial penalties. The government said it would sharply raise fines on employers who pay workers below the legal standard as part of the new legislation.
- (d) C is the correct answer. The purpose of a minimum wage is to increase the wages of workers who are poorly paid. Obviously, this is only part of the workforce in an economy.
- (e) Unions have a better chance of securing higher wages if they are powerful and can exert pressure on employers. However, they are also likely to be successful if the employer can afford to pay higher

wages. In this case unions feel that companies will be making higher profits next year. This suggests that they may be able to pay workers more.

(f) When trade unions interfere in a labour market, they can force wages up. However, this may be at the expense of jobs. This is because the demand for labour falls when wages are higher. However, it may be possible for unions to secure higher wages without lowering levels of employment. Job losses might be avoided if labour productivity rises at the same time or employers are able to pass on wage increase to customers in the form of price rises or if profit margins are reduced. Consequently, it is not always true that wage increases secured by trade unions will result in lower levels of employment.



Chapter 16

Getting started:

- (a) Machinery, tools, computers and other equipment:
 - Raw materials such as sheet metal.
 - Car components such as wheels, engines, braking systems, lights and seats.
 - Energy such as gas and electricity.
 - Labour
 - Buildings such as factories, warehouses and offices.
- (b) Honda employ over 160,000 people world-wide.
- (c) It may be possible to improve the efficiency of Honda's workers by introducing an incentive scheme to encourage them to work harder. They might be given more efficient tools and equipment to work with; they may be retrained and become more skilled; they may adopt new working practices which are more effective.

Question 1:

- (a) Atlantic cod is a renewable land resource. Fish are able to reproduce naturally so stocks of Atlantic cod can be replenished.
- (b) According to the graph in Figure 2, stocks of Atlantic cod do appear to be under threat. The amount of Atlantic cod landed has fallen from around 800,000 tonnes in the late 1960s to zero in 1992. This is an alarming fall. The graph shows that for a few years no cod at all was landed. This suggests that fishing ceased while stocks were given a chance to replenish. Since then only a very small quantity of cod has been landed which suggests that stocks are still under threat if fishing is not controlled.

Question 2:

- (a) Examples of capital used by Alonso which are mentioned in the case include the 50-seater coach, mobile phones, office furniture and a computer.
- (b) Entrepreneurs are responsible for setting up and running small businesses. Without them production would not take place. Alonso has set up a bus company to provide a passenger transport service from Madrid city centre to the airport. This was his idea and he owns the business. These are both features of entrepreneurship and Alonso has also taken some risk. He has invested 20,000 Euros of his own money. If the business is not successful he stands to lose some, or all, of this money. Alonso also organises other production factors. He has purchased some capital and hired two drivers to help him out.

Economics in practice – Mehreen Carpets:

- (a) Renewable resources used by Mehreen Carpets that are mentioned in the case study include wool and rosewood.
- (b) The loom is an example of fixed capital. It is not used up in production like working capital. It is used to make carpets and will be used repeatedly by the business.

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- (c) The value of human capital can be increased through training. Mehreen Carpets may spend time training its workers to reach higher levels of skill and craftsmanship. This will help them to be more productive which means the value of human capital will rise.
- (d) Production is a process that involves converting resources into goods or services. In this case Mehreen Carpets uses resources such as wool, a loom and skilled craftsmen to produce high quality, hand knotted oriental carpets. The business also produces furniture. The resources used here include rosewood, tools, equipment and skilled workers.
- (e) Mehreen Carpets might consider two approaches to raising carpet production. One is to employ more resources. This may involve investing in more looms, employing more skilled craftsmen and buying more wool and other materials. These extra resources will enable the business to produce a greater quantity of carpets to help meet the large export order.

The other approach is to increase productivity. This means that more output can be produced with the same resources. Mehreen Carpets might try to increase productivity by introducing an incentive scheme for their employees. This might encourage them to work harder. Other ways of increasing productivity might involve changing working practices, investing in more efficient looms or retraining workers. However, in this case the most likely approach is to use more production factors to meet the order. The measures needed to raise productivity may take a while to introduce.

Chapter 17

Getting started:

- (a) A Hairdressing is a service B Fishing is an agricultural activity C Banking is a service
 - D Paper production is manufacturing
- (b) (i) Ethiopia is a less developed country and is likely to focus on agricultural production such as fishing or farming.
 - (ii) The US has a very developed economy and is likely to focus on the production of services such as hairdressing and banking.

Question 1:

- (a) The primary sector is concerned with the extraction of raw materials from the earth. The main activities in this sector include mining, quarrying, fishing, forestry and agriculture. In this case, Jill and Ronnie Rimmer are farmers producing agricultural products. They grow root vegetables which is an example of primary production. The tertiary sector is concerned with the provision of services. In this case, the shops and supermarkets supplied by Jill and Ronnie Rimmer are retailers. Retailing is an important activity in the tertiary sector.
- (b) There has been a sharp fall in the number of people employed in agriculture since 1960. In 1960, 1,118,000 people were employed in the agricultural sector. In 2007, this had fallen to 402,000.
- (c) One of the main reasons why employment in agriculture has fallen in the UK so sharply is because of advances in technology. In the 1970s, Jill and Ronnie employed up to 12 workers, however, due mainly to mechanisation they now only employ three. Developments in technology have been enormous in agriculture. The harvesting machine shown in the photograph is an example, and once machines such as these have been purchased, the need for labour drops sharply.

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Economics in practice – Economic sectors – an international comparison:

- (a) (i) Production in the secondary sector of an economy involves converting raw materials into finished or semi-finished goods. In Spain, the manufacturing sector includes metals and metal manufactures, textiles and apparel (including footwear), food and beverages, chemicals, shipbuilding, electronic devices, automobiles and machine tools, for example.
 - (ii) Thailand relies most on the secondary sector for its economic output. Nearly half of its entire output (46 per cent) comes from the secondary sector. This compares with 29 per cent in Spain and 25 per cent in Uganda.
- (b) Less developed countries, such as Uganda, rely more heavily on agriculture for their economic output than well developed countries. In this case, Uganda relies more on agriculture than both Thailand and Spain. 33 per cent of Uganda's output is generated by the agricultural sector. This compares with just 10 per cent in Thailand and only 3 per cent in Spain. It also states in the case study that around 80 per cent of Uganda's workforce is employed in this sector. This is also typical of a less developed state. Finally, Uganda is also one of the poorest nations in the world. Such nations do not normally have a well developed secondary or tertiary sector.
- (c) A is the correct answer. Food processing is a secondary sector production activity.
- (d) (i) De-industrialisation occurs in well developed countries such as the UK, US, Germany, Japan and France. It involves the decline of the manufacturing sector at the expense of the tertiary sector. In the last 20 or 30 years many western style economies have seen employment in manufacturing fall sharply. However, at the same time there has been a consistent increase in the numbers of people employed in services.
 - (ii) The country with the most well developed tertiary sector will have been subject to the most de-industrialisation. According to Figure 4, Spain has experienced more de-industrialisation than the other two countries. The amount of output contributed by the tertiary sector is 68 per cent in Spain. This compares with 44 per cent in Thailand and 42 per cent in Uganda.
- (e) De-industrialisation occurs in well developed countries. A number of suggestions have been put forward to explain the process. There may have been a change in consumer demand. People may prefer to spend more of their income on services rather than manufactured goods. For example, people may be spending more on holidays, restaurants, travelling and personal services and less on consumer durables. Competition in manufacturing may be another important reason. Recently there has been some fierce competition in the production of manufactured goods from developing countries such as India, China and Brazil. These countries can often produce manufactured goods more cheaply than in western economies. Another reason is that as countries become more developed the public sector tends to grow rapidly. Since the public sector mainly provides services such as education, transport and healthcare, this adds to the growth of the tertiary sector. Finally, advances in technology means that employment in manufacturing falls because machines replace people. The reason for the decline in manufacturing in well developed countries may be different depending on the circumstances of the individual nation. For example, a country which has an inefficient manufacturing sector may be vulnerable to overseas competition.

Chapter 18

Getting started:

- (a) The costs linked to output are those associated directly with the production of each canoe. These include raw materials, labour and delivery. For every canoe that is made, these costs will increase. The other costs such as rent, administration wages, advertising and other expenses are all monthly costs. They are not linked to output.
- (b) The monthly costs of rent, administration wages, advertising and other expenses will stay the same regardless of how many canoes are produced. Even if canoe production rises by 20 per cent, the monthly rent, for example, will remain the same. These monthly costs are not linked to output.
- (c) If 12 canoes are produced the total costs incurred in February will be:
 - $= (\$400 + \$2,500 + \$100 + \$200) + 12 \times (\$200 + \$900 + \$40)$
 - $=(\$3,200)+12\times(\$1,140)$
 - = \$3,200 + \$13,680
 - = \$16,880

Question 1:

(a) Fixed costs are costs that do not vary with output. If output is increased, for example, fixed costs will remain exactly the same. In this case examples of fixed costs include rent, business rates and other fixed costs. These are annual costs and do not vary with output.

(b)
$$TC = FC + VC$$

- $= (\$50,000 + \$5,000 + \$25,000) + 4,800 \times (\$30 + \$10 + \$50 + \$10)$
- $=(\$80,000) + 4,800 \times (\$100)$
- = \$80,000 + \$480,000
- =£560,000
- (c) TC = FC + VC
 - $=(\$60,000 + \$5,000 + \$25,000) + 6,000 \times (\$30 + \$10 + \$50 + \$10)$
 - $=(\$90,000)+6,000\times(\$100)$
 - = \$90,000 + \$600,000
 - = \$690,000

Question 2:

- (a) Total cost = Fixed cost + Variable cost
 - = £160,000 + (4,500 × £120)
 - = £160,000 + £540,000
 - = £700,000
- (b) Total revenue = Price \times Quantity = £250 \times 4,500
 - $= \pounds 1,125,000$
- (c) Profit = Total revenue Total cost = £1,125,000 – £700,000 = £425,000
- (d) Profit = Total revenue Total cost = $\pounds 250 \times 5,200 - (\pounds 160,000 + 5,200 \times \pounds 140)$

 $= \pounds 1,300,000 - (\pounds 160,000 + \pounds 728,000)$ $= \pounds 1,300,000 - \pounds 888,000$ $= \pounds 412,000$

Economics in practice – Glenn's Fishing Trips:

- (a) Fixed costs are costs that do not vary with output. They stay the same at all levels of output. In this case fixed costs are those not linked to the number of fishing trips that Glenn sells. Examples are advertising, interest payments and insurance. These costs are the same every month. Variable costs are those which vary according to output. They rise as more output is produced. In this case variable costs are those which rise when Glenn sells more fishing trips. Examples include tackle hire, fuel and picnic hampers. These costs will go up the more trips he sells.
- (b) The total costs are found by adding all the costs in the January column. These are equal to \$8,210.
- (c) D is the correct answer. The cost of tackle hire varies with the number of trips made. All the other costs are fixed.
- (d) Profit = Total revenue Total cost = $(\$500 \times 28) - \$8,210$ = \$14,000 - \$8,210= \$5,790
- (e) Average $cost = \frac{Total cost}{Output} = \frac{\$8,210}{28} = \$293.21$
- (f) Profit = Total revenue Total costs
 - $= (\$600 \times 28) \$8,210$ = \$16,800 \$8,210
 - -\$10,800-\$8,= \$8,590

Chapter 19

Getting started:

- (a) In this example, certain costs are lower for the larger car firm, International Automotive. For example, the large firm can buy 12 volt car batteries for \$10 each. The smaller firm pays \$18. International Automotives is also paying less for its finance. It pays 6.8 per cent on loans of \$200m. In contrast, Spirit Cars pays 8.9 per cent on a loan of \$1.2 million.
- (b) International Automotives is likely to be more efficient. It enjoys lower costs and uses modern production techniques. It has large factories equipped with state-of-the-art technology. Modern, hightech production methods tend to be more efficient. In contrast, Spirit Cars uses craft workers to hand build cars. This will be much less efficient and incurs higher costs for resources.
- (c) With these cost advantages International will have a competitive edge over its rivals. With lower costs it can afford to charge customers lower prices. As a result, it might win a larger market share.

Question 1:

(a) News International is likely to enjoy lower average costs as a result of opening the new printing plant. This is because it can exploit economies of scale. When a firm increases the scale of operations, average costs will fall. In this case, News International has more than doubled its printing capacity from 30,000 copies an hour to 70,000. (b) Technical economies arise because larger plants are often more efficient than smaller ones. There can be more specialisation and more investment in machinery, for example. In this case, News International is exploiting technical economies. It has invested in a huge new plant – more than double the size of its previous Wapping printing plant. It contains twelve state-of-the-art colour printing presses which cover an area the size of 23 football pitches. The presses are quieter and much faster than those they replaced at Wapping. The new, larger plant is more efficient and cost effective.

Question 2:

- (a) Sometimes all firms in a particular industry can enjoy falling average costs as the whole industry grows. This is called external economies of scale. External economies are more likely to arise if an industry is concentrated in a particular region. In this case, large numbers of high-tech companies, silicon chip innovators and manufacturers in particular, have congregated in Silicon Valley. Silicon Valley is in the southern part of the San Francisco Bay Area in Northern California. As a result, the industry has been able to benefit from external economies of scale.
- (b) External economies of scale may arise for a number of reasons. For example, an established industry in a region will encourage suppliers in that industry to set up close by. Specialist marketing, cleaning, banking, insurance, waste disposal, distribution, maintenance and components suppliers are likely to be attracted to the area. All firms in the industry will be able to benefit from their services. In this case, venture capitalists, computer experts, engineers, computer programming and service companies all developed in Silicon Valley to serve the semi-conductor manufacturers. There was also a ready supply of industrial space and housing was still relatively inexpensive.

Economics in practice – Sensations:

(a) The size of a firm has an important affect on the average costs of production. As a firm increases its size, average costs start to fall. This is due to economies of scale, the idea that the firm becomes more efficient as it grows. In the diagram below, a firm will enjoy falling average costs as it expands between 0 and Q*. At Q* average costs are minimised and if a firm continues to expand, average costs will start to rise. This is due to diseconomies of scale which arise because of inefficiencies in production.



(b) As firms expand they can afford specialist managers. In this case, Sensations has employed a specialist marketing manager. A small business may employ a general manager responsible for finance, human resources, marketing and production. The manager may find this role demanding and lack competency in some fields. A large firm can afford to employ specialists in these fields. As a



result efficiency is likely to improve and average costs fall. Through his or her expertise, the marketing manager was able to raise the profile of the Sensations brand right across Canada. As a result the company grew quickly and became very profitable.

- (c) C is the correct answer. The availability of skilled labour is an external economy of scale. All the other responses are internal economies.
- (d) Large retail chains like Sensations are very likely to benefit from purchasing economies. Big firms that buy large amounts of stock can get cheaper rates. Shoe and garment manufacturers will offer discounts to firms that buy stock in bulk. This is similar to consumers buying multi-packs in supermarkets. They are better value for money. Sensations has expanded rapidly and now buys large quantities of stock from China. Inevitably, the company will benefit from purchasing economies.
- (e) Diseconomies of scale occur when average costs start to rise because the firm has grown too big. In this case, there is some evidence that Sensations is suffering from diseconomies of scale. Since buying the chain of stores in the Middle East, problems have arisen. For example, communications became difficult due to language and cultural differences. There were also some employee problems and a lack of employee empathy. Many of the staff did not seem to care whether the company succeeded or not resulting in inefficiencies and rising costs. Also, some of the store managers complained that the company was becoming too bureaucratic. Rising bureaucracy is a common source of diseconomies of scale. If a business becomes too bureaucratic, it means that too many resources are being used up in administration. Too much time may be spent filling in forms and writing reports. Also, decision-making may be too slow, communication channels too long and too many managers may be employed. If this is happening at Sensations, then they will be experiencing diseconomies of scale.

Chapter 20

Getting started:

- (a) At AMZ Tyres, labour productivity has improved. The firm employs 50 workers and the total output of tyres rose from 450,000 in 2007 to 520,000 in 2008. PepsiCo has managed to cut its energy consumption. It has reduced the use of its boilers by 70 per cent and the new generator is three to four times more efficient than a typical generator. In both cases, better use is being made of resources.
- (b) At AMZ Tyres labour productivity was increased by retraining the entire labour force. The training focused on improving the flexibility of workers and as a result total output rose. PepsiCo installed new technology including a \$2.35 million combined heat and power system in its bottling plant. Four 400-kilowatt generators, powered by natural gas that produce about 80 per cent of the electricity needed to run the filling, packaging and processing machines, were installed. The machines capture the heat given off by generators and convert it into steam. This is then used to warm the bottles and clean the machines.
- (c) In both cases, the improvements in productivity will raise profitability. At AMZ Tyres more output is being produced with the same number of workers. This extra output will generate more revenue and probably more profit. At PepsiCo, energy is being saved so costs will be lower. This will increase profit. It is also possible that workers will benefit because the two companies may be able to afford higher wages. Finally, the investment in new technology at PepsiCo will also benefit the environment. This is because less electricity is being used. The generation of electricity contributes to global warming.

Question 1:

- (a) Crops need water to grow and in some areas there is insufficient water to grow crops effectively. Irrigation involves diverting water from natural sources such as rivers, lakes or streams, to land which needs more water. In crop production it is mainly used in dry areas and in periods of rainfall shortfalls. However, some land is too wet for agricultural production. Either it is prone to flooding or it never drains properly. Drainage, which is the natural or artificial removal of surface and subsurface water from a given area, can be used to make such land more productive. In Ethiopia, both drainage and irrigation is being used to help improve the productivity of land.
- (b) The Irrigation and Drainage project in Ethiopia aims to increase irrigated agricultural output in the Megech and Ribb schemes located in the Lake Tana sub-basin of the Blue Nile Basin. The project will increase the productivity of around 20,000 ha of land. By providing more reliable access to water, agricultural productivity is expected to rise. In addition, farmers will be able to move into higher value products. Improvements in drainage and irrigation will also enable farmers to diversify and farm more intensively. This should help to reduce rural poverty in Ethiopia.

Question 2:

- (a) Labour productivity has increased the most in the Slovak Republic. It grew by just over 5 per cent between 2001 and 2006.
- (b) Labour productivity can be improved if people are better educated. In many countries the government is responsible for the education system. Therefore, the state can help improve the quality of human capital by investing in the education system. This might involve providing more equipment for schools, improving the quality of teaching or improving the management of schools and colleges. To equip young people with the skills needed in the workplace, a government might invest more in vocational education.
- (c) Improvements in labour productivity in Italy and Mexico were very low between 2001 and 2006. This suggests that investment in education and training were probably low. It also suggests that firms in these countries failed to improve working practices by adopting methods such as TQM or lean production. Finally, the workers in Mexico and Italy may be poorly motivated.

Economics in practice – Dragon Mouldings:

- (a) Labour productivity is defined as output per worker. It is the amount of output a worker produces in a given period of time. Labour productivity can be calculated if total output is divided by the number of workers employed.
- (b) 2007 Labour productivity $\frac{25,000,000}{50} = 500,000$ units p.a 2008 Labour productivity $\frac{24,000,000}{50} = 480,000$ units p.a
- (c) A is the correct answer. Job rotation is used to make work more interesting. It is a non-financial method of motivating workers. All the others are financial methods.
- (d) The new production manager at Dragon Mouldings carried out a staff survey and discovered that many workers were bored with their jobs. Jobs can be made more interesting by adopting job rotation, team working or empowerment.
- (e) The new production manager plans to introduce new technology in the factory to improve productivity. In particular, the use of robots is favoured. Robots respond to instructions from a


computer and handle a lot of the repetitive work in factories. Robots have reduced the need to employ people in jobs that were boring and uninteresting. As a result, workers at Dragon Mouldings may be spared the boring and repetitive work.

- (f) (i) If productivity improves at Dragon Mouldings, more output will be produced with the same quantity of resources. This means that unit costs will be lower. Therefore, the company should make more profit. The company may also gain a competitive edge over its rivals and will help to win a larger market share.
 - (ii) Improvements in productivity at Dragon Mouldings will also benefit the Chinese economy. This
 is because improvements in productivity shift the PPC out to the right. This means that more
 goods and services can be produced with a given quantity of resources. As a result the country is
 better off it is wealthier.

Chapter 21

Getting started:

(a) People outside the business will be affected by the new development in a number of ways. Local residents will benefit from the 'cleaning up' of a derelict site – the eyesore will be removed. There will also be some job creation in the local area. This will benefit some of the residents. Finally, many local people will benefit from having some new retail facilities, a restaurant and secure accommodation.

On the other hand, there may be some disruption to normal life during the development. There will be some noise and dust when the site is cleared, and up to 12 months of congestion due to the closure of an important road. Consequently, people outside of Empress Developments will both benefit and suffer as a result of the new development.

Question 1:

- (a) Factory farming may result in a number of negative externalities. For example, there may be an increase in the number of antibiotic-resistant bacteria because of the overuse of antibiotics in factory farming. This could cause health problems to the wider community in the future. Factory farming also results in air quality problems and the contamination of rivers, streams, and coastal waters with animal waste.
- (b) The private benefits of factory farming are the financial benefits to the farm owners. These might be lower costs and higher profits because factory farming is more efficient.
- (c) Social costs are the private costs and negative external costs added together. The private costs will be the financial costs of setting up and running a factory farm and the negative externalities are those outlined in (a) such as contaminated waterways from animal waste. Added together these form the social costs of factory farming.

Economics in practice – The London Congestion Charge:

(a) Externalities are the spill-over effects of economic activities such as production or consumption. They affect others and can be positive or negative. Negative externalities are costs created that are not met by those who impose them. In this case, car users in central London are causing congestion and polluting the atmosphere with carbon emissions. These costs are not met by those who impose them. Therefore, they are negative externalities.

- (b) Figure 2 shows that car use has more than doubled since 1971. The number of passenger kilometres has increased from 313 billion to 686 billion in 2006. Figure 3 shows that carbon emissions from transport has doubled from around 75 million tonnes in 1970 to about 150 million tonnes in 2005. This does suggest that cars must take a fair proportion of the blame for pollution and global warming caused by carbon emissions.
- (c) C is the correct answer. The social costs of an economic activity are the private costs plus any external costs met by third parties.
- (d) Many would argue that the London Congestion Charge has been a success. It was introduced because London's roads were clogged with slow-moving traffic and congestion was costing business £2m a week. Twelve months after its introduction it was claimed that traffic had been cut by 18 per cent and delays were down 30 per cent. The Mayor of London also said that the city's bus system had 'improved dramatically' with 29,000 more people using the service. However, the money raised from the scheme had not met expectations. It had been expected the charge would raise £180m for public transport, but it is well short of that estimate. Instead officials expect to get £68m this year and between £80m and £90m next year. Also, many central London retailers complained that their sales were down. However, since it was also claimed that the scheme led to a modest increase in the life expectancy of Londoners, most would agree that it has been a success.
- (e) According to Figure 3, carbon emissions resulting from industry in the UK have fallen between 1970 and 2005. In 1970, industry was responsible for around 300 tonnes of carbon dioxide. By 2005 this had fallen to around 150 tonnes. It could be argued that some of the measures taken by the government during that time period may have contributed to this fall. For example, some of the government legislation may have helped, such as, The Clean Air Act 1993, which allowed local authorities to control the height of chimneys serving industrial processes. Also, in 2005, the European Union (EU) Emissions Trading Directive came into force. Under the scheme, power stations, refineries and heavy industry across the EU are limited on how much carbon dioxide they can release into the atmosphere. Other measures, such as taxing polluters, subsidies to firms that avoid pollution and a system of fines, may also have helped.

However, there may be other reasons why carbon emissions from industry have fallen. For example, during this time deindustrialization has occurred in the UK. The manufacturing sector has been in serious decline over the time period. Also, firms have become more socially responsible. They may have been committed to the reduction of carbon emissions to improve their image. It is therefore very difficult to evaluate whether government measures are entirely responsible for the fall in industry emissions.

Chapter 22

Getting started:

- (a) Thames Water faces no competition. It is the only firm that supplies water and treats sewerage in London. In contrast, Maze faces lots of competition. There are around 5,500 restaurants in London.
- (b) In the restaurant market, where competition exists, there is more choice for consumers. For example, a resident of London has over 5,500 restaurants to choose from when dining out. Also, because of the competition, prices may be lower. In contrast, the only supplier of tap water in London is Thames Water. There is no competition and no choice whatsoever for consumers. If the level of customer service is poor or prices are too high (which they are likely to be when there is no competition), consumers cannot switch to another provider.



Question 1:

- (a) Competitive markets have lots of sellers. In this case, there are lots of places in the town centre where travellers can buy foreign currency before they go on holiday. This suggests that the market is competitive. The products sold by every outlet will be identical. It makes no difference where the Australian dollars are purchased from. This is another feature of a competitive market. Finally, the prices charged by all the outlets are very similar. The price of 5,000 Australian dollars ranges from £2,415 to £2,420. This is a difference of just 0.2 per cent and also supports the view that this market is competitive.
- (b) The cheapest provider of 5,000 Australian dollars is outlet F (£2,415). Therefore I would recommend this provider. There is no incentive to buy from a more expensive outlet because the product is identical.

Question 2:

- (a) Competitive markets have a large number of sellers and the product is highly substitutable. In this case, there are 5,500 producers of honey in Canada and the product each one sells is very, very similar indeed.
- (b) Generally, consumers benefit from the existence of competitive markets because prices are lower, quality is better and there is more choice. In this case, prices are likely to be low because there are so many honey producers. The penalty for raising price above the 'going price' will be large scale lost sales. The quality of Canadian honey is also high. Canadian honey is recognized around the world for its superior quality and prized taste. The Canadian Food Inspection Agency ensures that producers meet strict quality standards. In most provinces, the beekeeping industry is served by specialists who are responsible for the registration of beekeepers, bee health, management practices and other issues affecting beekeepers. If any single producer falls below the required quality standards, they may be taken off the register and be unable to sell their honey.

Economics in practice – The retail clothes market:

- (a) Competition is the rivalry that exists between firms when trying to sell goods in a particular market. In some markets there is a lot of competition. This is because there are lots of firms competing for the same customers. In this case, the clothes market in the UK is very competitive. There are a very large number of firms selling clothes in the UK. There are independents, multiples, variety chains, supermarkets and clothes can also be bought online.
- (b) One of the features of a competitive market is that there is a free flow of information. Information about the nature of products, availability at different outlets, prices, methods of production and the cost and availability of production factors, for example. This information will benefit both consumers and producers. The internet provides an enormous information service. For example, consumers can compare the prices of products using a price comparison site such as comparethemarket.com. The extra flow of information provided by the internet will make many markets more competitive.
- (c) B is the correct answer. The economy will benefit from competition because firms attempt to lower costs. This will minimise waste in the economy.
- (d) One of the features of some competitive markets is product differentiation. This means that firms try to persuade consumers that their product is different from that of a rival. In this case, the firms in the clothes market will try to differentiate their products. For example, they will have different product lines, different designs in different colours, different store layouts, different prices, different levels of

customer service, different packaging and different brand names. Next and Marks & Spencer have strong brand names, for example.

(e) In a competitive market firms cannot overcharge consumers. If one clothes store tries to raise its price it will lose a lot of its business. This is because the market is full of good substitutes and consumers can easily go to another shop. In the clothes market there is a huge amount of choice due to product differentiation. The quality of goods will also tend to be better. Shops that offer 'shoddy' goods will lose business. Consumers are rational and will look for value for money.

However, it could be argued that there may be some uncertainty or disruption. This is because firms that fail to meet the needs of consumers profitably eventually leave the market. This means that some consumers might be inconvenienced. It could also be argued that innovation in a competitive market might be lacking. This is because firms only make smaller profits in competitive markets. As a result, they do not have enough profit to invest in product development. In this case, there is evidence that consumers are benefiting from competition. In March 2009, Debenhams announced that it was cutting prices by up to 50 per cent in what could be the opening shot in a high street sales war. This will obviously benefit customers. When the department store slashed prices before Christmas, rivals such as Marks & Spencer followed suit. The latest offers, outside the usual sales periods, may force competitors to do the same. Overall, consumers surely benefit from the high levels of competition in the clothes market.

Chapter 23

Getting started:

- (a) Large firms will tend to employ lots of workers, have a high turnover and operate in many locations. Tesco operates over 2,200 stores, employs about 273,000 people and had a turnover of £48 billion in 2008. Tesco also became the world's fourth largest retailer in 2008.
- (b) Tesco can exploit economies of scale. For example, it will be able to bulk buy all the stock for its stores. With over 2,200 stores Tesco would be buying huge quantities of stock. Suppliers will sell such large quantities for a lower price.
- (c) Vikram Patel also runs a grocery store but nowhere near on the same scale as Tesco. However, there are advantages to being a small operator. Vikram is a popular member of the local community. He gives free grocery parcels to the elderly at Christmas and his store has a reputation for high quality and friendly customer service. Small firms can often offer customers a personal service.

Question 1:

- (a) Stephen Peters' bicycle shop business is small. It only employs five people full-time and two parttime. According to the EU definitions of business size, a firm employing between 0 and 49 people is considered to be small.
- (b) One of the main disadvantages of small firms is the difficulty in raising finance. Their choice of sources is limited and they are considered to be more risky than larger firms by banks and other money-lenders. Peters borrowed £25,000 from HSBC in order to open his bicycle shops. He said, 'At first the banks were sympathetic and extremely open-minded in terms of lending us money. But then the bars kept being raised. They made life extremely difficult. They raised rates and kept asking more questions.' He is now charged six points above the base rate of 3 per cent. 'The banks don't like retail businesses at the moment because they see them as high risk in the economic climate'. He

added that he struggled to get an overdraft but eventually got £200,000, although that was like 'pulling teeth'. Stephen Peters' experience with the bank highlights this main disadvantage.

Economics in practice – Starbucks:

- (a) According to the EU, a large firm is one which employs 250 people or more, has a turnover of 50 million Euros or more, or has capital employed of 43 million Euros or more. In this case, Starbucks employs 172,000 people so it is clearly an example of a large firm. Its turnover is also \$9.411 billion which is significantly greater than the 50 million Euros needed to be large according to the EU.
- (b) D is the correct answer. A firm employing between 50 and 249 workers is considered to be mediumsized according to the EU.
- (c) As a large firm Starbucks will enjoy a couple of key advantages over its smaller rivals. The main advantage is that Starbucks' average costs are likely to be lower than those of smaller rivals. This is because it can exploit economies of scale. For example, it can get cheaper supplies of materials and equipment because it buys in bulk. Starbucks operates 16,000 coffee shops so the firm would be buying very large quantities of resources from suppliers. Large firms can often dominate a market. They have a higher profile in the public eye than small firms and benefit from such recognition. This may mean that they can charge higher prices which will enable them to make higher profits. Starbucks is well known in many countries and the brand will be recognised by large numbers of people. With such a strong brand prices may be higher.
- (d) Starbucks might be too bureaucratic. Large firms sometimes become overwhelmed by their administration systems. For example, decision-making can be very slow in large firms because so many different people have to be consulted before a decision can be made. Too many resources may be used up in administration. For example, too much time may be spent filling in forms and writing reports. Also, communication channels may be too long and too many managers may be employed. Starbucks employs 172,000 people and operates 16,000 stores in over 50 countries. Such a large organisation may be difficult to control and co-ordinate. As a result costs may escalate. Finally, in very large organisations people can become alienated. The organisation may become so large that the effort made by a single employee seems insignificant. The personal contact in large organisations may be lacking and this can result in poor worker motivation.
- (e) In an industry where there are very large firms it is still possible for small firms to survive. Some small firms have advantages over their larger rivals. For example, an independent coffee shop can adapt to change more quickly. This is because the owners, who tend to be the main decision-makers, are actively involved in the business and can react to change. For example, an owner might supply a particular type of sandwich at the request of a single regular customer. Starbucks is not likely to be so flexible. Smaller firms can offer customers an individual personal service. Some people prefer to deal with the owner of a firm directly and are prepared to pay a higher price for the privilege. Owners are far more accessible in small firms than larger ones. Many workers in small firms do not belong to trade unions. As a result, their negotiating power is weaker and the owners are often able to restrict wages to the legal minimum wage. Since small firms have fewer employees, communication tends to be informal and more rapid than in larger organisations such as Starbucks. The owner will be in close contact with all staff and can exchange information rapidly. As a result, decision-making will be speeded up and workers may be better motivated, and because of these advantages an independent coffee shop may compete with Starbucks.

Getting started:

- (a) Sony started out as a radio repair shop in 1945. It was set up by Masaru Ibuka who was joined by Akio Morita the next year. Together they founded a company called Tokyo Telecommunications Engineering Corporation. The company built Japan's first tape recorder called the Type-G. Sony is now one of the leading manufacturers of electronics, video, communications, video game consoles, and information technology products. It is a huge company with a turnover of \$100 billion and a workforce of 180,000 people world wide. It has grown from a single shop to a huge multi-national corporation.
- (b) One of the main benefits of growth is an increase in the amount of profit that can be made. In 2008, Sony made a profit of around \$4 billion. This is obviously a lot of profit and only a large firm could make this amount. As a large firm Sony has a high profile in the market. Sony is now one of the leading manufacturers of electronics, video, communications, video game consoles, and information technology products. The Sony brand is recognised all over the world. This will help Sony sell new products when they are launched. Large firms like Sony also have the resources to develop new technologies and products. Sony has a reputation for innovative product development. It has launched some famous products such as the Sony Walkman and the Sony PlayStation. In 2008, it spent about \$3.54 billion on research and development. Only large firms can afford such a heavy investment in R&D.

Question 1:

- (a) When firms grow they produce more output. As a result their average costs are likely to fall. This is because as firms grow they can exploit economies of scale. A firm like Lovefilm may be able to exploit marketing, purchasing, managerial and financial economies for example.
- (b) Lovefilm bought Amazon's British and German DVD rental business earlier this year, pushing its market share in DVD rentals to around 20 per cent. If the firm continues to increase its market share it may become a dominant player. As a result it may be able to control the market and charge higher prices. Lovefilm may also enjoy a higher profile and find it easier to establish its brand and attract high quality staff, for example.

Question 2:

- (a) The merger of Orbit and Showtime Arabia is an example of horizontal integration. Both firms are in the same line of business. They are both Pay-TV companies.
- (b) (i) One of the main motives for horizontal integration is to reduce average costs. Both firms are in the same industry so there will be scope for cutting costs by avoiding duplication in operations. The new company will also be able to exploit economies of scale since it will be a bigger operation. This will improve both efficiency and profitability. It could be argued that when firms in the same industry join together, the merger is more likely to be a success. This is because there is a common knowledge of the markets in which they operate, and employees in each firm have similar skills and are likely to be familiar which each others working practices. There is also likely to be less disruption with a horizontal merger.
 - (ii) Consumers are likely to benefit from the merger according to the information in the case. The new company now offers over 70 exclusive channels featuring the widest choice of exclusive first run Hollywood movies, premium sports, Arabic and international television entertainment.

New customers can subscribe to new enhanced packages from 1 August, while existing Orbit and Showtime subscribers have the option to either benefit from special upgrade offers or retain their current subscription packages at current prices. However, there is now less competition in the market and in the future the new company may raise subscription charges for the channel.

Economics in practice – Research In Motion takeover of Certicom:

- (a) Firms can grow internally or externally. Internal growth involves producing more output and selling more in existing markets. It is a slow method of growth. In contrast, external growth is a faster way of achieving growth and involves joining forces with another company. This can be achieved by taking over another company or merging with one. In this case RIM has grown by taking over Certicom.
- (b) Vertical integration involves a firm joining with one that operates in a different stage of production. Backward vertical integration involves a firm joining with one that operates in the previous stage of production. In this case, Research In Motion (RIM), a manufacturer of technological consumer products such as the Blackberry, has bought Certicom, a supplier to RIM. Certicom operates in the previous stage of production to RIM. RIM has used Certicom's software for encryption in its Blackberry smart phones for years. This is a classic example of backward vertical integration.
- (c) Takeovers can be hostile or friendly. A hostile takeover occurs when a firm takes over another against its will. This is only possible if shares can be bought on the open market. Friendly takeovers are those where the firm being targeted welcomes the takeover bid. The shareholders are happy to sell their shares to the predator. In this case, the initial bid of \$1.50 by RIM for Certicom was considered hostile. Certicom responded to the bid by inviting other firms in the industry to make a higher bid. As a result, another company, VeriSign, made a bid of \$2.10. In the end, RIM's takeover was friendly because 95 per cent of Certicom's shareholders accepted a higher bid of \$3.00.
- (d) As a result of the takeover, RIM now owns the firm that provides key security technology for RIM's products such as the Blackberry. One of the main benefits of this takeover is that now RIM has control of this supplier. Supply of the encryption software is now guaranteed. It is also expected that the Certicom takeover will offer RIM significant cost savings and additional revenue through the licensing of Certicom's cutting edge encryption software. Kathryn Weldon, an industry analyst, said RIM likes to own the technology used in its products in order have more control over them. She said this gives RIM some technical and market advantages.
- (e) A is the correct answer. Economies of scale would encourage growth not limit expansion.

Chapter 25

Getting started:

- (a) Merseyrail is the only firm which supplies rail travel between Southport and Hunts Cross in Merseyside. Therefore Merseyrail is a monopolist; it is the sole seller in the market.
- (b) Although Merseyrail has the monopoly in rail travel between Southport and Liverpool, it does face competition. For example, there are likely to be a number of bus and coach companies offering transport services between these destinations. Commuters could also choose to use their own private transport such as the car, motorcycle or bicycle.
- (c) In October 2008, Merseyrail announced that commuters in Southport are facing fare increases of up to 30 per cent. Merseyrail is effectively abolishing reduced train fares for passengers carrying out short journeys after 9.30am by introducing a minimum off-peak day return fare of £3. That would

mean for thousands of passengers making shorter journeys, such as the £1.95 off-peak day return from Ainsdale to Southport, it would be cheaper to buy the peak '£2.60 anytime' day return ticket. It could be argued that these passengers are being exploited. This is because if they want to travel by train between these destinations, they have no choice but to pay the higher fares.

Question 1:

- (a) Walkers have over 50 per cent of the market in the UK. According to UK law this means that Walkers has a legal monopoly. This is because in the UK if a firm dominates 25 per cent or more of the market, it is said to have a monopoly.
- (b) Walkers is a powerful company. It has over 50 per cent of the market and in recent years its share has grown. Other producers are finding it difficult to compete with Walkers. For example, in the 1960s, Golden Wonder was the market leader but now it has less than 10 per cent of the market. Walkers are also backed by PepsiCo, a very large multi-national. Walkers can afford to spend heavily on TV advertising and rivals are not able to do this. It could be argued that Walkers does dominate the market.

Question 2:

- (a) In some markets a natural monopoly might exist. These are markets where it is actually more efficient if just one firm supplies all consumers. In this case, Abu Dhabi Water and Electricity Company (ADWEC) is the 'Single Buyer and Seller' of power and water in the Emirate of Abu Dhabi. State-owned ADWEC is a natural monopolist. It is the only seller of water in Abu Dhabi. It has to balance demand and supply through contracts with providers and distribution companies.
- (b) Consumers may benefit from the existence of a natural monopoly. This is because costs will be lower than if there were many firms competing in the industry. It does not make economic sense for more than one provider to supply water to consumers in a particular region. It would be highly inefficient if two or more water companies tried to supply water to all consumers in a region using their own pipe systems. There would be a huge duplication of resources which would be wasted. A natural monopoly will avoid such waste.

Economics in practice – Weyerhaeuser:

- (a) A pure monopoly exists when a market is supplied by just one producer. In this case Weyerhaeuser appears to have close to a pure monopoly in the supply of alder. Morelock Enterprises, a wood products company, filed a law suit against the company. Morelock alleged that by controlling alder logs, Weyerhaeuser was able to monopolize the market for finished alder. Weyerhaeuser lost the case which does suggest that it was acting as a monopolist.
- (b) The alder lumber sold by Weyerhaeuser appears to be unique. It states in the case that 'If you increase the prices for alder by 5 per cent, companies are not going to switch to another hardwood. There is no substitute for alder, and that meets the definition of a market.' Alder is used to make guitars and cabinets and other hardwoods cannot be used instead. Therefore, Weyerhaeuser's alder lumber appears to be unique.
- (c) Weyerhaeuser is one of the largest U.S. forest products companies. It turned over \$16.3 billion in 2007 and employed more than 40,000 employees in 13 countries. Since the firm is so large, it is highly likely that it will exploit economies of scale. Large firms produce large amounts of output which means that average costs fall.

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- (d) It is possible to argue that monopolists may be inefficient. If a firm does not face any competition there is no incentive to keep costs down. As a result a monopolist such as Weyerhaeuser may adopt a 'sloppy' approach to business and incur unnecessary costs. Also, if monopolies get too big they may suffer from diseconomies of scale. As a result, their average costs will rise. This could happen to Weyerhaeuser because it has operations in 13 different countries. If so, this could lead to communication and co-ordination problems which could raise costs.
- (e) B is the correct answer. Monopolists are likely to restrict choice but this is a disadvantage not an advantage.
- (f) The general feeling is that monopolies are undesirable. This is because of the disadvantages associated with markets that are dominated by a single firm. A firm which dominates a market is able to charge more for its products. Monopolists will tend to restrict output in order to force up the price that customers pay. In this case, it was argued that Weyerhaeuser cornered the market of alder logs and drove up prices by an average of 7.5 per cent between 2000 and 2006. A monopolist also restricts choice in the market. If there is just one supplier in a market, consumer choice is obviously restricted. In this case, Weyerhaeuser is virtually the only supplier of alder lumber in the world. Customers cannot switch to other types of hardwood because they are not suitable. Higher prices and restricted choice are two of the main disadvantages of monopoly.

Chapter 26

Getting started:

- (a) The confectionery market in the UK is dominated by three large producers Cadbury Schweppes, Mars and Nestlé. The most dominant firm is Cadbury; it has a market share of 26.8 per cent. This is significantly greater than Mars, which is the second largest with 19.1 per cent of the market.
- (b) One way in which firms compete in confectionery, is to market a variety of different brands. Brands are extremely important in the confectionery industry and each of the dominant producers has an impressive brand portfolio. For example, Cadbury has Cadbury's Flake, Cadbury's Dairy Milk, Cadbury's Creme Egg and Cadbury's Chocolate Buttons. Mars has Mars Bar, Twix, Galaxy, Snickers and M & Ms. Nestlé has Kit Kat, Aero, Milky Bar, Smarties, Rolo and Yorkie Bars. In each case these are just a selection of some of their important brands.

Another way in which these companies compete is through advertising. For example, Cadbury sponsors the British television programme Coronation Street. In January 2009, Nestlé launched its biggest ever advertising campaign, costing £21million, to promote Kit Kat. In 2008, Mars began advertising online with the launch of an ad campaign for the Gummi Burst addition to its Starburst sweets line.

Question 1:

(a) (i) The top six movie distributors controlled 71.8 per cent of the total market.

(ii) An oligopoly is said to exist if a market is dominated by just a few producers. In this case, the movie distribution industry is dominated by six firms. Warner Bros, Sony/Columbia, 20th Century Fox, Paramount, Fox Searchlight and Buena Vista together have a 71.8 market share. This is almost three quarters of the entire market.

(b) Barriers to entry are obstacles that discourage new firms from entering a market. There are significant barriers in the movie industry. One is the high cost of making films. For example, *Gran Torino*, starring Clint Eastwood, released by Warner Bros. in February 2009, cost about \$30 million.

Also, *Valkyrie*, starring Tom Cruise, released by 20th Century Fox in January 2009, cost a huge \$100 million. Small firms would find it quite difficult to raise such large amounts of money to make such high profile films. Another barrier is the amount of money that movie firms spend on marketing. They spend huge amounts of money advertising and promoting their films just before and during their release. For example, both Gran Torino and Valkyrie were advertised heavily on UK television.

Question 2:

- (a) In some oligopolistic markets collusion might take place. This is where the dominant firms in the industry set up agreements to restrict competition. In this case, it is suggested that three giant Chilean pharmaceutical retailers fixed prices. Fasa SA found that several of its executives colluded with rivals and pharmaceutical companies to jointly increase the prices of more than 200 products. The Chilean authorities and Fasa reached an agreement in which the retailer said that several executives personally contacted pharmaceutical companies and 'agreed to participate in a price-increase mechanism coordinated with their competitors'. However both Cruz Verde and Salcobrand denied the charges.
- (b) Collusion is only likely to occur if a small number of large firms dominate the market, i.e. in an oligopolistic market. Collusive activities are designed to eliminate competition in a market and if they are successful, consumers will suffer. In this case, it is alleged that three large retailers in the Chilean pharmaceuticals market, Fasa SA, Cruz Verde and Salcobrand, agreed to increase the prices of more than 200 products. If this is true, it means that consumers in Chile were paying more for their drugs and medicines than before the price agreements. This is obviously a disadvantage.

Economics in practice – UK supermarket price war:

- (a) An oligopoly is said to exist if a few large firms can dominate a market. In this case four firms dominate the UK supermarket industry Tesco with 30.7 per cent, Asda with 16.9 per cent, Sainsbury's with 14.7 per cent and Morrisons with 11.9 per cent. The rest of the market is shared between a number of other small supermarket chains and a much larger number of independents.
- (b) (i) A price war may break out in an oligopolistic market at any time. Price wars occur when one of the dominant firms cuts prices. The other dominant firms are forced to follow suit or they will lose sales. In this case, Tesco announced a £100m price cutting campaign in January 2009. The move came after Asda announced a wave of discounts on thousands of items. Sainsbury's also joined the New Year price competition, vowing to grow its Basics range to more than 600 products by the end of January. The supermarket said more than half of these would be priced at less than £1. It appears that Asda started the price war and Tesco and Sainsbury's soon followed.
 - (ii) Interdependence is an important feature in oligopoly. It means that the actions of one large firm in the industry will have a direct impact on others. In this case, Asda decided to cut the price of some of its products. This meant that Asda would probably increase its sales at the expense of the other supermarket chains in the industry. As a result, Tesco and Sainsbury's immediately said they were going to cut the prices of some of their products. Thus, it appears that the action taken by Asda had a direct impact on Tesco and Sainsbury's.
- (c) A cartel exists when a group of firms join together and act as one. They may decide to fix prices or restrict output. In this case there is no evidence to suggest that a cartel operates in the UK supermarket industry. Also, such cartels are illegal in the UK.

There are advantages and disadvantages of oligopolistic markets. If the dominant firms are able to (f) exploit economies of scale, their average costs will be lower. Therefore, it is possible that some of the cost savings will be passed on to consumers in the form of lower prices. For example, in the supermarket industry the dominant firms will buy their stock in bulk and therefore get it cheaper. Consumers might also benefit from a price war. In this case, Asda appears to have started a price war. As a result, consumers will benefit from lower prices in at least three supermarkets. However, price wars do not normally last for very long and there is also the threat that one of the firms is squeezed out of the market. As a result the market becomes less competitive and in the long term prices might be pushed even higher by the survivors. Competition in oligopolistic markets ensures that consumers are provided with some choice. It could be argued that plenty of choice exists in the supermarket industry. For example, each of the big four chains will have different product ranges, different store layouts and so on.

(d) D is the correct answer. Economies of scale are not an example of non-price competition. It is one of

The main disadvantages of oligopoly are likely to emerge if there is collusion in the market. This is where firms agree on restrictive practices. However, there is no evidence of collusion given the information in this case. It could be argued though that supermarkets spend a lot of money on advertising which could be used to reduce prices instead. Overall, it is likely that the advantages in this case outweigh the disadvantages with consumers probably benefiting from an oligopolistic market structure.

Chapter 27

Getting started:

the advantages of oligopolistic markets.

- (a) The BBC is owned by the state. It is a public sector organisation. In contrast, Marks & Spencer is a private sector organisation and is owned by shareholders.
- (b) The BBC is controlled by the BBC Trust. The BBC Trust consists of the Chairman, Vice-Chairman and ten members, or 'Trustees'. Their backgrounds and experience is wide, ranging from broadcasting, regulation, competition, business, the public sector and engagement with the public, to programme-making and journalism. However, Marks & Spencer is run by a board of directors led by Sir Stuart Rose, the chairman.
- (c) According to the Chairman, the aim of the BBC is to be independent, efficient and firmly focused on its public purposes. Marks & Spencer aims to develop into a world-class retailer that's customerfocused, fast-moving and flexible. It aims to offer only the highest quality products, service and shopping environments in all of their stores. In doing all this, Marks and Spencer probably also aims to make a profit for its shareholders.

Question 1:

- (a) Public sector organisations are owned by central or local government. In this case, the schools in Worcestershire are owned by the state. They are run by Worcester local authority and education is free for those that attend the primary schools. CCS is a private sector business enterprise. It provides cleaning services for which it charges.
- (b) When Cheryl set up the business in 2004, she was a sole trader. This means that the business was owned by her alone. However, in 2008 she formed a company by selling shares to her employees.

They became joint owners with Cheryl. Cheryl owned 75 per cent of the business and her employees owned the other 25 per cent between them.

(c) CCS Ltd is controlled by Cheryl Chambers. This is because she owns the majority of the shares. She owns 75 per cent compared to her employees who only own 25 per cent between them. Cheryl has the most power in the company and therefore controls it.

Question 2:

- (a) Figure 2 shows that Centrica's revenue has increased from £10.6bn in 2003 to £16.3bn in 2007. This is quite a significant rate of growth. Revenue has increased by nearly 60 per cent over the time period. This does suggest that Centrica is achieving its growth aim.
- (b) Profit is important to most companies in the private sector. Figure 2 shows that dividends to shareholders have increased every year since 2003 from 5.4p per share to 13p per share. This means that dividend payments have more than doubled. This does suggest that profit is very important to Centrica and that shareholders are being well rewarded for their investment in the company.

Economics in practice – The Driving Standards Agency:

- (a) The public sector is made up of organisations which are owned and controlled by local or central government. The driving Standards Agency is a public sector organisation. It is an executive agency which provides services that were once the responsibility of central government departments. These are run by boards and are usually accountable to a central government department.
- (b) Most public sector organisations are funded from tax revenue collected by the government. However, some organisations are able to make a direct charge for their services. The Driving Standards Agency generates most of its revenue from administering driving tests. Income for the year 2007/08 is estimated to be in the region of £165 million. This money comes from test fees and other commercial activities. All private sector businesses generate revenue from the sale of goods or services. If they need additional funding it must come from the owners or money lenders.
- (c) D is the correct answer. Private sector organisations are not likely to maximise social benefits. This aim is more likely to be pursued by public sector organisations.
- (d) The aim of the DSA is to promote road safety in Great Britain by improving driving standards, in particular by testing drivers and driving instructors fairly and efficiently. DSA's vision is 'Safe Driving for Life'. The overall mission is to contribute to the public service agreement objective to achieve 40% reduction in riders and drivers killed or seriously injured in road accidents, in the age group up to 24 years, by 2010 compared with the average for 1994–98. The DSA has three core strategic aims. These are to deliver better services to customers, better outcomes for citizens and better value for money.
- (e) Firms in the private sector are likely to have financial aims. For example, most firms are in business to make a profit. They may attempt to maximise profits or earn enough profit to satisfy the owners. Other aims include sales revenue maximisation and growth. From time to time survival may be an aim. Survival is often an initial aim when a business is first set up and may also become important if trading conditions deteriorate. In recent years some firms have aimed to become more socially responsible. This involves meeting the needs of a wider range of stakeholders such as the environment, employees or the local community.

In the public sector the aims of organisations are not likely to be based purely on finances. The main reason for this is because most public sector organisations do not generate revenue or make profit.



Their aims usually focus on improving the quality of the services they provide. However, they are also encouraged to minimise costs and take into account the social costs and benefits of economic activity.

Chapter 28

Getting started:

- (a) A cartel is formed when a group of firms that dominate a market join together and agree to 'fix' a market. In this case, four firms in the car glass manufacturing market, Saint-Gobain of France, Pilkington of Britain, Asahi/AGC of Japan and Soliver of Belgium, were found to be running a cartel between early 1998 and 2003 by discussing target prices, market-sharing and customer allocations. They agreed these during secret meetings in hotels and airports.
- (b) The victims of cartels are usually consumers. They end up paying higher prices or having their choice restricted. In this case, the European Competition Commission said these companies cheated the car industry and car buyers in a market worth €2 billion in the last year of the cartel. So it was car manufacturers and ultimately car buyers who were the victims of illegal practices.
- (c) The role of the European Commission in this case is to carry out investigations into reported cases of consumer exploitation. The European anti-trust regulators found that four firms were guilty of running a cartel in the market for vehicle glass. The commission also imposed fines on the four companies involved. Saint-Gobain of France was ordered to pay €896 million. Fines were imposed on Pilkington of Britain (€370 million), Asahi/AGC of Japan (€113.5 million), and Soliver of Belgium (€4.4 million).

Question 1:

- (a) Ofgem (the Office of Gas and Electricity Markets) is responsible for monitoring the activities of firms in the supply of gas and electricity. Ofgem was one of a number of specialised bodies set up to monitor the activities of former state monopolies which were sold off as part of the UK government's privatisation programme. The role of Ofgem is to monitor the prices charged by gas and electricity companies and encourage competition where ever possible. In this case, Ofgem discovered that National Grid was involved in anti-competitive activities.
- (b) Anti-competitive practices are usually undertaken by monopolists or firms that dominate markets. They aim to reduce levels of competition in a market and result in the exploitation of consumers. In this case, Ofgem ruled that National Grid – which owns 99 per cent of the UK's gas meters – had 'severely restricted' energy suppliers from replacing its meters with improved devices. Use of the 'smart meters' eliminates estimated bills that can lead to consumers paying more than they should. Ofgem said National Grid had deprived customers 'of access to lower prices and improved service'. National Grid had struck meter deals with five of the six major energy suppliers and levied penalties if they replaced more than a 'small' number of meters. National Grid was fined £41.6 million for adopting this practice.

Question 2:

(a) Regional policy is designed to solve regional problems such as unemployment, congestion and income inequality. It aims to encourage business development in 'depressed' regions. In this case, The Tower Hamlets Women Enterprise Project was set up in 2005 to help women start and run their own businesses. The project was located in Bethnal Green, Tower Hamlets, one of the most deprived areas in the UK.

- (b) Most projects like the Tower Hamlets Women Enterprise Project are funded by the government or EU. Money for this project came from EU Structural Funds.
- (c) The Tower Hamlets Women Enterprise Project was set up to help women in Bethnal Green set up and develop businesses. The project helped women by using a programme focusing on four stages in business start up. These included 'still thinking' (exploring options); 'preparing the ground' (development of the ideas and training); 'just launched' (setting up the business); and 'established' (keeping the business healthy). Through its contacts, *account3* was able to refer women to other business support schemes if they could not provide the service themselves. The project also created a women's business resource room and child care services which were shared by all *account3* projects. The project assisted 71 businesses and created 72 jobs.

Economics in practice – BAA:

- (a) In this case the Competition Commission (CC) has investigated competition in the operation of airports in the UK on behalf of the government. The commission investigates cases that are referred by the OFT, regulatory bodies and the government. During the investigation it was found that a lack of competition had resulted in high charges and poor services. For example, Heathrow was the 5th most expensive airport out of 50 big airports.
- (b) BAA owns seven airports in the UK. These include most of the key airports in the UK with the exception of Manchester. However, the real problem lies in the south east and Scotland. In the south east, BAA owns all three of the major airports Heathrow, Gatwick and Stansted. In Scotland it owns the two largest airports Glasgow and Edinburgh. It is in the south east and Scotland where BAA faces virtually no competition.
- (c) One of the roles of the government in the economy is to promote competition. One way in which it can do this is to encourage the growth of small firms. If more small firms are encouraged to join markets there will be more competition. In the UK measures to help small firms include Business start-up schemes which provide funds for new businesses when they first set up and Business Links which provide information and advice on running a business and obtaining finance. Another approach is to lower barriers to entry. If barriers to entry are lowered or removed then more firms will join a market and it will be more competitive. In the UK in the past some legal barriers have been removed. For example, the provision of bus services in the UK used to be the sole responsibility of local authorities. There was no competition at all. However, the law was changed so that new operators such as Stagecoach could obtain a license and join the market.
- (d) A is the correct answer. The Health and Safety Act is designed to protect employees in the work place, not promote competition.
- (e) If there is a lack of competition in a market consumers are likely to suffer. They may end up paying higher prices. There is also no incentive for monopolists or dominant firms to be efficient. In this case, it was found that a lack of competition had resulted in high charges and poor services. For example, Heathrow was the 5th most expensive airport out of 50 big airports. However, in terms of customer satisfaction it ranked 56th out of 58. Examples of the poor service provided by Heathrow included high numbers of complaints from passengers about lost luggage, poor punctuality of plane departures and arrivals, long queues at security and immigration controls, and poor facilities in the departure lounges. These examples of poor service suggest strongly that there is a lack of competition in the provision of airport services.
- (f) As a result of an investigation carried out by the Competition Commission, BAA will have to sell Gatwick and Stansted as well as either Edinburgh or Glasgow airports. The inquiry chairman,

Christopher Clarke, said the only way to introduce proper competition was for BAA to sell two of its southeast airports and either Glasgow or Edinburgh. The Commission also said that the sale must go ahead on all three airports within two years. They are to be sold in sequence, beginning with Gatwick, then Stansted, followed by either Edinburgh or Glasgow. Once the airports have been sold off there will be competition. This is because the airports will have new owners and will compete for passengers in the market. The new owners might reduce charges and improve services to encourage passengers to use their airport rather than BAA's.

Chapter 29

Getting started:

- (a) The privatisation of ENEA is part of a big privatisation programme in Poland. Like many eastern European countries, Poland is in the process of transferring state assets into the private sector after the break up of the Soviet Union.
- (b) The money raised from privatisation will allow ENEA to upgrade and expand its electricity distribution network and invest more in renewable energy and grid connections. The funding will also support an energy efficiency programme and the construction of new power units. Higher efficiency and greater capacity are crucial if Poland is going to be able to meet growing demand for power.
- (c) The European Bank of Reconstruction and development (EBRD is supporting the privatisation of Poland's energy sector by buying a 2.5 per cent stake in the group. Support from EBRD was expected to encourage other investors to provide financing.

Question 1:

- (a) The extract makes it quite clear that the government is committed to privatisation in the future. There are two clues in the article. It says that '.....the state should withdraw from areas in which it is no longer required.....' and at the end of the article it states '.....sell off public assets that the state no longer needs to own.....' These statements make it quite clear that privatisation in the future is highly likely.
- (b) The White Paper is about improving public services. In the extract it says that the motives for possible privatisation are to secure the greatest possible efficiency for every pound of taxpayers' money it spends. The article also says that it is vital to strip out waste and improve productivity.
- (c) In the past, reasons for privatisation include:
 - generating revenue for the government
 - sell off inefficient nationalised industries
 - results from deregulation
 - widen share ownership
 - reduce political interference.

Question 2:

- (a) After privatisation there is competitive pressure on firms to improve efficiency. As a result, many firms look to job cuts as a way of saving money. This will result in an increase in unemployment.
- (b) Some of the newly privatised businesses in the UK have cut back on staffing levels. For example, the Rail, Maritime and Transport Union suggested that there were 20,000 to 30,000 job losses as a result of rail privatisation. Also, in an effort to improve efficiency, some workers may have been pressurised into raising their productivity. They have been asked to adopt more flexible working practices, for example.

(c) The article suggests that the study found countries with good social support networks coped better than others. If this means that death rates were lower, perhaps workers should be encouraged to join support groups such as the church, community groups or trade unions. The government could also try to improve the quality of health care for workers. However, this requires resources which the government might not have. Finally, to prevent the high death rates the government should slow down the speed of the privatisation process. The graph shows that the non-mass privatizers had a better life expectancy.

Economics in practice – Royal Mail:

- (a) Privatisation involves transferring resources from the public sector to the private sector. Partprivatisation in this case means that only part of Royal Mail will be sold off. It probably means that the government will retain a share in Royal Mail when it is sold. For example, TNT, a Dutch firm, has confirmed that it expects to take a significant minority stake in Royal Mail, investing as much as £3 billion for around a third of the company. This might mean that the government retains two thirds.
- (b) In 2006, the revenue generated by Royal Mail was £9.056 billion and profits before tax were £312 million. Since then, profits have dropped and in 2008, the BBC reported that Royal Mail's trading position had worsened to an annual loss of £279 million in 2007. The change in fortunes from profit to loss suggests that inefficiencies may have crept in at Royal Mail. For example, it states in the case that a shake-up in industrial relations following a spate of strikes in recent years was needed.
- (c) In this case, the main reason why the government wants to involve the private sector in the operation of Royal Mail is because the company needs investment. And it believes that in the current economic climate the taxpayer cannot afford to fund that investment. Lord Mandelson, Business Secretary, said that given the strain on the public purse caused by the recession, taxpayers could not be expected to bear the added strain of paying the 'hundreds of millions' needed to modernise Royal Mail. He also said that an overseas firm was needed to bring a 'gale force of fresh air' and cultural change. Lord Mandelson said: 'If we want the Royal Mail to become a serious player in the international market, then we have got to see it, in my view, teaming up with another postal operator'.
- (d) The proceeds from the part-sale of Royal Mail are likely to be used by the government. They may be used to fund government expenditure or reduce borrowing.
- (e) A is the correct answer. Public limited companies are owned by private shareholders not the government.
- (f) There are some strong arguments for the privatisation of Royal Mail. The government will benefit from an injection of cash from the sale proceeds and the burden of running the company will be removed. In the private sector, Royal Mail will hopefully get the investment needed to improve efficiency and generally improve its trading performance. If it makes a profit the government will benefit because it still owns a share in Royal Mail. As a result of the investment in Royal Mail consumers might benefit from improved services. For example, there may be more collections and deliveries. New innovative products might be marketed and prices might fall if competition is allowed. The economy might benefit if efficiency does improve and costs fall.

On the other hand, privatisation might not work. To start with there will be job losses. Therefore workers will lose out. If competition is not allowed, Royal Mail will still have a monopoly in the collection and delivery of letters in the UK. This means that consumers might be exploited. Prices might rise and unprofitable services might be dropped. The economy will only benefit if the firm improves efficiency and lowers costs. It is difficult to say whether the part-privatisation of Royal Mail will be a good thing. If it is still a monopoly, there will be little incentive for improvements in efficiency. So the outcome of the transfer might depend on how much competition emerges.

Getting started:

- (a) Information in the case suggests that the government's management of the economy in Spain is open to criticism. For example, the number of people unemployed rose 5.2 per cent in 2007 over the previous year to 2,129,547 people. Also, the inflation rate, led by higher food and energy costs, meanwhile hit 4.3 per cent in December, its highest yearly reading since 1997. 'The economic crisis has broken out,' right-wing daily newspaper ABC said Friday on its front page. This suggests that the current government has not managed the economy well recently.
- (b) The success of a government is often judged by how well it manages the economy. If the economy performs well, people will benefit and may be inclined to re-elect that government. In this case, the Spanish government is 'under fire' just a couple of months before an election, and it is the economic data which the media and the opposition are focusing on. The opposition are saying that the current government's record relating to the management of the economy is poor. It is clear to see how important the performance of the economy is to the government.

Question 1:

- (a) Gross domestic product is an internationally recognised measure of economic growth. It measures the total value of all goods and services produced in an economy over a period of time, usually one year.
- (b) The data shows that in 2009, all seven countries will have negative economic growth. For example, in the US, economic growth is expected to be -4 per cent. This means that output in the US is expected to fall by 4 per cent in 2009.
- (c) Over the time period the US economy has grown more quickly than the Japanese economy. This is because in most years the growth rate in the US has been higher than the growth rate in Japan. There is only one year where Japan's economy grew faster than the US economy. That was in 2007 when the growth rates were 2.0 and 2.7 in the US and Japan respectively.

Question 2:

(a) Assuming that the number of people unemployed in the UK was, say, 1.74 million, the unemployment rate for 2008 is given by:

Percentage unemployed = $\frac{1.74 \text{ m}}{30 \text{ m}} \times 100 = 5.8 \text{ per cent}$

(b) Unemployment is bad for the economy and for those who are unemployed. Unemployment is a waste of resources. If people are not working they are not making any contribution to output. Therefore, GDP will be lower. Unemployment will also cause hardship to those who cannot find work. Their living standards will be very low compared to those in work. In some countries, where there is no benefit system, the unemployed may have to suffer poverty. Therefore, a government must aim to keep unemployment as low as possible.

Economics in practice – China:

- (a) When managing the economy the government sets targets it wishes to achieve. These targets relate to key economic performance indicators such as economic growth, inflation and unemployment. For example, the Chinese government plan to grow the economy at a rate of 7.5 per cent p.a for the next five years. This is a macroeconomic objective.
- (b) The data in the graph suggests that the Chinese economy grew particularly well between 1999 and 2008. Most economies in the world are happy to grow at around 2.5 per cent a year. However, the Chinese economy grew by considerably more than this every year. For example, it achieved double digit growth for six consecutive years from 2003. This is impressive.
- (c) Generally economic growth will improve the living standards of the Chinese people. For example, it should lead to:
 - more income
 - better food and clothes
 - improved housing
 - more leisure time
 - better public services.
- (d) The Chinese government has said that it will restrict the increase in unemployment to 5 per cent over the next five years. It has not pledged to reduce unemployment even though this would be highly desirable. The reason for this is because the government must think that in the future unemployment is going to be problem. It may feel that it would be impossible to reduce unemployment due to economic conditions in the country and the wider global economy. There is no point in setting targets that are not achievable because they will be missed and the government might not be seen in a very good light.
- (e) In recent years people around the world have become increasingly concerned about the damage some firms do to the environment. In particular, there are concerns that global warming could have some potentially catastrophic affects on the environment such as changes in climate. As a result, more and more governments are setting targets to reduce damage to the environment. The Chinese government has set a number of environmental targets.
- (f) The correct answer is C. If China sells more exports, the surplus on the current account will increase.
- (g) An increasingly important macroeconomic objective is to protect the environment. The Chinese government has set a number of targets to help achieve this aim. For example, it aims to conserve resources by cutting their consumption. For example, it plans to cut energy consumption per unit of GDP by 20 per cent in five years. Also, water consumption per unit of industrial added value will be reduced by 30 per cent in five years. It also plans to recycle waste. For example, it hopes to increase the re- use of solid industrial waste from 55.8 per cent in 2005 to 60 per cent in 2010. The Chinese government also plans to reduce pollution by reducing the total discharge of major pollutants by 10 percent in five years. Finally, it will make a small contribution to reducing greenhouse gases by planting more forests. Forest coverage will increase from 18.2 per cent in 2005 to 20 per cent in 2010.



Getting started:

- (a) Figure 1 shows that incomes per head in Estonia have increased sharply between 2000 and 2008. In 2000, income per head was \$10,012. By 2008, this had more than doubled to \$23,605. Rising incomes on this scale in Estonia will help to improve living standards.
- (b) Economic growth is desirable because living standards improve. However, if growth is too rapid problems can be caused. In Estonia these problems include inflation, too many imports and a weakening of a nation's currency.
- (c) The growth rates in Estonia have been considerably higher than those in developed countries in recent years. For example, in 2006, economic growth was 11.2 per cent, compared with the average for developed countries of 2.5 per cent. The main reason for this is because Estonia had a lot of catching up to do since it was part of the Soviet Union. Only recently has the economy been allowed to flourish with a commitment to free markets.

Question 1:

- (a) (i) GDP stands for gross domestic product. It is a measure of national income and reflects growth in an economy. It is an internationally recognised measure of economic growth.
 - (ii) GDP per capita is GDP per head of a nation's population. It is a measure of GDP that takes into account changes in the population. It is calculated by dividing GDP by the size of the population.
- (b) Between 1980 and 2008 the UK economy has performed the best. In 1980 it had the lowest GDP per capita of just under \$10,000. By 2008, this had grown to about \$48,000, higher than any other country.
- (c) In 2000, France had the lowest GDP per capita. It was just over \$20,000. This was slightly lower than Germany and the UK.
- (d) The US had the most consistent growth path over the time period. The graph shows a fairly smooth increase over the entire period. Growth in the other countries has fluctuated more. For example, GDP per capita actually fell for the UK, France and Germany between 1980 and 1985.

Question 2:

- (a) In the last 50 years most developed countries have enjoyed an average growth rate of around 2.5 per cent. The growth rates shown in Figure 7 are considerably higher than this average. For example, between 2003 and 2007, GDP was rising at rates above 10 per cent. This is a high rate of growth.
- (b) A number of environmental groups such as Friends of the Earth believe that the benefits of growth are outweighed by the costs of generating that growth. There is evidence that in China economic growth is causing pollution-related problems, from acid rain to contaminated rivers. On a severely polluted day in many Chinese cities, it is difficult to see beyond a few hundred meters. In northern China, drought has left more than two million people without enough drinking water, partly because much of the area's remaining water supply is contaminated by pollutants. Two-thirds of Chinese cities have less water than they need because of overuse and pollution. Many experts say China will soon pass the United States as the world's largest producer of carbon dioxide. According to the World Bank, 17 out of 20 of the world's most polluted cities in terms of air quality are in China.

(c) The environmental damage done by economic growth does sound serious according to information in this case. Social unrest is beginning to emerge around China. People living near polluting factories are protesting about the contamination of land and water supplies. Environmentalists say if the authorities want to maintain social stability, and continue economic growth, they are going to have to tighten regulations and employ cleaner technology. Another problem is that some of the measures used by the government to reduce environmental damage are not working. It seems that factories would rather pay fines than meet the cost of cleaning up their production methods.

Economics in practice – The Credit Crunch:

- (a) Over a period of time, national income will rise. National income is the value of all incomes in the economy added together. This includes income from wages, profits, royalties, dividends, interest and income generated abroad. When national income is rising, economists say that there is economic growth.
- (b) National income can be measured in a number of ways but the most common method involves using gross domestic product (GDP). This method is recognised all over the world. In this case, economic growth is measured using **real** GDP. This means that changes in GDP have been adjusted for inflation.
- (c) D is the correct answer. The value of services is included in GDP.
- (d) The global economy has been hit by a 'credit crunch'. Banks have all but stopped lending money and this has resulted in sharply declining economic activity. The data in Figure 8 clearly confirms this. In Japan, the US and the Euro area, real GDP has moved into negative territory. For example, in Japan real GDP fell by 4 per cent in the fourth quarter of 2008. Even in China, where the economy has been growing very rapidly, the rate of increase is falling. In the 2nd quarter of 2008, real GDP was rising by 10 per cent. By the 4th quarter, the rise was just over 6 per cent. A similar pattern is shown in Asia where real GDP was completely flat in the 4th quarter.
- (e) In early 2009, the UK economy was beginning to suffer. Unemployment went through the 2 million mark for the first time in over ten years. Woolworths, one of the UK's most famous retailers closed down, lending for mortgages almost came to a standstill and in February 2009, retail sales growth slowed to the lowest level since 1995. The UK stock market fell from around 6,700 to about 3,700 in March 2009 and house prices fell by over 30 per cent. This suggests that the economy was at least in a downturn and experiencing a recession. However, it could be argued that the UK economy had actually slumped and was on the brink of a serious depression.
- (f) When economic growth becomes negative many people are likely to suffer. Those people who lose their jobs are likely to suffer the most. The unemployed lose their income and have to survive on benefits. In some countries, the benefit system is inadequate and the unemployed suffer real hardship. Even in developed countries such as the UK, people may have their homes repossessed if they cannot maintain mortgage repayments. If negative growth continues for a period of time many of the benefits of economic growth will be scaled down. Incomes will stop rising and expenditure on public services may be cut. This could reduce living standards for a significant proportion of the population.

However, there may be some compensation for negative growth. For example, in the UK, house prices have fallen by 30 per cent. This means that they become more affordable for some people. Inflation rates are also likely to tumble and environmental damage might be reduced as economic activity declines. For example, when incomes fall people are likely to reduce the number of flights

they make. Resource depletion may also slow down. Overall though, many would argue that the benefits of negative economic growth are outweighed by the costs.

Chapter 32

Getting started:

- (a) (i) Percentage change in gas bill = $\frac{\pounds 1, 200 \pounds 900}{\pounds 900} \times 100 = 33.3\%$
 - (ii) Percentage change in grocery bill = $\frac{\pounds 58.25 \pounds 55.90}{\pounds 55.90} \times 100 = 4.2\%$
- (b) According to the calculations in (a), the price of gas has gone up by far more than the weekly grocery bill for essentials. Gas rose by a huge 33.3% while the grocery bill rose just by 4.2%.
- (c) The gas bill may have risen because gas distribution companies are paying more for the gas that they buy from their suppliers. The price increase may also be the result of the gas companies trying to make more profit and the gas distributors may also have other costs that have risen, such as staff wages.
- (d) Bolton Wanderers may have reduced season ticket prices:
 - to try and attract more supporters
 - due to the credit crunch
 - in order to remain competitive.

Question 1:

- (a) For much of 2006 and 2007 the rate of inflation in the Eurozone was around 2 per cent. However, in the second half of 2007 and the first half of 2008, inflation surged to just over 4 per cent. Then at the end of 2008 and the beginning of 2009 inflation fell very sharply indeed to around 1 per cent.
- (b) Inflation is measured in the Eurozone using the consumer price index (CPI). This measurement is used commonly across Europe. Every month the authorities record the prices of about 600 goods and services purchased by over 7,000 families. An average monthly price is then worked out from all the information gathered. This average price is then converted into an index number. This allows accurate comparisons to be made between two different time periods.

Question 2:

- (a) Keynesians argue that inflation can be caused by too much demand in the economy. This is called demand-pull inflation. In any market, if demand increases there will be an increase in price. Similarly, if demand in the whole economy rises there will be an increase in the general level of prices. In this case there was a sharp increase in the price of copper. The rise in metal prices, including copper which is used in construction and electronics, has been caused by growing demand from developing nations. Strong demand from China, combined with a lack of investment in new mining projects, has caused a surge in commodity prices. This is demand-pull inflation.
- (b) It is likely that copper prices fell sharply in 2009 because demand for copper fell. Towards the end of 2008 the global economy went into recession. This resulted in a fall in demand for many products but particularly for commodities. Commodities such as copper are used in construction and

electronics. These industries have been hit quite hard by the recession so a fall in demand has resulted in much lower prices.

Economics in practice – Inflation in Abu Dhabi and UAE:

- (a) Inflation can be defined as a general and persistent rise in prices. If the prices of goods and services are going up, generally, in the economy over a period of time, inflation is said to exist. For example, if inflation was 4 per cent this means that average prices have risen by 4 per cent over the last year and goods that cost £100 last year will now cost £104.
- (b) The graph shows that inflation in UAE and Abu Dhabi has increased consistently over the time period. For example, in 2004 inflation in UAE was 5 per cent. However, by 2007 it was expected to be 10.9 per cent. Further, according to the DPE report, inflation in 2008 was 12 per cent. A similar pattern is shown for Abu Dhabi.
- (c) D is the answer. A rise in the money supply is not a cause of cost push inflation. Growth in the money supply will cause money supply inflation.
- (d) The DPE suggested that easy bank loans and the rising cost of imports had both contributed to the high levels of inflation. This means that there are two possible causes of inflation in UAE and Abu Dhabi. If it is easy to get bank loans in these countries then the money supply will grow and prices may start to rise. Also if the cost of imports is rising, this is likely to result in cost-push inflation. This will be caused by firms as they raise prices to protect their profit margins in the face of rising business costs. It is likely that inflation may be caused by more than one factor.
- (e) A Keynesian theory is that inflation can be caused by rising costs. When businesses are faced with rising costs they put up their prices to protect their profit margins. As a result, inflation is caused. This is called cost push inflation. This is most likely to happen if firms set their prices by adding a certain percentage to costs. Consequently, whenever costs rise, it follows that prices will also rise.

Costs might rise for a number of reasons. For example, the cost of raw materials due to the rising costs of imported goods such as oil. Wage increases might also cause cost push inflation. For example, in the 1970s, trade unions became quite strong and were able to put pressure on employers to increase wages. The extra money paid to workers was recovered by employers by increasing prices. Increases in taxation can also cause cost push inflation. And, if entrepreneurs try to increase the amount of profit they make this can also cause cost push inflation.

Monetarists believe that the sole cause of inflation is excessive growth in the money supply. They think there is a strong link between inflation and growth in the money supply. Money supply inflation is caused when households, firms and the government borrow more money from banks to fund extra spending. This adds to the money supply because there are now more bank deposits. The extra money lent by the banks creates more demand and prices are driven up.

Chapter 33

Getting started:

- (a) According to the graphs, inflation in South Africa is higher than in the OECD. Throughout the whole of the time period inflation in South Africa has been at least 2 per cent higher than in the OECD area (30 countries). This supports the view that inflation in South Africa has been high.
- (b) Consumers are likely to be affected by the recent price increases. This is because many of the goods that have increased in price are essentials. For example, the food and non-alcoholic beverages index

increased by 0.2 per cent between January 2009 and February 2009, taking the annual rate to 15.8 per cent. The monthly increase in the food and non-alcoholic beverages index was largely driven by monthly increases in cold beverages, other food, meat and fish. Sugar, sweets and desserts also contributed 0.3 per cent to the increase. The transport index increased by 1.8 per cent between January 2009 and February 2009, mainly due to a 10.5 per cent increase in the price of petrol. These price increases will affect many consumers in South Africa.

(c) Businesses are also being affected by inflation. South African businesses are losing their competitive edge because their prices are too high. According to a spokesman for South African businesses 'trading is becoming very difficult. We're losing our competitive edge abroad. If this carries on we'll have to lay off workers'. This suggests that businesses are finding it difficult to sell goods abroad and may have to make people redundant because of falling sales. The profits made by firms are likely to fall if their competitive edge is lost.

Question 1:

- (a) (i) The profit made by Jack's business has fallen by 50 per cent this year. The main reason for this is because business costs have risen. The health and fitness club has been hit hard by the huge increases in utility bills. The business uses a lot of fuel to heat the swimming pool, for example.
 - (ii) When costs rise due to inflation, one way to protect profits is to raise prices. By raising prices, revenue will increase and this can be used to offset the higher costs. However, this is not always possible. If prices are increased there may be a fall in demand. For example, if Jack raises membership fees at the club, customers might not renew their membership, in which case revenue could actually fall.
- (b) One of the problems with inflation is that workers will demand higher wages. They will need more money to protect themselves against inflation. Demands for higher wages when there is inflation can cause conflict between employers and trade unions. In this case Jack says that his staff want a 7 per cent pay increase and that he cannot afford to meet this demand. At worst this could lead to a strike.
- (c) If inflation is rapid, firms will have to increase their prices frequently. This will cost money because customers have to be informed. New brochures will have to be printed, web sites updated and sales staff told. Jack will have to change the prices he charges for membership fees and any other services the club sells. These are called menu costs because, for a restaurant, when prices are increased a new menu has to be printed.

Economics in practice – Inflation in Turkey:

- (a) In the 1990s inflation in Turkey was very serious. The country experienced hyperinflation. This is where price increases get out of control. In 1994, inflation was 104 per cent. This means that prices more than doubled in that year.
- (b) Between 2003 and 2008, inflation started to fall in Turkey. In 2003 it was 45.2 per cent. By 2008 it had fallen to 8.7 per cent. This is also considerably lower than the peak of 104 per cent in 1994. However, many would regard this as too high. In the OECD, for example, inflation rates were less than 4 per cent for most of this period.
- (c) Inflation in Turkey was so high in the 1990s that many firms may have found it difficult to sell in overseas markets. This is because the prices of exports rise. As a result, demand for exports is likely to fall which means that the Turkish current account will be adversely affected. If exports fall, a

surplus on the current account will be reduced or a deficit will be increased. The problem will be worse if imports become relatively cheaper than domestic goods. If demand for imports rises as a result, the adverse affect on the current account will be increased. Overall, the Turkish balance of payments probably worsened during the 1990s.

- (d) The correct answer is C. Inflation was 104 per cent in 1994. Therefore goods costing 1 million lira would increase by 104 per cent, i.e. another 1.04 million lira must be added to the original price (1 million + 1.04 million = 2.04 million).
- (e) High rates of inflation will have an impact on people. In Turkey, households became poorer. Their real wages fell which meant they had less purchasing power. They could not buy the same quantity of goods and services. Prices rose faster than wages, and unemployment was also a problem. Following the most severe economic crisis in February 2001, tens of thousands of people lost their jobs, while many of those working were left exhausted and desperate. According to research, the unemployment rate in Turkey reached 16 per cent. Even according to official statistics, the jobless rate has reached 30 per cent among the 'educated' youth in urban regions. The unemployment problem was also worse because of the cuts in government expenditure. It has been claimed that the government has been cutting budget deficits at the population's expense.
- (f) Inflation can have an effect on the functions of money. If hyperinflation exists, where price increases are out of control, money may cease to be a medium of exchange. Although in Turkey money was still used as a medium of exchange, it was necessary to replace the currency. In 2005, due to a lack of confidence in the monetary system, the government issued new notes and coins to replace the old ones. When the new currency was introduced, 1 new Turkish lira; was exchanged for 1,000,000 old lira.

When inflation is high it will not be a very good store of value. The value of people's savings can be run down if inflation is constantly higher than interest rates in the economy. For example, just in one year, 1994, the value of the lira was reduced by around half when inflation was 104 per cent. In just one year, the value of people's savings would have halved.

Also, using money as a unit of account can be a problem. Monetary values can become distorted and people become uncertain about the true values of goods and services. Finally, inflation can benefit those in debt. This is because after a period of time the amount repaid has less purchasing power than the amount borrowed. People who borrowed money in Turkey may have benefited from periods of hyperinflation.

Chapter 34

Getting started:

- (a) Jesus Torres is laid off every year at the end of October. His work is seasonal which means that when the holiday season is over his services are no longer required. Therefore he is laid off.
- (b) Vinetta is a victim of the downturn in the economy which has hit the construction industry. She is an architect whose services are required when there is work in the building industry. Unfortunately, when the economy starts to dip the demand for construction projects is hit and therefore fewer architects are required. Vinetta was laid off along with four of her colleagues.
- (c) In many countries the government pays benefits to the unemployed, so when unemployment rises more money has to be paid out. The government has to get this money from somewhere.

Question 1:

(a) Jenny Truelove has been made unemployed twice recently. In 2006, she was laid off by Smithson Ltd, a manufacturer of plastic household products based in Derby. Jenny worked on the factory floor but the company was taken over and production was switched to China. Jenny is a victim of sectoral unemployment in this example. Manufacturing is in decline in the UK and Jenny is laid off due to changes in the structure of the economy.

Jenny managed to get another job in Derby working in a warehouse for a mail order company. She helped to 'pick stock' and process customer orders. Unfortunately, after 18 months the company automated the warehouse resulting in 12 redundancies. Jenny was laid off again. This time she was a victim of technological unemployment. Her job is now done by a machine so her services are not required.

(b) Jenny can improve her geographical mobility by moving away from Derby. If she is prepared to move away she is more likely to get a job. This is because there will be more choice of jobs to apply for over a wider geographical area. Jenny can also improve her occupational mobility. She could gain some qualifications at college. For example, she could go on a training course and obtain some NVQs.

Question 2:

- (a) Flexsys is laying off workers because demand for their rubber products is falling. The company is suffering from strong Far Eastern competition.
- (b) Many of the Flexsys workers being laid off may suffer hardship. Their incomes will fall because state benefits are generally lower than wages. In extreme cases unemployed people lose their homes because they cannot meet mortgage payments. The living standards of the unemployed are generally lower than those in work. Sometimes the costs can extend to family breakups and lower self esteem for those who are long term unemployed. The longer people are unemployed the worse it gets. There have been a lot of job losses in the North Wales area and finding a new job may be difficult. This can be very stressful and cause anxiety.
- (c) Sometimes unemployment can have a huge impact on local communities. In this case there have been a lot of job losses in the area and the recent announcement at Flexsys is described as another hammer blow to the community. If there are a lot of unemployed people living in the same area the whole community can be 'dragged down'. The spirit in these communities falls to low levels. Such areas become run down. Smaller businesses start to struggle and fail. Households do not have enough money to maintain their houses and gardens and the residential environment degenerates. Some have suggested that unemployment, particularly amongst the young, leads to increased crime, violence, drug use and vandalism.

Economics in practice – Unemployment in the US:

(a) Unemployment can be measured using a number of methods. One approach is to count all those people who claim benefits. This is called the claimant count. However, this method excludes certain groups so it understates the true level of unemployment. An internationally recognised method is to record the number of people who are not working. According to the ILO, unemployed people are those without a job, want a job, have actively sought work in the last 4 weeks and are available to start work in the next 2 weeks, or are out of work, have found a job and are waiting to start it in the next 2 weeks.

A survey can be carried out to do this.

- (b) Cyclical unemployment occurs when there is a downturn in the economy. People lose their jobs because the firms they work for are cutting back on production. They are doing this because demand is falling. In this case, job losses are a result of a global recession caused by a financial crisis in the US. The job losses in the US have hit all sectors. Most December job losses were in the service sector, which shed 273,000 jobs. However, manufacturing jobs fell by 149,000 in December, while employment in construction fell by 101,000, with retailers cutting staff by 67,000.
- (c) Over a period of time economic activity fluctuates, a period of boom is likely to be followed by a downturn in the economy. When an economy moves from a boom into a downturn business activity slows down and people are laid off. This process will continue, and worsen, if the economy goes into a recession or depression. People lose their jobs because demand for goods and services starts to fall. History suggests that this is a common pattern and cyclical unemployment occurs a regular intervals over time.



- (d) People who are out of work do not make any contribution to production. This is a waste of resources and results in lower levels of national income.
 - Tax revenues will fall because most taxes are linked to income and spending. This means the government has less to spend and may have to cut public sector services.
 - The government will also be under pressure because it will have to pay out more in benefits to those who lose their jobs.
 - Although taxes may not go up immediately, they have to go up eventually. The government may also have to increase its borrowing.
- (e) The correct answer is C. Frictional unemployment refers to those people who are out of work when moving between jobs.
- (f) Boeing said it would be laying off workers at its factories in the Seattle area. AT&T, the telecoms giant, said last month that it was reducing its workforce by 4 per cent and cutting 12,000 positions. An increase in unemployment can have a number of negative affects on firms such as these. When firms lay off workers they have to pay them redundancy money. Also, the remaining workers may be unmotivated because they may fear that they are next. Boeing and AT&T may be left with spare capacity when laying people off. There will be unused machines, tools, equipment and factory space which would have been used before people were laid off. Unemployment usually leads to a fall in demand. Sales are likely to fall for most businesses when unemployment starts to rise in the economy. This is because people have less to spend. Boeing and AT&T are likely to experience a fall in sales.

Getting started:

(a) If a country has an open economy it means that they trade with other nations. They buy goods from other countries and also sell goods abroad. There are no restrictions. In this case, Malaysia sells natural rubber and palm oil, together with sawn logs and sawn timber, cocoa, pepper, pineapple and tobacco to other nations. At the same time Malaysia buys goods such as electronics, machinery, petroleum products, plastics, vehicles, iron and steel products and chemicals from abroad.

- (b) In April 2008, Malaysia sold MYR 51,682 million of goods to overseas countries. During the same month Malaysia bought MYR 43,683 million of goods from abroad. This means that Malaysia sold MYR 7,999 million of goods more than they bought.
- (c) Malaysia does seem to benefit from trading with other nations. In every month over the time period shown Malaysia sells more goods than it buys from abroad. This suggests that Malaysia has a very healthy trading balance.

Question 1:

- (a) The balance of trade, also called the visible balance, is the difference between exports and imports of physical goods.
- (b) In the first few months of 2008, Japan has exported more than it has imported. There are surpluses on the balance of trade. For example, in April 2008 the balance of trade is Y1096.182 billion. However, from this point on the position gradually worsens. By the end of the time period, Japan's import of physical goods exceeds its export and the balance of trade becomes negative. In early 2009, there is an Y956.869 billion deficit on the balance of trade. However, right at the very end the balance becomes positive again.
- (c) The biggest surplus on the balance of trade is in April 2008. It is Y1096.182 billion.

Economics in practice – The Nigerian balance of payments:

- (a) Nigeria trades with other countries for the following reasons:
 - Obtain goods that cannot be produced domestically
 - Obtain goods that can be bought more cheaply from overseas
 - Extend consumer choice
 - Sell off unwanted commodities lie oil
- (b) Visible trade involves buying and selling physical goods. Exports are goods sold to other countries. Examples of visible exports for Nigeria include oil and natural gas which accounts for more than 90% of the nation's total exports. Invisible trade involves buying and selling services. An example of invisible exports for Nigeria include tourism.
- (c) C is the correct answer. Insurance is a service and therefore an invisible item.
- (d) The balance of trade, sometimes called the visible balance, is the difference between exports and imports of physical goods such as commodities, manufactured goods and machinery. The current balance includes invisible trade in addition to visible trade. It is the difference between all exports and all imports for a nation.
- (e) A current account surplus is likely to generate some benefits for the Nigerian economy. For example, the thriving oil industry with rising exports will generate employment and economic growth. This will help to improve living standards in the country. Nigeria can also build up foreign currency reserves or lend money overseas.

However, the surplus may result in a rising exchange rate which will raise the prices of exports resulting in a fall in demand in the future. This may not be a problem with Nigeria's exports though because oil is in such high demand. Oil is also relatively price inelastic. If a country has a very high surplus it means that other countries have deficits. This unbalanced situation could result in international instability. Generally, though Nigeria is likely to benefit from its current account surplus'.

Getting started:

- (a) Global warming is the term used to describe the gradual warming up of the earth's surface. The graph in Figure 1 shows clearly that the earth has warmed up over the time period. The increase in temperature is particularly steep between 1960 and the current time. The photographs also provide evidence. In 1928 the landscape shown was frozen over. By the year 2004, much of the same landscape has thawed out.
- (b) Governments are becoming concerned about the environment because people are worried about the threat to the planet. Global warming could have some quite adverse affects. For example, sea levels will rise because the ice caps will melt. This will result in flooding in some parts of the world. Subtropical deserts will expand causing severe droughts in some areas and there will be more extreme weather systems such as storms and floods. Governments need to take action or they may not be re-elected.
- (c) The agriculture industry is likely to be affected by global warming more than any other. Global warming is likely to result in climate change. This means that some parts of the globe will become warmer and growing conditions will improve. However, other areas will get too hot, deserts will form and it may be impossible to grow crops. There may also be more extreme weather systems such as storms and floods. These changes will affect agricultural yields around the world.

Question 1:

- (a) A huge range of legislation, regulations, guidelines and codes of practice exist in the UK which is designed to help protect the environment. In this case, Alpine Cold Stores (South Kirby) Ltd, owner of the site of the former Birds Eye factory in North East Lincolnshire was fined £1,000 after pollution seeped into a borehole. The company admitted allowing water from a borehole on the site to run to waste, exposing groundwater to contamination. This was in breach of the Water Resources Act of 1991. Hopefully, as a result of this legislation, the company will not make the mistake again. Such legislation is designed to prevent firms from polluting the environment and those that do are punished.
- (b) The Environment Agency is responsible for taking action against those who break environment laws. In this case, the Environment Agency told the court the open borehole acted as a route to underground water supplies. Mrs Miriam Tordoff, prosecuting, told magistrates the borehole was seen running to waste on five separate occasions between April and July 2008. The agency also has other duties such as giving advice to firms about protecting the environment; helping firms reduce waste, working with farmers, looking after wildlife and helping people get the most out of enjoying the environment.

Question 2:

(a) One way in which the 25 year waste and recycling contract will protect the environment is that more materials will be recycled. This will reduce waste and reduce the amount of new materials that need to be produced. The new recycling facilities will be easier for residents to use, provide better working conditions for waste operatives and will use modern methods to eliminate noise and odours.

Also, waste that cannot be recycled, instead of being sent to landfill, will be processed into a fuel for use by a North West major chemicals producer Ineos Chlor to provide energy for its plant at



Runcorn, Cheshire. The fuel will feed a new Combined Heat and Power plant which will produce electricity and steam to replace energy currently generated from non-renewable sources.

The project will also divert more than 75 per cent of Greater Manchester's waste away from landfill which will be the greatest amount of diversion of all local authorities across the UK. This will reduce the cost to the council (because landfill tax will be less) and help protect the environment.

Economics in practice – Energy use and electricity generation:

- (a) Domestic energy consumption increased by 32 per cent between 1971 and 2005. Growth in the number of households, the proportion of households with central heating, and the ownership of household electrical appliances, have contributed to increased consumption over the period.
- (b) In the UK, fossil fuels account for more than 90 per cent of the total consumption of fuels used in the production of energy. Unfortunately, the burning of fossil fuels to create energy produces carbon emissions which contribute to global warming. Consequently, the 30 per cent increase in consumption of energy will increase damage to the environment.
- (c) (i) Figure 2 shows that coal consumption has fallen significantly between 1970 and 2006, from about 100 million tonnes (of oil equivalent) to just over 40 million tonnes.
 - (ii) One reason for the fall in coal consumption is probably because coal became a relatively more expensive source of energy during the time period. Oil was probably cheaper (oil consumption has increased over the time period).
- (d) The government can offer grants, tax allowances and other subsidies to firms as an incentive to reduce activities that damage the environment. In this case, subsidies are offered to firms that invest in renewable energy sources. For example, in March 2009, the Government said that it will increase the subsidy available to offshore wind farm developers by 50 per cent. Speaking at a Department of Energy and Climate Change seminar, Energy and Climate Change minister Mike O'Brien also announced that up to £10m is to be made available to develop the next generation of offshore wind technology.
- (e) International targets are being increasingly set in an attempt to reduce global pollution. One very important international agreement is the Kyoto Protocol. In this case, under its Renewable Obligation (the Government's key measure to encourage renewable energy generation), the UK Government is committed to increasing the contribution of electricity from renewable sources. The UK has a challenging target that by 2010, 10 per cent of licensed electricity sales will be from renewable sources. The EU-wide target is that 22 per cent of electricity generated in the EU should be generated from renewable sources by 2010.
- (f) Many governments impose taxes on those that damage the environment. The aim of taxation is to ensure that the social costs resulting from production and consumption are met by those who impose them. In the UK petrol is taxed very heavily. For example, if a litre of petrol cost 115p about 67p of this would be paid in tax. It could be argued that such a heavy tax will discourage car use and therefore reduce carbon emissions. A similar tax could be imposed on electricity. If electricity was more expensive, demand would fall and there would be fewer carbon emissions. Another advantage is that those who use more electricity pay more tax. They are therefore made to meet the social cost they impose. However, it could be argued that electricity is a necessity and that heavy taxes might mean that people on low incomes could not afford to buy as much as they need. For example, in the winter pensioners may not be able to afford to keep warm. Higher electricity in production. This could cause cost push inflation. Most people would argue that heavy taxes on electricity would not be a good idea because the disadvantages outweigh the advantages.

Economics

Getting started:

- (a) The graph in Figure 1 shows levels of global manufacturing between 1998 and 2008. In 2008, global manufacturing fell very sharply from over 50 to nearly 40, according to the purchasing manager's index. This is a fall of around 20 per cent in less than a year and suggests very strongly that there is a global recession.
- (b) One of the reactions to the credit crunch was to nationalise some banks. This was because they were in danger of collapsing. For example, the UK government took a significant stake in RBS and in Germany the government took a 25 per cent stake in Commerzbank. It was felt that nationalisation was necessary to restore confidence in the banking system.
- (c) Many firms and consumers fund their spending with money that is borrowed. If interest rates are lower then people and firms are likely to borrow more and so demand will increase. Interest rates have been lowered all over the world to encourage more spending.

Question 1:

- (a) In March 2009, China said it would rely on fiscal policy to weather the global financial crisis and promote fast economic growth. This will involve increasing government expenditure. The Chinese government said money would be provided for a range of different expenditures. These include spending on infrastructure facilities for agricultural production and in rural areas, government housing projects, education, medical care and health sectors and the reconstruction in the earthquakehit areas.
- (b) Fiscal policy also involves using the tax system to influence aggregate demand. In this case, the Chinese government promised to ease the tax burdens of firms and residents, in a move to encourage firms to invest and residents to consume. By lowering taxes on firms and consumers, they would have more money to invest and spend, respectively. The government also said it would increase the income of low-income families to spur consumer spending.
- (c) Prudent fiscal policy is cautious fiscal policy. This means that the government would not be lowering taxes or increasing spending to provide an extra boost to demand in the economy. Active fiscal policy is the opposite. It means that the government is prepared to spend more and tax less. New spending levels are planned and tax cuts implemented.

Economics in practice – Economic policy in India:

- (a) Governments use policy instruments when controlling the economy. They are like tools. Policy instruments are economic variables such as the rate of interest, rates of taxation and levels of government expenditure. They can be adjusted either directly or indirectly by the government.
- (b) Monetary policy involves using policy instruments such as the interest rate to influence aggregate demand in the economy. Many firms and consumers use borrowed money to pay for goods and services. Consequently, changes in the interest rate will influence the amount borrowed and therefore the amount of demand in the economy. In this case, India has cut the interest rates but says it has more scope to reduce them further.
- (c) Fiscal policy can be used to influence aggregate demand in the economy. If, for example, a government wanted to increase demand, it could increase government expenditure and lower taxes. This is a fiscal stimulus. The economy is being stimulated using fiscal policy instruments.

- (e) The government in India is concerned about the fall in economic growth. Figure 2 shows that growth rates have fallen from around 9 and 10 per cent to just 5.3 per cent in January 2009. The government has chosen both monetary policy and fiscal policy to increase growth rates again. For example, since last October, India's central bank has cut interest rates to 5 per cent to raise the pace of growth. One of the advantages that India has over many other countries in the world at the time is that...'they have a lot of room in the area of monetary policy,' said Planning Commission Deputy Chairman Montek Singh Ahluwalia. He also said that, 'Many other countries don't have that headroom as they have lowered their interest rates to near zero'. This suggests that further cuts are likely. India is also likely to use fiscal policy. Ahluwalia says 'I would still argue that in spite of the high fiscal deficit there is a case for an additional fiscal stimulus in the present circumstances for the next year.'
- (f) Supply side policies are designed to increase the productive potential of the economy. Their purpose is to promote economic growth and they are aimed at the whole economy. Although sometimes supply side measures may be targeted at a specific part of the economy that is holding up economic growth. One reason for the fast pace of growth in India is down to the use of supply side policies. They have helped to increase competitiveness and productivity in India. For example financial markets have become more deregulated, allowing more flexible loans. These have helped to increase investment which has led to increased capacity and competitiveness. There has also been more training and education of at least part of the population. This can be shown using production possibility curves (PPCs). In the diagram below, the PPC has shifted from PPC₁ to PPC₂. This shows that the productive potential of the Indian economy has increased enabling more production of both consumer and capital goods.



Getting started:

- (a) Government expenditure is the money spent by the government to provide public sector services. Examples of government expenditure in New Zealand include education, health, defence, law and order and social security payments. The New Zealand government plan to spend \$61.9 billion in 2008/09.
- (b) The most expensive item of government expenditure in New Zealand is health care at \$12.6 bn.
- (c) The most important source of government revenue in New Zealand is individual's income taxes at \$27.2 bn.
- (d) The percentage revenue collected from corporations is given by:

 $= \frac{\text{Corporation tax}}{\text{Total income}} \times 100 = \frac{\$9.6 \text{ bn}}{\$61.9 \text{ bn}} \times 100 = 15.5\%$

Question 1:

- (a) When a government spends more than it collects in revenue it will generate a budget deficit. This means that the government has to borrow money to fund the deficit. The amount a government needs to borrow is called the public sector net cash requirement.
- (b) There were two budget surplus' during the time period shown. These were in 1999/00 and 2000/01. The largest surplus was in 2000/01 when government revenues exceeded government spending by £36,321 million. In all other years, the value of government spending was greater than government revenues which resulted in a series of budget deficits.
- (c) If tax receipts fall during 2009/10, the government's revenue will fall. If spending remains the same, increases or falls at a slower rate than tax revenues, the size of the budget deficit will increase. Therefore the government will have to borrow more so the size of the PSNCR will also rise.

Question 2:

- (a) (i) The most important direct tax for the government is income tax. This tax generates more revenue than any other tax. In 2007/08, income tax is estimated to have contributed £150.9 billion to government revenue.
 - (ii) The most important indirect tax is VAT. It is estimated to have raised £80.5 billion in 2007/08.
- (b) Direct taxes are taxes on income and wealth. They are aimed at individuals and businesses. Most individuals and small businesses such as sole traders and partnerships pay income tax. Most limited companies pay corporation tax which is a tax on company profits. Indirect taxes are levied on spending. The main indirect tax in the UK is VAT. Most goods and services attract VAT of 17.5 per cent.
- (c) During a recession total incomes, profits and spending in the economy are all likely to fall. Since most taxes are levied on income, profit and spending, the amount of tax revenue collected by the government is therefore likely to fall. This means that the government will have to cut its own spending or borrow more.

Economics in practice – US fiscal policy:

- (a) Figure 38.5 shows US government spending in 2008. Three categories of spending account for over 60% of the total. The highest category is spending on health care which accounts for 23%. Social security and defence both account for 21% of the total. These are the three main spending priorities for the US government.
- (b) Fiscal policy is used to regulate aggregate demand in the economy. Governments can use changes in the tax system or changes in the level of government spending to influence the level of aggregate demand in the economy. For example, if the government wants to cut aggregate demand in the economy to help reduce inflation, it could cut government expenditure or raise taxes. Both of these measures would dampen demand.

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- (c) Government spending on defence in the US is the highest in the world. In 2008, defence spending was about \$613 bn. One of the reasons why it was so high in 2008 was because of the nation's military commitments in Iraq and Afghanistan.
- (d) A is the correct answer. A sales tax is an indirect tax because it is a tax on spending.
- (e) Expansionary fiscal policy involves providing a financial stimulus to the economy. This can be done by raising government expenditure or reducing taxes or a combination of the two. In 2008, the US government took action to help boost the US economy and avoid going into recession. About \$170 billion in tax rebates was used to stimulate the economy. It was estimated that the extra spending would increase budget deficits (or reduce future surpluses) by \$152 billion in 2008 and by a net amount of \$124 billion over the 2008-2018 period. Tax rebates were paid to individual U.S. taxpayers during 2008. Most taxpayers received a rebate of at least \$300 per person (\$600 for married couples) plus an extra \$300 per dependent child under the age of 17. This is an example of expansionary fiscal policy. In 2009, as a result of the 'credit crunch' the government found another \$800 billion to fund increased spending and further tax cuts. This is a further example.
- (f) The amounts of money pumped into the US economy in 2008 and 2009 appear quite large. The extra money is designed to boost the US economy and avoid recession. It is hoped that the extra money will increase aggregate demand resulting in economic growth and a fall in unemployment. However, unfortunately, expansionary fiscal policy designed to promote economic growth may cause inflation if demand rises too quickly. If people in the US spend the tax rebates quickly and at the same time other government expenditure creates further demand, there may not be enough supply to meet demand. As a result prices will rise. The increase in aggregate demand may also cause increased spending on imports and a worsening of the current deficit. Also, expenditure on imports does little to help the US economy.

Chapter 39

Getting started:

- (a) In common with many other countries in the world, interest rates in the US have fallen since 2007. In 2007, the interest rate was 5.25 per cent. Since then it has fallen guite steadily to just 0.25 per cent at the end of 2008 and remained there into 2009.
- (b) Firms will benefit when interest rates fall. Firms which currently have loans, like Toledo Brakes, find that their interest payments fall which reduces production costs. When interest rates are lower, firms are also more likely to borrow money to invest. For example, as a result of the lower interest rates in the US, Toledo Brakes has decided to invest in new tooling technology and upgrade its computer system.
- There is an inverse relationship between interest rates and consumer spending. This means that when (c) interest rates rise, consumer spending falls. This is because a significant proportion of spending is funded by borrowing. When the cost of borrowing rises, there will be less borrowing, and therefore less spending. In this case, Emma Durham plans to reduce her spending because the interest rate charged on her credit card has increased.

Question 1:

(a) The Monetary Policy Committee sets interest rates in the UK economy. This is a group of nine people who are experts in economics and monetary policy. The group is led by the Governor of the Bank of England. The aim of the MPC is to set interest rates at a level which keeps inflation under control.

(b) The base rate is the rate of interest set by the monetary policy committee. It influences all other interest rates in the economy. The base rate in the UK is currently 0.5 per cent, the lowest on record.

Economics in practice – Monetary policy in Brazil:

- (a) A government can influence aggregate demand by adjusting interest rates or the money supply in the economy. This approach to demand management is called monetary policy. For example, in Brazil interest rates have been high. This has resulted in lower levels of aggregate demand and lower inflation levels as a result.
- (b) In 2001, the inflation target was 4 per cent. According to Figure 4 inflation was actually 6 per cent. However, it could be concluded that the target was reached because a variation of up to 2 percentage points around the target is allowed.
- (c) Brazil's approach to monetary policy is similar to that of the UK. For example, interest rates are set by the Monetary Policy Committee. COPOM is the committee responsible for decisions on interest rates in Brazil. Members, such as the governor of the Central Bank and other officials, that sit on the COPOM have voting rights. In Brazil, as in the UK, the government sets targets for inflation and the Central Bank publishes an inflation report on a quarterly basis which serves as a basis for decisionmaking on interest rates.
- (d) Brazil's approach to monetary policy is similar to that of the UK. For example, interest rates are set by the Monetary Policy Committee. COPOM is the committee responsible for decisions on interest rates in Brazil. The governor and all directors of the Central Bank sit on the COPOM and have voting rights. In Brazil, as in the UK, the government sets targets for inflation and the Central Bank publishes an inflation report on a quarterly basis, which serves as a basis for decision-making on interest rates.
- (e) A is the correct answer. If the money supply is allowed to grow too quickly inflation will rise.
- (f) When interest rates are high, as they have been in Brazil (up to 25 per cent at times), eventually there will be a decrease in aggregate demand. This is likely to result in a rise in unemployment. For example, higher interest rates will discourage consumers from borrowing money to fund spending on items such as houses and consumer durables. As a result, the construction industry and those firms producing goods such as cars, electronic goods, furniture and non-essential items, will lose sales and lay off staff. Also, higher interest rates will result in higher mortgage payments for many households. This will reduce their spending power and lead to a fall in demand. Again firms will react by reducing capacity and laying off staff.

Higher interest rates will also discourage firms from borrowing to invest in new technology and expansion. This will hamper their long term development. They may also lose their competitive edge in foreign markets. Also, if interest rates result in higher exchange rates it may be difficult for firms to sell abroad. Exporters are likely to react by laying off staff. Generally, tight monetary policy will result in higher unemployment, lower investment and lower economic growth.

Getting started:

- (a) In 2003, Andrei received some financial support to help buy a new machine. The old machine was almost useless and he couldn't really afford a new one. With the new machine Andrei was able to produce more efficiently and lower his prices. This led to more business and higher sales.
- (b) Privatisation helped Andrei to get more business. After privatisation, Andrei was given the opportunity to supply parts to the newly privatised AutoCo. Before privatisation, the company would not have considered Andrei's business as a supplier. They just stuck with their old suppliers. They had no incentive to look around for cheaper and better quality parts. This is because any losses made by a nationalised industry are covered by the government.
- (c) Lower taxes on business profits should provide an incentive for entrepreneurs to expand and develop their businesses. This is because they get to keep more of the profit they make. Also, as in this case, if businesses can keep more of their profit, they have more to invest. If more entrepreneurs set up businesses and expand them, and if there is more investment, aggregate supply will increase.

Question 1:

- (a) The graph shows that economies with lower taxes perform better than those with higher taxes. For example, the GDP in countries with lower taxes was 5.4 per cent between 1998 and 2008, whilst in countries with higher taxes it was 2.1 per cent. Export growth and investment growth was also higher in low tax countries between 2000 and 2005. Export growth was 6.3 per cent in low tax countries but only 3.1 per cent in high tax countries. Similarly, investment growth was 5.9 per cent in low tax countries and just 0.8 per cent in high tax countries.
- (b) Some argue that high taxes on income and profit will reduce output in the economy. The evidence in this case suggests that this is true, where economic growth is much higher in low tax countries. This is because high taxes reduce the incentive to work and discourage people from setting up or developing businesses. This is particularly so if marginal rates are too high. If people cut back on the amount of work they do and fewer people set up and develop businesses, there will be less output in the economy. For example, workers will take more holidays, retire earlier, or refuse overtime and entrepreneurs are less likely to undertake risky business opportunities. If taxes are lower, these people keep more of their income and are therefore encouraged to work more hours and set up businesses.

Economics in practice – Supply side policies in Ireland:

- (a) Supply side policies are designed to help the economy increase its productive potential. They aim to promote competition, improve labour market flexibility and encourage the flow of capital into the private sector for investment. In this case, the Irish government has privatised certain industries to help promote competition. It has reformed training and education to improve the quality of labour and given tax holidays to foreign businesses that invest in the country.
- (b) (i) If the quality of labour can be improved, labour productivity will increase and it will be possible to increase aggregate supply. Ireland has reformed training and education in an effort to equip the workforce with the skills needed by businesses. As a result, firms will have access to a pool of skilled and qualified people which will enable them to produce more and contribute to the increase in aggregate supply.

- (ii) It has often been argued that state owned businesses are inefficient. They have no incentive to minimise costs and offer high quality products because their losses are covered by taxpayer's money. However, in the private sector such businesses are exposed to competition. They have to give value for money and make a profit for their shareholders. As a result they become more efficient and therefore help to increase aggregate supply.
- (iii) Extra government investment will increase aggregate supply because investment of any sort will help to increase the productive potential of the economy. In this case the government has invested heavily in communications technology and also spent money reforming training and the education system.
- (c) Some economists have argued that if taxes are too high, the incentive to work and set up and develop businesses is reduced. If marginal tax rates are too high, people choose not to work extra hours and entrepreneurs are not prepared to take further risks. The Irish government agreed with this view and as a result cut taxes. For example, they cut taxes on company profits to just 10 per cent. They also offered tax holidays to foreign firms setting up in Ireland. These lower taxes should act as an incentive for businesses to set up and expand.
- (d) B is the correct answer. Tax breaks should encourage them to invest in businesses and therefore provide them with valuable capital to develop and expand.
- (e) In 1985, unemployment in Ireland was 17 per cent, government debt was over 100 per cent of GDP and its tax rates were some of the highest in Europe. Ireland was considered one of the most backward economies in Europe at this time. As a result, the government decided to slash government spending and introduce a range of supply side polices designed to promote export led economic growth. It could be argued that the government's strategy has worked because by 2003 unemployment had fallen to around 5 per cent and economic growth was so high that Ireland was branded the 'Celtic Tiger'. Figure 2 shows that economic growth over the period was very high. For example, in 2001 growth reached 16 per cent. Even after 2002, when it dropped for a short time, it averaged around 6 per cent. This is an excellent economic performance considering that growth of around 2.5 per cent is the average for developed countries. However, there may be other factors that have contributed to Ireland's good economic performance. Fiscal policy and monetary policy may have played an important role. For example, interest rates may have been very low during the period encouraging consumption and investment.

Getting started:

- (a) Monetary policy and fiscal policy are both policy instruments that can be used to influence aggregate demand in the economy. Expansionary policies are those designed to increase aggregate demand. Expansionary monetary policy might involve lowering interest rates to encourage borrowing. This would increase aggregate demand as firms and households borrow money to invest and spend, respectively. Expansionary fiscal policy might involve lowering taxes or increasing government expenditure. Both of these measures would increase aggregate demand.
- (b) Although one of the world's wealthiest countries 100 years ago, Argentina has suffered many economic setbacks in recent history. In 2001, a severe depression, exploding debt, and a run on the banks ended in the most serious economic crisis in the country's history. The economy bottomed out that year, with real GDP 18 per cent lower than in 1998 and almost 60 per cent of Argentines under
the poverty line. As a result, the authorities used a number of measures to rescue the economy. These included the use of expansionary monetary and fiscal policies.

(c) The expansionary policies used by the Argentine authorities were designed to rescue the country from an economic crisis. On the positive side, the policies have resulted in economic growth. As Figure 2 shows, GDP rose from \$102 billion in 2003 to \$328 billion in 2009. However, the expansionary policies also fuelled inflation which rose to over 40 per cent in 2003. Inflation is bad for the economy.

Question 1:

- (a) Expansionary fiscal policy involves raising government spending or lowering taxes. In 2007, the Nigerian government planned to spend N2.3 trillion compared with N1.9 trillion in 2006. The Budget provided for a deficit of N0.5 trillion, an equivalent to 2.9 per cent of GDP. This means that the Nigerian government is increasing its spending in the economy. Between 2006 and 2007, spending rose by over 20 per cent. This is an example of expansionary fiscal policy.
- (b) The 2007 budget focused on the theme: 'to accelerate investments in basic physical and human resource capital'. As a result, the government planned to spend on projects in the power, water, roads, security, education and health sectors. The positive effects of this policy are likely to be improved living standards for Nigerians, improved infrastructure for businesses which should help them to develop and generate employment. This means that unemployment should fall and the economy should grow.

However, in 2008, Nigeria's inflation rate rose to 9.7 per cent in May, the highest in two years, as the cost of food, energy and building materials increased. Inflation accelerated from 8.2 per cent in April according to the National Bureau of Statistics. This is a possible negative effect of expansionary fiscal policy.

Question 2:

- (a) The scrappage scheme in the UK had a number of benefits. Consumers were given £1,000 to buy a brand new car. Jobs in the car industry were protected because car sales rose by 20 per cent. The government made £105m net profit because VAT receipts were greater than the cost of the scheme. And the environment benefitted because CO₂ emissions were reduced.
- (b) It is unlikely that government measures designed to protect the environment would have any adverse economic effects. This is because the money spent on such measures is generally quite small relative to other items of government expenditure. In this case, the car scrappage scheme has had a number of economic benefits as well as an environmental benefit. However, in a minority of cases it is possible that some environmental measures may constrain businesses and impose additional costs. This might result in business closures and job losses.

Economics in practice – UK economic policy:

(a) Figure 2 shows that at the end of 2008 economic growth was only 0.5 per cent. In 2009, GDP started to fall. The economy was in recession. The unemployment data in Figure 4 also shows that the economy is in poor shape. Unemployment has increased consistently in recent months from around 5 per cent to over 7 per cent. Consequently, the expansionary policies implemented by the UK government are appropriate.

- (b) Loose monetary policy involves increasing aggregate demand by lowering interest rates or increasing the money supply. The UK government has lowered interest rates to 0.5 per cent and used quantitative easing to increase the money supply. Lower interest rates will encourage borrowing by firms and households. This will increase aggregate demand which will create jobs and stimulate economic growth. Lower interest rates may cause the exchange rate to fall. This means that demand for exports may increase because they will be cheaper. This will help improve the current account. Lower interest rates will also encourage firms to invest. This will help them become more competitive.
- (c) D is the correct answer. Expansionary fiscal policy is more likely to reduce unemployment.
- (d) The UK budget deficit was around £175bn in 2009 and some expected it to rise to £200bn. The reason why it is so high is because government spending has increased and tax revenues have fallen. Spending has increased because the government is trying to help the economy recover from a recession. It has spent money to create economic activity. For example, it spent a significant amount on bank nationalisation. Tax revenues have fallen because VAT rates have been cut. Also, during a recession there is less spending and GDP falls, as a result tax revenues will also fall.
- (e) If the monetary stimulus is too strong, firms may not be able to cope with the increase in aggregate demand. They may not be able to increase supply quickly enough. As a result they will raise their prices causing inflation.

If the fiscal stimulus is too strong higher aggregate demand may 'suck' in imports and a current account deficit may increase. Lower interest rates may force the exchange rate down which means that imports become more expensive. This may add to inflationary pressures.

The main danger is the threat of inflation. The increase in aggregate demand might cause demand pull inflation. This is more likely if the economy has limited spare capacity. However, according to the chart in Figure 3 inflation is very low and falling in the UK. The risk of inflation appears minimal at the moment.

Finally, the fiscal stimulus has increased government debt. Expansionary fiscal policies will place a drain on the government's resources. The UK budget deficit is £175bn and rising.

Chapter 42

Getting started:

- (a) If a firm hopes to sell its products to consumers in all countries in the world, it will be selling in a global market. This is the largest possible market.
- (b) (i) According to Figure 1, the Indian and the Chinese markets are expected to grow sharply in the next 30 years. For example, by 2040 it is expected that there will be over 400 million car owners in China.
 - (ii) In recent years the Chinese and Indian economies have started to grow. Living standards have started to rise and people are becoming better off. Ten years ago people in these two countries could not afford a car. However, as their incomes grow, people in these two very large countries will be able to buy cars for the first time.
- (c) Fifty years ago the global car industry was dominated by three US car makers, GM, Ford and Chrysler. But from the 1980s, their market share fell as Japan made an entrance into the global market. Now their share of their home market in the US has declined dramatically as new, leaner producers like Toyota have entered the market. GM and Ford are cutting thousands of jobs and closing plants, while Toyota is building one new plant each year. Toyota is now worth 10 times as much as GM and is now the world's largest carmaker. Figure 2 shows that the US now produces fewer cars than it sells. On the other hand, in Asia, more cars are produced than are sold. The US has now lost its dominance in the global car industry.

Question 1:

- (a) Developments in technology are one of the main reasons why globalisation is gathering pace. Modern ICT allows firms to transfer complex data instantly to any part of the world. The internet has also had a dramatic affect. Consumers can gather information about products and buy them online from firms located in different parts of the world. In this case, TutorVista, based in Bangalore, India, is an e-tutoring business which provides help to students with their studies. Their tutoring services are available anywhere in the world because they can be accessed online. This is just one small example of the IT services revolution that is sweeping the world of business. Also, in this case, India is the global leader in the provision of these BPO services which can be offered using ICT. BPO services include admin tasks – such as accounting, IT support, and payrolls which can be undertaken anywhere in the world as a result of developments in ICT.
- (b) Globalisation can only flourish if governments are committed to it. For example, countries cannot trade if the government keeps international borders closed and trade will be very limited if governments choose to protect their domestic producers. Firms cannot locate production plants and other facilities if they cannot obtain planning permission from countries. Governments can aid globalisation by relaxing all laws and regulations which prevent, restrict or complicate trade and business. In this case, the Indian IT services industry only began to develop when the government opened the country to the forces of globalisation. It ended regulation at home and lowered barriers to foreign investment.

Question 2:

- (a) Multinationals are large and powerful corporations. They sell goods and services into global markets and have production plants and other operating facilities all over the world. In this case, HSBC is one of the largest banking and financial services organisations in the world. HSBC has 9,500 offices in 86 countries in Europe, the Asia-Pacific region, the Americas, the Middle East and Africa. In 2008, HSBC had a turnover of nearly £50 billion and employed over 300,000 people across the world. HSBC is clearly a multinational.
- (b) Most banks now offer online banking services. This means that people can carry out banking transactions using their PCs. Online banking will help companies like HSBC reach global markets. This is because customers can access their accounts anywhere in the world. Customers do not necessarily have to live in the country where they opened an account. Banks like HSBC can also advertise their services cheaply on the internet to a global market.

Economics in practice – Coca-Cola:

- (a) Multinational companies are large and powerful. They sell their products to many countries and have production plants and other operating facilities all over the world. Coca-Cola is the world's largest beverage company, offering consumers in 200 countries nearly 3,000 products. In 2008, Coca-Cola had a turnover of \$31.9 billion and made a profit before tax of \$7.4 billion. Coca-Cola has more than 300 bottling partners around the world which manufacture, package, distribute and merchandise their brands bringing them to more than 20 million customers globally. Coca-Cola is clearly a large multinational company.
- (b) Globalisation is the integration of world economies. Firms and people are behaving as though there is just one market or one economy in the whole world. Companies like Coca-Cola make a big contribution to globalisation. They are very keen to 'do business' in other countries. Coca-Cola has a global outlook. It sells to over 200 countries in the world. Their brands are recognised internationally, and according to Figure 4, 76 per cent of its business is outside of the US. Coca-Cola also has more than 300 bottling partners around the world which manufacture, package, distribute and merchandise their brands bringing them to more than 20 million customers globally. Companies like Coca-Cola treat the world as though it is one single market. They help globalisation to gather pace.
- (c) (i) Between 1998 and 2008, Coca-Cola saw the per capita consumption of its beverages rise from 65 to 85. This is an increase of over 30 per cent.
 - (ii) The 30 per cent increase in per capita consumption of Coca-Cola's beverages suggests that the company is increasing its grip on the global beverages market. The figure means that, on average, every person in the world consumed 85 units of their products in 2008.
- (d) Some firms have become multinationals because they have been able to establish a successful brand in their domestic market and then exploit it globally. Coca Cola relies on highly effective branding and marketing for its global success. Its brands include Coca-Cola, Diet Coke, Fanta, Sprite, Coca-Cola Zero, Vitaminwater and Powerade. Coca Cola does face fierce competition in the beverages market. However, it has been able to protect its brands using heavy advertising and innovative marketing to attract customers globally. Coca Cola sponsors and creates partnerships with highprofile sports, entertainment and cultural events. For example, the company has a long association with the Olympic Games and was heavily involved in the sponsorship of the Beijing 2008 Olympic Games. Partly as a result of this Coca Cola's volume grew 19 per cent in China in 2008.

- (e) Some firms have become multinationals because they have been able to establish a successful brand in their domestic market and then exploit it globally. Coca-Cola relies on highly effective branding and marketing for its global success. Its brands include Coca-Cola, Diet Coke, Fanta, Sprite, Coca-Cola Zero, Vitaminwater and Powerade. Coca-Cola does face fierce competition in the beverages market. However, it has been able to protect its brands with patents and uses heavy advertising and innovative marketing to attract customers globally. Coca-Cola sponsors and creates partnerships with high-profile sports, entertainment and cultural events. For example, the company has a long association with the Olympic Games and was heavily involved in the sponsorship of the Beijing 2008 Olympic Games. Partly as a result of this Coca-Cola's volume grew 19 per cent in China in 2008.
- (f) Multinationals, such as Coca-Cola, will be in a better position to exploit economies of scale because they are so large. Firms that sell to global markets will produce more than those who just sell to domestic markets. They can therefore lower costs. Such firms are so powerful they can exert a lot of pressure on suppliers to lower their prices. Also, multinationals have access to cheap global resources such as labour, capital and commodities. For example, Coca-Cola will use huge quantities of sugar when manufacturing its products. They will buy millions of tonnes on a regular basis. As a result, they will be able to buy it cheaply. Coca-Cola will also benefit from marketing economies. They can afford to produce powerful and expensive television adverts and use them (with some degree of adaptation) all over the world. Companies like Coca-Cola will be able to exploit economies of scale probably to the limit.

Chapter 43

Getting started:

- (a) Between 2004 and 2006, FDI in India has increased from \$4 billion to \$12 billion. This is an increase of 200 per cent.
- (b) India started to attract multinationals in 1988. However, it all really began in the 1990s when the government began to embrace globalisation. They ended regulation and lowered barriers to foreign investment. The government deliberately targeted the IT services sector for growth, giving it special subsidies. As a result, foreign multinationals flooded into India. They were eager to take advantage of the cheap labour and the opening up of one of the world's biggest markets.
- (c) Generally, firms will locate business operations on sites where the benefits outweigh the costs. In recent years India has become an attractive location for multinationals and other firms for a number of reasons. In particular, India has become an important centre for IT businesses. This is because the government has targeted the IT services sector for growth, giving it special subsidies. Also, the cost of data transmission fell due to new fibre optical cable networks. Firms are also attracted by the cheap labour in India and the fact that India represents a very big new market. India has a population of over 1 billion. Hewlett-Packard, Dell, IBM, and Accenture are examples of some of the firms that now have operations in India.
- (d) One of the main benefits of allowing large multinationals to locate operations in a country is that jobs will be created. For example, in December 2006, Cisco Systems announced a \$1.1bn investment in Bangalore, creating 6,000 jobs. There will be temporary jobs while construction projects are completed and then full-time jobs when new call centres and other operations are recruiting staff. The government will also benefit from extra tax revenue, assuming the multinationals make a profit from their new locations.

Question 1:

- (a) Foreign direct investment occurs when a company makes an investment in a foreign country. This may involve the construction of a factory, distribution centre or store, or the development of a mine or tea plantation, for example. Another part of FDI is the purchase of shares in a business (10 per cent or more) by a foreign company. Most FDI is undertaken by multinational companies. In this case, a number of foreign companies have invested in Iraq during 2008, including Germany's Siemens, which won a \$2.1bn contract to supply gas turbines in Iraq. General Electric also signed a \$3bn deal with Iraq's electricity ministry to help rebuild and support the country's electricity grid. Other companies which invested in Iraq include Royal Dutch Shell, Al Qudra Holding and Daimler AG.
- (b) Iraq has not attracted much FDI in recent years. This is because of the security problems in the country. In 2003, the country was a war zone. Several years after that, Iraq was occupied by US and British troops and it was not safe for business development. Although there were a lot of opportunities in Iraq, particular in the construction industry, many foreign firms concluded that business development was not worth the risk.

Question 2:

- (a) Bilateral aid is assistance given by one country direct to another. In this case, the US helped Afghanistan to develop a power station in the south of the country. The aid project is the US's largest in Afghanistan. The cost of the development is about \$51 million.
- (b) The US aid will help to improve the living standards of the Afghans. When the project is complete there will be an increase in capacity to generate electricity, which will create a better quality of life for Afghan people in southern Afghanistan. Kajaki is an American-built hydroelectric dam project with the potential to provide Afghanistan with 6 per cent of its power. The dam was originally built in the 1950s to help Afghan farmers irrigate their fields. When the work is complete, at full capacity, the three turbines together can provide southern Afghanistan with 51 megawatts of power.

Economics in practice – FDI in Russia:

- (a) Foreign direct investment (FDI) involves a foreign business investing money in another country. It might be the development of a business operation such as a factory or a hotel, or the purchase of shares in a company (at least 10 per cent) located in the host country. Development Aid is quite different. This is money given mainly by governments to help less developed countries. Its purpose is to help the long term development of a nation. It should not be confused with humanitarian aid which is designed to help resolve short term problems such as starvation or a natural disaster.
- (b) Evidence in the case does suggest that levels of FDI in Russia have been low. For example, total FDI in Russia from 1991 to 2001 was \$18.2 billion. In China, FDI was \$46 billion in 2000 alone and more than \$200 billion in the US. Levels of FDI in Russia are also very low relative to other transition countries. For example, adjusted for population size, on a per capita basis, FDI in Russia is \$15, compared to \$84 for Poland, \$118 for the Czech Republic, and \$221 in Hungary. These figures do support the view that FDI in Russia has been poor.
- (c) A number of reasons have been put forward to explain the low levels of FDI in Russia. One view is that Russia may not really want foreign investment. The nation's leaders have suggested an interest but only to win the support of foreign governments and international financial institutions. Also, some Russian leaders do not trust the West. They think that Western firms will only invest to exploit

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Russia's resources and take profits home. Finally, it has been argued that trading is still difficult in Russia because new rules have not been brought in effectively and government policy is confused.

- (d) Initially, Russia needs to make it very clear that FDI is welcome. The government needs to have a clear policy which encourages FDI. The rules and regulations relating to foreign business investment also need to be clarified and simplified. This should make trading for foreign businesses easier. The government could also offer financial incentives to foreign firms such as tax breaks, subsidies, grants and low interest loans.
- (e) D is the correct answer. According to Figure 3, transport and communications has benefited most from FDI, with 25 per cent of all inward investment devoted to this industry. Fuel and petrochemicals came second, receiving 19 per cent of investment.
- (f) Nestlé, the Swiss food products firm, has announced a \$208m investment in the expansion of its Timashevsk coffee factory, in Russia's Krasnodar region. It produces Nescafé Classic soluble coffee, Nescafé coffee mixes and other Nescafé products mainly for the Russian market. The main reason why Nestlé has invested in Russia is to develop further its Russian interests. By producing products in Russia, Nestlé has easier access to the Russian market. Distribution costs will be lower and logistics simpler.
- (g) One of the main benefits to Russia of the Nestlé investment is the creation of jobs. If the factory is going to increase capacity, more workers are likely to be needed. These recruits will probably come from the Krasnodar region of Russia. Over the past 14 years, Nestlé has built up a strong presence in Russia with over 11,000 employees and 14 production units. The local economy in Krasnodar might also benefit if construction firms, for example, are involved in the factory expansion. Other possible benefits include an increase in incomes for those who are employed by Nestlé (foreign employers often pay higher wages than domestic firms), an increase in tax revenues, an increase in exports and improvements in training and education. Russia might also benefit from access to new technologies. New state-of-the-art technologies and processes will be introduced to increase capacity and Russians may be able to benefit from this. Finally, the factory will benefit from Nestlé's freeze-dry technology which will create coffee products of superior quality and benefit Russian consumers.

Chapter 44

Getting started:

- (a) Foreign direct investment has risen sharply in Indonesia since 2001. In 2001, FDI was actually negative. This means that more investment funds flowed out of Indonesia than flowed in. However, by 2006 FDI had grown to over \$5 billion. It was actually even higher in 2005 at around \$8 billion.
- (b) Countries that encourage FDI do so because of the benefits they enjoy. In this case, Newmont Mining Corp. of the US, which has several mining interests in Indonesia, says that over the seven year period of operating the Sulawesi Minahasa Raya mine, financial benefits amounted to \$500 million. Newmont Nusa Tenggara, another Newmont mine, pays around \$35.90 million every year in taxes and other fees to the government. In addition, Newmont claims it buys \$183 million of goods and services from Indonesian businesses, pays \$55 million to Indonesian employees and spends \$2.3 million in community development.
- (c) Sometimes, FDI can have negative effects. In this case, some workers lost their lives in the mines which suggest that health and safety standards may have been low. There was also contamination of marine resources in Sulawesi, reported health impacts in Sulawesi, a loss of water for farming and damage to the protected forests in Sumbawa. Also, in March 2006, a number of protestors were shot

by police in West Nusa Tengarra province, near the site of one of Newmont's mines. The protests centred on Newmont's exploration activities in the Dodo and Rinti protected forests by the main mine site on Sumbawa. Local people want the company to leave and say that exploration has brought environmental damage and loss of livelihood. They have been prevented from entering forests to collect such products as honey, candlenut and palm sugar. The water supply has decreased, and crops such as rice, squash and cucumber have failed to grow due to drought. Clearly, FDI is not all good and there are negative aspects to globalisation.

Question 1:

- (a) One of the main benefits of globalisation is that more jobs are created in the world. In this case it is argued that the US has seen employment rise as a result of globalisation. This is in spite of 1 million manufacturing jobs moving out of the US. In the last 10 years, 16 million new jobs have been created mainly because of globalisation. For example, in the service sector, 17 million new jobs have been created for Americans, more than offsetting the million manufacturing jobs lost due to globalisation. In addition, 3 million jobs have been created in health care and more than 1 million in education. Almost 2.5 million jobs have been created in the financial services industry, and 2 million more jobs in the leisure and hospitality industry. In almost every industry except manufacturing, employment has increased over the last decade of globalisation. Figure 4 supports this view. It shows that unemployment has been below 6 per cent for most of the time period. Globalisation has helped the economy create so many jobs that seven states have set record low unemployment rates this year.
- (b) Globalisation generally raises world GDP. This is because globalisation results in more output, income and employment across the world. The US is the home for many of the worlds multinationals and will therefore benefit more than others when the profits of overseas ventures are added to national income. The US is also a common destination for FDI with many overseas multinationals having operations in the US. It also says in the case that average pay for jobs in the service sector has increased by 42 per cent since 1996. This will add to national income.

Question 2:

(a) It is suggested that globalisation causes damage to the environment. Evidence in this case supports such a view. China has benefited considerably from globalisation in recent years but the nation appears to be choking on its own success. Chinese growth has been the result of rapidly expanding heavy industry and urbanisation that requires huge amounts of energy. Most of this energy comes from coal, the most readily available, and dirtiest, source. Environmental damage is now so severe that many argue it is out of control. Public health is becoming a serious problem. Pollution has made cancer China's leading cause of death, and air pollution alone is blamed for hundreds of thousands of deaths each year. Nearly 500 million people lack access to safe drinking water and Chinese cities often seem wrapped in a toxic grey shroud. Only 1 per cent of the country's 560 million city dwellers breathe air considered safe by the European Union. Environmental decay seems commonplace in China, with industrial cities where people rarely see the sun; children are killed or sickened by lead poisoning or other types of local pollution; and a coastline so swamped by algal red tides that large sections of the ocean no longer sustain marine life.

Economics in practice – Globalisation and Africa:

(a) Unfortunately though, high birth rates, a lack of infrastructure, corruption, armed conflicts, poor governance, environmental degradation, poor health conditions, and lack of education have restricted

Africa's development. Without these obstacles, Africa may have enjoyed considerably more of the benefits of globalisation.

- (b) Africa is rich in natural resources which China desperately needs. There is copper in Zambia, iron ore in Gabon and oil in Angola. China has been growing at astonishing rates in recent years and needs more natural resources to help sustain this rapid rate of growth. In other countries, where there are fewer natural resources, Chinese companies have identified trading and investment opportunities. Also, Africa's need for new and better roads, school buildings, computer networks, telecoms systems and power generation has opened a lucrative window of opportunity for Chinese firms.
- (c) One of the effects of globalisation is rising commodity prices. Growing world demand for commodities such as copper, iron ore and oil has driven up prices sharply at times. Since many African nations such as Zambia, Gabon, Angola and Sudan, have an abundance of these resources, they will benefit when their price increases.
- (d) B is the correct answer. Figure 7 shows that Sudan is one of the nations that got over \$300 million of investment in 2005.
- (e) Trade between Africa and China was over \$100 billion in 2008. But according to information in the case, most African countries now have a growing trade deficit with China. For example, Ethiopian exports to China reached \$132m in 2006, much less than the value of Chinese imports of \$432m. The graph in Figure 6 shows a mixed pattern. In some years, China exported more to Africa than it imported between 2001 and 2003, for example. However, in 2004 and 2005, Africa appears to have a trade surplus with China. In the future, if China is able to develop markets in Africa, it would be reasonable to expect China to benefit most.
- (f) Africa nations will benefit from China's interest in their economies. For example, international trade between the two nations has risen to \$100 billion and China's FDI is increasing all the time. It could be argued that China is unlocking Africa's potential. It is helping nations to generate income from the resources they own. The extra output and employment resulting from Chinese FDI will increase economic growth and should raise living standards in Africa. The profits made by Chinese companies are taxed which increases tax revenue for the government. In addition to higher levels of income, exports and employment, Many multinationals also assist local suppliers in purchasing raw materials and intermediate goods and in modernising production facilities.

However, some might argue that China is exploiting Africa. For example, China may be encouraging African nations to rely too heavily on producing primary products which have a low income elasticity of demand. Chinese companies may pay local labour low wages. They may also employ child labour and working conditions are often very poor. It could be argued that resources are extracted and sold with little money going to Africa. Also, taxes paid to the host nation are often minimal. Finally, stories of anti-Chinese unrest in Zambia, and the killing of nine Chinese oil workers by rebels in Ethiopia, have suggested that not everyone in Africa welcomes China's growing interest.

To conclude, it is clear that Africa has benefitted from China's interest. However, the extent of the benefits is less clear. It could be argued that without China's interest many African nations might still be struggling to develop.

Chapter 45

Getting started:

- (a) Saudi Arabia is one of the biggest oil producers in the world. However, it only uses a fraction of the oil it produces for home consumption. Most of Saudi's oil is exported because they have far more than they need.
- (b) Some goods that are consumed in the UK cannot be produced in the UK. For example, it is not possible to grow large quantities of tropical fruit in the UK. This is because the climate is temperate and not tropical.
- (c) The Maldives has few natural resources which can be used to produce goods and services. However, the islands are very beautiful and attract a lot of tourists. The Maldives rely heavily on tourism for income because it has little else.

Question 1:

- (a) (i) Over the time period shown, both imports and exports have grown consistently for Poland. For example, in 2000 the value of exports was just over 2,000 million Euros. However, by 2008 the value of exports reached almost 12,000 million Euros. This is a huge increase. However, both imports and exports fell sharply in 2009. Figure 1 also shows that Poland has generally imported more than it has exported. For example, by 2008 imports were over 12,000 million Euros.
 - (ii) The main reason why international trade has flourished in Poland in recent years is because the Polish economy has opened up. Since the break up of the Soviet Union, Poland has become more established as a trading nation. It has joined the EU and developed new trading links with other EU countries. Both exports and imports have increased consistently ever since. The reason why international trade fell sharply in 2009 is because of the world recession.
- (b) (i) One of Poland's main imports is capital goods. Poland probably imports capital goods because other countries can produce them more cheaply. It may also be possible that Poland does not have the resources to produce capital goods. For example, they not have the technical expertise.
 - (ii) Poland also imports fuel and minerals. They may import these basic commodities because there are insufficient quantities of fuel and minerals in Poland.

Economics in practice – International trade in South Africa:

(a) Countries trade with each other for a number of reasons. One is to obtain goods that others can produce more cheaply. For example, South Africa buys machinery and scientific instruments from other countries. This may be because other countries have the resources to produce such goods more efficiently. It is obviously beneficial to buy goods from other countries if they are cheaper.

South Africa sells commodities such as gold, diamonds and coal. This is because the country has an abundance of these resources. It has more gold, diamonds and coal than it needs for its own purposes. Consequently it can generate income by selling them abroad.

- (b) Figure 2 shows that South Africa's exports and imports are roughly equal for a few years at the beginning of the time period. However, between 2003 and 2008, South Africa has seen its current account steadily worsen. By the beginning of 2008 the current account deficit was around ZRA 200,000 billion. The position improved after this as the world economy went into recession.
- (c) South Africa is now a popular tourist destination. However, before the first democratic election in 1994, few tourists would have considered visiting the country because of the political situation and



- (d) Trading with other nations may have some drawbacks. South Africa may become too dependent on a narrow range of goods. For example, the country may become too reliant on the production of its primary goods. If demand or prices fall for these goods, nations will suffer a loss of trade and income. Countries can suffer when demand patterns change. For example, an increasing amount of consumer's income is spent on services. South Africa, which relies heavily on mining, may suffer high levels of unemployment if demand for gold, diamonds, platinum and coal falls. Finally, since free trade helps the global economy to grow, it will lead to an increase in environmental damage. For example, as South Africa becomes wealthier, their demand for cars and air travel will rise. This will increase carbon emissions and increase global warming. Also, an increasing amount of resources will be used up. For example, once all of the mineral deposits in South Africa have been mined, there will be no more.
- (e) If countries are free to specialise and trade, firms will be selling to larger markets. This means they will be able to exploit economies of scale because their output will be higher than if they were just selling to the domestic market. This will help to lower costs, improve efficiency and generate global growth.
- (f) B is the correct answer. If exports fall, the current balance will worsen.
- (g) Since 1994, South Africa's economy has been more open. There has been an increase in international trade and South Africa has developed some strong trading links with the UK, Germany, Italy, Belgium, United States, China, and Japan. One of the main advantages of international trade is that living standards will improve. International trade allows the advantages from specialisation to be extended. If countries specialise in the production of goods in which they are more efficient, the global economy will benefit. Goods and services all over the world will be produced in locations where costs are minimised. South African firms will also be able to exploit economies of scale which will lower costs. There will also be more consumer choice and competitive pressure will help improve product quality and keep costs down.

Figure 3 shows that GDP per capita has increased from \$2972 in 2000 to \$3720 in 2008. This supports the view that living standards are rising in South Africa. However, it is possible that other factors have contributed to this growth. For example, South African firms may be adopting more efficient production techniques. They may be investing in new technology or using more productive working practices. The government might be investing in education and the infrastructure and there may be less regulation. It is unlikely that South Africa's improvement in living standards is purely as a result of international trade. However, it will have made a significant contribution.

Chapter 46

Getting started:

(a) (i) China has taken a number of measures to protect its domestic industries and has announced several measures to help exporters. For example, banks are being told to lend more to small and medium-sized exporters. In Hong Kong, there are plans to cover trade credit of up to \$12.9 billion given by exporters and steps have been made to help labour-intensive sectors like garment production. China has also been restoring export tax rebates for the textile sector that it had been phasing out.

- (ii) Indonesia plans to limit imports of goods such as garments, electronics, shoes, toys and food. Importers of these products will have to be registered with the government, use only five designated ports for their shipments, arrange for a detailed inspection of goods before they are transported to Indonesia and have every single container inspected on arrival by Indonesia's slow customs.
- (b) The measures used by China to help exporters may increase their sales because they may become more competitive. However, the measures taken by China, which is coming under threat from countries with even lower wages, like Vietnam, Indonesia and Bangladesh, may prompt other nations to do the same. In which case there will be no gain in trade. If individual countries make it difficult for firms to import goods there will be a fall in world trade. Firms will lose trade from overseas buyers if countries create obstacles to trade such as those in the case put in place by Indonesia.

Question 1:

- (a) One way to cut imports is to place a physical limit on the amount allowed into the country. This is called a quota. By restricting the quantity of imports, domestic producers face less of a threat. They will have more of the market for themselves. However, quotas will tend to raise prices because fewer of the cheaper imports are available.
- (b) The effect in the market of a quota is the same as that of a tariff. The supply curve shifts to the left from S_1 to S_2 forcing a price increase from P_1 to P_2 . This is shown in the graph below.



Question 2:

- (a) Canada is using subsidies to help its domestic computer games industry. This involves giving financial support, such as grants or tax breaks, to exporters or domestic producers that face fierce competition from imports. It is alleged that tax incentives are being used to attract European game developers to Ontario, Quebec and B.C. Canada is attracting multimillion-dollar investments and thousands of highly skilled foreign workers, whose talents are fuelling the industry's growth. For example, Manitoba is allowing companies to write off as much as 45 per cent of labour costs. Quebec offers a 37.5 per cent labour tax credit. Ontario offers a 30 per cent labour tax credit for small companies, and 20 per cent for companies whose annual revenues are above \$20 million.
- (b) Countries use protectionism for a number of reasons. For example, trade barriers may be used to improve the current balance, to protect jobs, to prevent the entry of harmful or undesirable goods or to prevent dumping. In this case, it seems that Canada may be protecting jobs or an infant industry. Most likely, Canada is trying to develop an infant industry. It states in the case that the government is trying to expand the computer games industry in Canada and that measures are designed to attract multimillion-dollar investments and thousands of highly skilled foreign workers.

Economics in practice –Global recession and protectionism:

- (a) Protectionism has increased around the world due to the global recession, which started to bite in 2008 and 2009. Many governments around the world were under political pressure to save jobs by discouraging imports. In November 2008, the G20 met and signed an agreement not to introduce protectionist measures. However, since then, 17 of these countries have put in place 47 measures whose effect is to restrict trade at the expense of other countries. Governments are obviously fearful of the threat to jobs if they do not protect domestic producers.
- (b) According to information in the case, the EU announced new export subsidies on butter, cheese, and milk powder. Also, subsidies for the car industry have increased to around \$48 billion worldwide. In addition to the US direct subsidy of \$17.4 billion to its three national auto companies, Canada, France, Germany, United Kingdom, China, Argentina, Brazil, Sweden and Italy have also provided subsidies. In this case, subsidies are probably designed to help car producers survive during the recession. However, they may also restrict trade.
- (c) Tariffs are being used by some countries to protect domestic industries. For example, Russia raised tariffs on used autos and Ecuador raised tariffs on more than 600 items in 2008/09. Tariffs are taxes on imports which makes them more expensive. As a result, demand for them falls and domestic producers can sell more in the market.

Administrative barriers are also being used. In some countries, tightening standards have slowed import entry, including, for example, China's import ban on Irish pork as well as rejection of some Belgian chocolate, Italian brandy, British sauce, Dutch eggs and Spanish dairy products; and India's ban on Chinese toys.

Evidence in the case suggests that the US is adopting a 'Buy American' campaign. This claim was based on a clause contained in a \$800 billion financial package to stimulate the US economy. The clause required that only US iron, steel and manufactured goods could be used in projects funded by the package.

- (d) A is the correct answer. Dumping involves a firm selling goods below cost in an overseas market.
- (e) The graph opposite shows the effect on a market when a tariff is imposed. The diagram shows the domestic supply and demand for a product. With free trade the price charged in the market is Pw. The price is below the domestic equilibrium because of cheap imports. Demand before a tariff is imposed at 0qw. After the tariff is imposed, the price rises to P and demand falls to 0qt and domestic producers increase their supply from 0q1 to 0q2. The effect of a tariff is to raise price, reduce imports and increase the amount supplied by domestic producers.



(f) Most economists argue that free trade will benefit the global economy. Therefore if countries adopt protectionist policies, the benefits of free trade will be lost. If governments restrict free trade consumers will end up paying more for products and their choice will be limited. If domestic producers are not exposed to competition, the quality of their goods is likely to be inferior and there will be little incentive to innovate. Global growth will slow down and people's living standards all over the world will suffer. There will also be a fall in job creation.

In this case, countries appear to be adopting protectionist policies because of the global recession. However, many would argue that this is completely the wrong approach. One reason is because of Economics

the lessons learnt during the 1930s depression, when import controls made matters considerably worse. Protectionism may also result in retaliation and arguably there may be better ways to deal with a recession than reducing international trade. Therefore, many would argue that the use of protectionist policies during a recession is not appropriate.

Chapter 47

Getting started:

- (a) Figure 1 shows clearly the strength of growth in world merchandise exports between 1948 and 2007. Exports have grown exponentially from \$59 billion to \$13,619 billion. This is a huge growth rate.
- (b) Historically, world trade was dominated by countries like the UK, which had a sizable empire, and the US which is now one of the richest nations in the world. However, Figure 2 shows that over the time period US exports have fallen significantly as a proportion of world trade from \$21.8 billion to \$13.6 billion. Also, since the UK is not featured as a single trading entity, this suggests that the UK is no longer as dominant as it was.
- (c) Trade in some regions shown in the pie charts has increased sharply. For example, Asia's proportion has risen from 14 per cent to nearly 28 per cent, i.e. double. The proportion of world trade attributable to the Middle East has also increased sharply, from 2 per cent to 5.6 per cent. On the other hand some regions now contribute less to world trade than they used to. For example, Africa has fallen from 7.3 per cent to 3.1 per cent and Central and South America from 11.3 to 7.3 per cent.

Economics in practice – The EU and the UK:

- (a) Figure 47.3 shows that both imports and exports between the EU and the UK have grown over the time period. However, imports of goods have grown much faster than exports. In 1999, the UK had a deficit with the EU of about £8,000m. However, by 2008 this deficit had grown to nearly £40,000m.
- (b) relaxing of trade barriers
 - improved transport and communications
 - development of multinationals
 - travel and consumer awareness
 - break-up of the Soviet Union
 - trade agreements.
- (c) A trading bloc is made up of a group of countries situated in the same region that join together and make a free trade area. This means that trade between all the members will be completely free of tariffs, quotas and other forms of trade barrier. It is also common for trading blocs to have a common tariff on imports from non-members. The EU is a very important trading bloc. It has a population of around 500 million and generates an estimated 30 per cent share (\$18.4 trillion in 2008) of world GDP. The EU has developed a single market through a standardised system of laws which apply in all member states. These laws guarantee the freedom of movement of people, goods, services and capital throughout the bloc. The EU maintains common policies on trade, agriculture, fisheries, and regional development.
- (d) A is the correct answer. Non-members will face common trade barriers when selling goods to any member of a trading bloc.
- (e) Belonging to a trade bloc has a number of advantages such as an increased flow of FDI and a greater freedom of movement of goods, services, capital and people throughout the region. However,

sometimes countries are reluctant members of trade blocs because of the disadvantages. One might be the high financial cost of membership. In 2008, the cost to the UK of membership to the EU was expected to be about £65 billion. The UK has also resisted some of the changes brought in by the EU. For example, the UK still has not joined the single European currency. Some British people also object to some of the rules and regulations imposed by the EU. For example, many do not like having to adopt metric measurements. These are some of the reasons why countries, such as the UK in this case, are often reluctant members of trading blocs.

Chapter 48

Getting started:

- (a) In this case, Miles, a Bangladeshi pop band has discovered that one of its songs has been 'stolen' by a film company in India. The song has been used in the soundtrack of a film without the permission of the band.
- (b) In this case, rules laid down by the WTO have been used to secure a ruling against the Indian film company which used a song released by Miles in one of its films. After contacting people familiar with WTO rules, the band found that their song was protected by an agreement relating to intellectual property rights. The agreement provides protection for the authors of works such as computer programmes, sound recordings and films. According to the agreement, members must provide authors of computer programs, sound recordings and films the right to authorise or to prohibit the commercial rental of their work. In this case the Indian company did not inform Miles about the use of its song. Miles took the company to court and won.
- (c) Such agreements provide protection against the theft from authors of works such as computer programmes, sound recordings and films. The agreement covers the use of such works across national borders. Without such protection, artists like Miles would lose out financially. Also, there would be less incentive to produce such work if there was a good chance it would be stolen by an overseas firm.

Question 1:

- (a) The United States, Japan and Taiwan claim that the EU is breaking trade rules by imposing tariffs of up to 14 per cent on goods such as set-top boxes, flat-screen computer monitors, and computer printers. This means that US exports of these goods in the EU are made more expensive which will reduce demand. The United States is the second largest exporter of total ITA products in the world. If duty-free treatment for ITA products is not maintained, trade, jobs, and investment could be seriously affected. The US has a lot to lose if the tariffs are not withdrawn.
- (b) One of the main roles of the WTO is to provide guidelines and rules by which international trade is conducted. In this case, the EU has allegedly put tariffs on goods covered by a WTO Information Technology Agreement (ITA) which prohibits such duties. A US trade spokesperson said 'we believe that these duties are inconsistent with the EU's commitments on these products and that they discourage technological innovation in the IT sector.' The WTO may also be asked to settle the dispute with one of their panels.
- (c) Probably the main problem with getting the WTO to help settle a trade dispute is the amount of time it takes. The settlement was expected to take between 12 and 18 months and could not begin until a suitable panel of experts had been assembled to hear the case.

Economics in practice – The WTO:

- (a) The WTO is an international body set up in 1995. It has 153 members, employs over 600 people and has a budget of over \$160 million. The aim of the organisation is to promote free trade by persuading countries to abolish tariffs and other trade barriers. The WTO is the only body overseeing the rules of international trade. It polices free trade agreements, settles trade disputes between governments and organises trade negotiations.
- (b) One of the most important roles of the WTO is to settle trade disputes between nations. In this case, the US and the EU claims that China has placed restrictions on foreign firms when supplying financial information services. 18 months ago China said that foreign suppliers including Reuters Group, Dow Jones and Bloomberg should distribute their data and news reports to customers in China through Xinhua News Agency. This places these companies at a disadvantage. The WTO has been asked to investigate the matter.
- (c) According to a WTO rule, the request by the EU and US to investigate China's trade restrictions means that a 60-day consultation period is automatically triggered. The purpose of this is probably to encourage the parties involved to settle the dispute without WTO intervention. This would save time and money. However, if the dispute is not resolved before the deadline the US and EU can ask the WTO to investigate.
- (d) C is the correct answer. It is not the job of the WTO to set the prices of goods and services between international traders.
- (e)
 - (i) Figure 2 shows the types of goods which different regions in the world export. Asia has the highest share of manufactures in total exports, with more than 80 per cent of the region's exports included in that product group.
 - In contrast, the Middle east, Africa and the CIS, depend on fuels and mining products for their exports.
 - Less developed countries also show a similar structure. With almost three quarters of their revenues coming from primary goods. South and Central America show the highest share of agricultural exports.
 - Figure 3 shows regional shares in world merchandise exports in 1996 and 2006. The main conclusions to be drawn from the data are that over the time period the exports of Europe and North America have fallen at the expense of all other regions in the world, particularly Asia.
 - (ii) One of the roles of the WTO is to gather and publish trade and other international economic data. This data may be used by a range of different organisations and institutions. For example, the media may use it to support articles and features in newspapers, magazines and programmes. It may also be used by students in their research or governments to help make international comparisons. It may also be used by firms to help in market analysis for example.
 - The WTO aims to promote free trade by persuading countries to abolish import tariffs and other (f) barriers. It has become closely associated with globalisation and wants more countries and people to benefit from the gains of free trade. However, there are groups which are very critical of the WTO's activities. One such group is Global Exchange which promotes people-centred globalisation. One of its criticisms is that the WTO is responsible for damage to the environment. For example, the very first WTO panel ruled that a provision of the US Clean Air Act, requiring both domestic and foreign producers alike to produce cleaner gasoline, was illegal. Global Exchange also believes that the WTO favours wealthy nations over poorer ones. For example, negotiators from poor countries are not even invited to meetings and then 'agreements' are announced that poor countries didn't even

know were being discussed. Many poor countries do not have enough trade personnel to participate in all the negotiations or to even have a permanent representative at the WTO. This prevents poor countries from representing their interests. It has to be said that many of these criticisms are rejected. For example, although the WTO is in favour of free trade, it cannot force less developed countries into trade agreements against their will.

Chapter 49

Getting started:

- (a) Italy is clearly the most developed nation. It is wealthier Italy's GDP per capita is \$31,000 compared to the Congo's which is only \$300. Only a small fraction of the population is undernourished in Italy, less than 2.5 per cent. In Congo it is 74 per cent. Also, Italy has a higher literacy rate, a higher life expectancy rate and a more stable population.
- (b) Figure 2 shows that the most important business sector in the Congo is agriculture. Around 55 per cent of all production is in agriculture compared with Italy where it is only 2 per cent. In Italy, services is the most important sector with over 70 per cent of all production devoted to the service industries. In the Congo a service sector has developed but it only accounts for 34 per cent of production. These patterns are normal for a developed and developing nation.
- (c) Congo has an abundance of natural resources such as diamonds, gold, copper, cobalt and zinc. However, to date these resources have not been exploited commercially. There may be a number of reasons for this. One very likely reason is that the country is recovering from 20 years of decline due to military conflict. This has reduced national output and government revenue, increased external debt, and resulted in the deaths of about 5 million people. As a result, foreign firms withdrew due to political uncertainty, lack of infrastructure and difficult trading conditions. It is likely that the resources which might have been used to exploit natural resources have been used instead for the army.

Question 1:

- (a) Developing countries have some common characteristics such as low GDP per capita, low life expectancy, low literacy levels, fast growing population, poor infrastructure and poor sanitation. Bangladesh does have some of these characteristics. For example, Bangladesh is one of the most densely populated countries in the world. It has over 160 million people, many of whom are landless and forced to live on and cultivate flood-prone land. GDP per capita in Bangladesh is about \$1,500 pa, the literacy rate is 50 per cent and life expectancy is 60 years. Bangladesh also suffers from soil erosion and deforestation.
- (b) In recent years Bangladesh has made some progress in developing its economy. The key to improvement was opening up the economy. In the 1990s, it reduced tariffs, removed quotas, joined a unified currency and became more open. As a result, Bangladesh began to develop more trading partners. The garments industry is responsible for nearly 80 per cent of the country's export revenues. Other sectors such as seafood, ceramics, pharmaceuticals and software development are growing. The plentiful supply of cheap labour in Bangladesh has also begun to attract FDI which will help to boost economic growth.

Economics in practice – Contrasting Ethiopia and the UK:

- (a) Developing or less developed countries have a number of common characteristics such as low income per capita, low life expectancy and low literacy levels. Ethiopia has most of the characteristics. For example, GDP per capita is around \$900 pa and life expectancy is about 53 years. The literacy rate is just 36 per cent and in 2006 the number of internet users per 100 of the population was zero.
- (b) Trade between Ethiopia and China is now valued at over \$200 million pa. China imports natural resources from Ethiopia such as natural gum, coffee, hides and skins, and oil seeds. This is because Ethiopia has enough of these resources to export and generate foreign exchange. In return, China exports light industry products, machinery, chemicals, medical products, building materials, textiles, and rubber products. These are probably goods that Ethiopia is not able to produce itself. Or they may be produced in China more cheaply. It is quite common for African states to export natural resources and import industry goods and machinery.
- (c) If economies are more open there will be more trade. The potential gains from removing trade barriers are considerable. Estimates of the gains to merchandise trade range from US\$250 billion to US\$680 billion per year worldwide. About two-thirds of these gains would be enjoyed by developed countries. Figure 4 shows how the current account balances of developing countries have improved in recent years, partly as a result of more free trade. Increased trade should create more employment, income and tax revenue for the government as nations such as Ethiopia begin to export more.
- (d) D is the correct answer. African states like Ethiopia tend to generate a lot of their income from the sale of commodities or primary goods.
- (e) Foreign direct investment is very important for developing countries. This is because the exports of foreign businesses located inside a developed country counts as exports for that country. The primary sector, particularly the oil and gas industry, continues to attract FDI to Africa. Figure 9 shows that FDI has increased very sharply over the time period. It also shows that developed countries attract more FDI nearly twice as much as developing nations. For example, in 2002 the stock of FDI in developed countries was \$4595 billion compared with \$2340 billion in developing countries. FDI is important for all countries however, it could be argued that it is more important to developing nations because without it they may struggle to begin their development.
- (f) At the end of 2008 and into 2009 there was a global recession. It is likely that the UK's current account deficit will fall. This is because when economic growth becomes negative, as it does in a recession, both imports and exports fall. Since the UK has nearly always imported more goods and services than it has exported, the recession might reduce imports more than exports. This should help to reduce the deficit. Figure 8 shows that the UK's exports did start to fall at the end of 2008 and 2009. This is after a lengthy period of continual growth. Also, unemployment in the UK almost doubled within six months of the beginning of the recession. This would tend to support the view that the demand for imported goods would fall.

Chapter 50

Getting started:

- (a) (i) Germany uses the euro. (ii) India uses the rupee.
- (b) Goods and services purchased from foreign firms have to be paid for in a different currency to that used at home. For example, when Sally and Peter travel to India they need to use rupees to fund their

purchases. This means that domestic currency has to be exchanged for foreign currency. Therefore it is necessary to know what the exchange rate is between two currencies.

(c) In the case of Enfield Systems the exchange rate was $\pounds 1 = \pounds 1.10$.

Question 1:

(a) The price in dollars is given by:

 $\pounds 3,600,000 \times \$1.5 = \$5,400,000$

(b) The sterling price of the German components is given by:

€2.5m ÷ €1.1 = £2,272,727

(c) The amount in Euros received by the Spanish supplier is given by:

£200,000 × €1.1 = €220,000

Question 2:

- (a) The equilibrium exchange rate is determined where the supply and demand for US dollars is the same. This is where $\epsilon 1 = \$0.75$.
- (b) The amount of US dollars an Italian shopper can buy is given by:

€3,000 × \$0.75 = \$2,250

Economics in practice – The exchange rate between the British pound and the Australian dollar

- (a) An exchange rate is the price of one currency in terms of another. It is the conversion rate when swapping one currency for another. In this case, the exchange rate between the British pound and the Australian dollar is £1 = AUS\$2. This means that one pound can be exchanged for two Australian dollars.
- (b) Like all prices, the price of a currency is determined by market forces. Currencies are bought and sold like commodities on foreign exchange markets. Banks and other financial institutions trade in these markets to obtain foreign currencies for their customers. The price of any currency is determined by the forces of supply and demand. Figure 5 shows the supply and demand for pounds. The price of sterling in this example is given in terms of the Australian dollar. The equilibrium exchange rate is where supply and demand for pounds is equal. At this point in the diagram, the price of £1 in Australian dollars is \$2, therefore the exchange rate is $\pounds 1 = AUS$ \$2. At this exchange rate Q1 pounds are traded on the market.
- (c) If there is an increase in demand for UK exports by Australian firms, there will be an increase in demand for pounds. This is because Australian firms have to pay for British goods with British currency. As a result they have to buy pounds with their Australian dollars. This increases the demand for pounds which is shown by a shift in the demand curve from D_1 to D_2 . This means that the market is now in equilibrium at a higher exchange rate. In the diagram shown right, the new exchange rate is £1 = AUS\$2.25. The quantity of pounds traded in the market has also increased from Q_1 to Q_2 .

The market for pounds



(d) If the UK interest rate falls, it will be less attractive for foreigners to deposit their savings in UK banks. As a result, they may withdraw funds and place them in a foreign bank. This means that savers will have to convert their sterling into another currency. This will increase the supply of pounds on the foreign exchange market. The increase in supply is shown by a shift in the supply curve from S_1 to S_2 in the diagram below. This causes the exchange rate to fall from £1 = AUS\$2 to £1 = AUS\$1.75. The quantity of pounds traded in the market has also increased from Q_1 to Q_2 .



(e) The correct answer is C. The amount of sterling which can be bought with AUS\$3,800 is given by $3,800 \div 2 = \pounds 1,900$.

Chapter 51

Getting started:

(a) (i) Since 2007, the euro has become much stronger in relation to the pound. At the beginning of 2007 one euro could buy about 66 pence. By the end of 2008 it could buy over 90 pence.

- ii) For quite a long period of time the exchange rate between the pound and the euro was fairly stable. This was between November 2004 and September 2007. It was also fairly stable for a short period between March 2008 and November 2008.
- (b) (i) For all of 2006 and most of 2007 the pound rose against the dollar from around \$1.75 to over \$2. However, at the end of 2007 and throughout 2008 it fell back again but more sharply. In 2009 the pound was worth less than \$1.50.
 - (ii) Right at the end of the time period, in 2009, the pound was worth just under \$1.50.
- (c) Firms involved in international trade would probably welcome stable exchange rates. Therefore fluctuating exchange rates would be bad. When rates are changing all the time it is difficult to make decisions about the future. For example, it is difficult to set the prices of goods to overseas buyers if the price keeps changing as a result of changes in the exchange rate.

Question 1:

- (a) (i) The amount in Euros paid by the French customer for the fuel systems is given by:
 £50 × €1.10 = €55.
 - (ii) The amount paid in pounds by Benfield Hodges for the steel is given by:

€4,400 ÷ €1.10 = £4,000.

 (b) (i) The amount in Euros paid by the French customer for the fuel systems is given by: £50 × €1.00 = €50.

The price has fallen from €55 to €50.

The amount paid in pounds by Benfield Hodges for the steel is given by:

€4,400 ÷ €1.00 = £4,400.

The price has gone up from £4,000 to £4,400.

(ii) The price of the fuel systems has fallen for the French customer. This means that demand for these exports is likely to rise in a year's time. However, the price of the imported steel for Benfield Hodges has increased. This means that demand is likely to fall in the future.

Question 2:

- (a) (i) The cost in pounds of the aviation fuel in 2009 is given by: $900,000 \div 1.50 = \pounds 600,000.$
 - (ii) The price in Euros of the return flight in 2009 is given by:
 £220 × €1.10 = €242
- (b) (i) The cost in pounds of the aviation fuel in 2010 is given by:
 - $900,000 \div 1.75 = £514,286.$
 - The cost in pounds of the aviation fuel has fallen from £600,000 to £514,286.
 - (ii) The price in Euros of the return flight in 2010 is given by:
 - £220 × €1.30 = €286

The euro price of the return flight from Madrid to London has increased from €242 to €286.

(c) A change in the exchange rate will affect the prices paid for imports and exports. As a result, there is also likely to be a change in demand. In this case, the exchange rate has risen – the pound is stronger

against the US dollar and the euro. As a result, the cost of the imported fuel has fallen and therefore demand is likely to rise. On the other hand, the price of flight tickets to Spanish travellers has increased which is likely to reduce demand.

Economics in practice – The effects of changing exchange rates in the UK:

- (a) The exchange rate is the price of one currency in terms of another. For example, in Figure 5 the price of £1 in 2009 is \$1.50 or ¥150. Like all prices they can change. This is because prices are determined by market forces and at any time supply and demand conditions can change. For example, if the UK government were to raise interest rates there is likely to be an increase in the demand for pounds as foreign savers take advantage by depositing their savings in UK banks. To do this they have to buy pounds. This increases demand and therefore raises the exchange rate.
- (b) The price paid in yen by the Japanese customer for the goods is given by:

 $\pounds 18,000 \times \$ 150 = \$ 2,700,000.$

- (c) C is the correct answer. When the exchange rate falls, exports will be cheaper so demand should rise provided demand is price elastic.
- (d) If Duberry's plc buys the machinery in 2009 the cost in pounds is given by:

 $€12m \div €1.10 = £10.9091m$

If Duberry's plc waits for a year before buying the machinery the cost in pounds will be:

 $\notin 12m \div \notin 1.00 = \pounds 12m$

Duberry's plc will benefit financially if they purchase the machinery in 2009. The exchange rate falls in 2010 which makes imports more expensive. The company would save over £1m if it buys the machinery in 2009.

(e) In 2010, the exchange rate between the pound and the US dollar is expected to increase – the pound will strengthen. This means that exports become more expensive. Therefore, Duberry's US customers will have to pay more for their confectionery.