

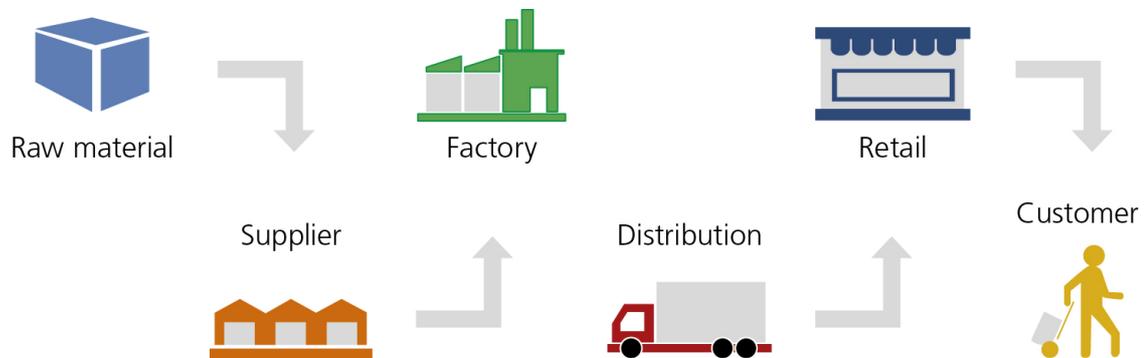
# Chapter 14: The international economy: globalisation and international trade

## Application of economics in the real world

### Application of economics in the real world 14.1: Economic nationalism and global production platforms

- 1 A supply chain is the network of all the individuals, organisations, resources, activities and technology involved in the creation and sale of a product, from the delivery of source materials from the supplier to the manufacturer, through to the product's eventual delivery to the end user.

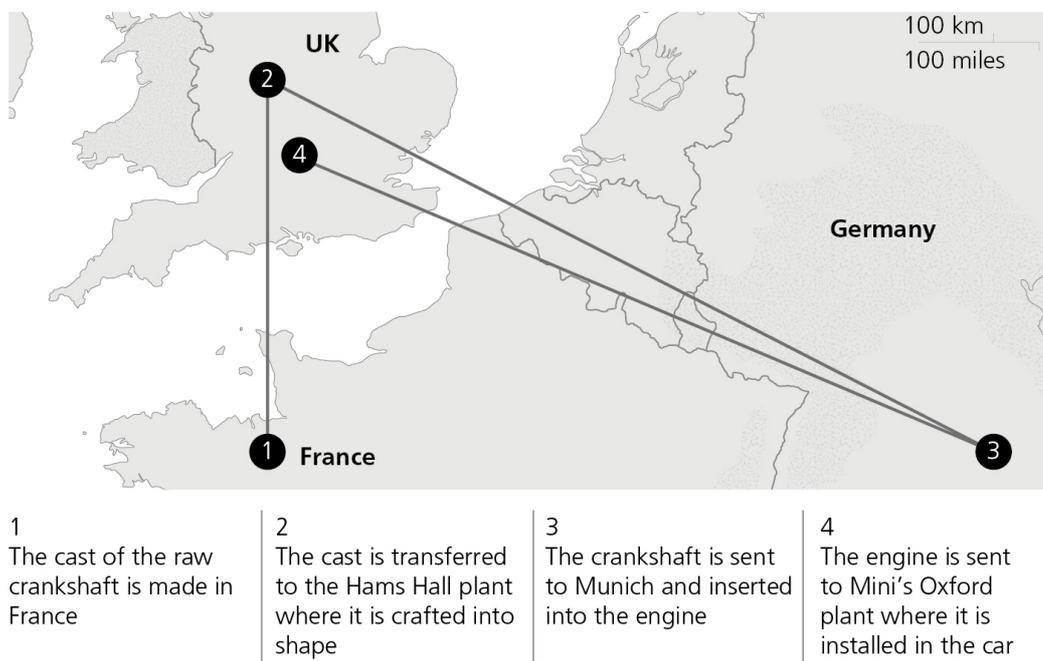
Figure AERW14.1 illustrates a supply chain for a manufactured good from the initial extraction of raw material from the earth's crust to the eventual selling of the finished good by a retail outlet to the final customer.



**Figure AERW14.1** Supply chain for a manufactured good

- 2 If a government wishes to protect domestic firms from foreign competition, it might use quotas and tariffs to try to achieve this objective. Protectionist policies involve import and export controls. A quota puts a maximum limit on imports, while a tariff or import duty raises the price of imports. Countries adopt protectionist policies for a number of reasons. These include to protect infant industries (recently established industries in developing countries) and to protect sunset industries (industries such as steel which are in decline in already developed countries). However, economists who believe in the virtues of free trade argue that, by raising prices and reducing trade, protectionism leads to an inefficient allocation of resources.

- 3 The flow chart in Figure AERW14.1 above is essentially linear since it assumes that eventual consumption of a good stems from the production of raw materials being fed into manufacturing processes and finally into consumption. But the production and consumption of real-world goods is not like this. Production takes place on a production platform, part of which is illustrated in Figure AERW14.2.



**Figure AERW14.2** Production platform for an automobile crankshaft

Production of a manufactured good such as an automobile involves the assembly of hundreds if not thousands of separate components into the eventual final car. According to Graham Ruddick and Philip Oltermann, writing in the *Guardian* on 3 March 2017, the story behind the crankshaft used in the BMW Mini, which crosses the Channel three times in a 2,000-mile journey before the finished car rolls off the production line, is as follows:

*A cast of the raw crankshaft — the part of the car that translates the movement of the pistons into the rotational motion required to move the vehicle — is made by a supplier based in France. From there it is shipped to BMW's Hams Hall plant in Warwickshire, where it is drilled and milled into shape. When that job is complete, each crankshaft is then sent back across the Channel to Munich, where it is inserted into the engine. From Munich, it is back to the Mini plant in Oxford, where the engine is then 'married' with the car. If the car is to be sold on the continent then the crankshaft, inside the finished motor, will cross the Channel for a fourth time. On average, just 41% of the parts used in a car assembled in the UK are actually produced in the country.*

This is the production platform for just one component in the finished car. Given that there are hundreds if not thousands of components in a modern automobile, the overall production platform is extremely complicated and for a 'British-made' car stretches across most of western Europe.

A modern multinational company such as BMW would incur excessively high costs of production if it attempted to manufacture all its components 'in-house'. Only a multinational company operating on a continent-wide if not a global production platform can benefit from average cost-cutting economies of scale which allow it to compete in markets for final products such as automobiles.

## Application of economics in the real world 14.2: Has globalisation given way to de-globalisation?

- 1 Globalisation is the name given to the increasing integration of the world's economies. Trade liberalisation, international capital and labour mobility, and the increased power of multinational corporations (MNCs) are important elements of globalisation.

In recent years, there has been an increase in support for economic nationalists who seek to reverse globalisation using protectionist policies. De-globalisation has seen MNCs close factories in less developed countries and relocate them in developed countries.

- 2 Possibly the main driver of globalisation in recent decades has been the growth of trade in goods and services between countries. International trade obviously involves cross-border trade. By contrast, trade within a country is internal trade: for example, in the UK, when Scotch whisky manufactured in Scotland is transported south to England to be sold in retail stores in London. Almost by definition, the growth in 'cross-border trade' promotes globalisation.
- 3 American firms such as Apple undertake most of their production in countries outside the USA, in China and in other southeast Asian countries such as Vietnam. They normally do this by signing contracts with local indigenous firms which become part of their supply chains before completed goods are sold in the USA and elsewhere.

The main effect of tariffs imposed by the USA on goods imported from China has been the diversion of production away from China to countries such as Vietnam. Writing in the *Wall Street Journal* on 14 July 2019, Austen Hufford and Bob Tita reported that:

*[US] companies that make Crocs shoes, Yeti beer coolers, Roomba vacuums and GoPro cameras are producing goods in other countries to avoid US tariffs of as much as 25% on some \$250 billion of imports from China. Apple Inc. is also considering shifting final assembly of some of its devices out of China to avoid US tariffs.*

*Furniture-maker Lovesac Co. is now making about 60% of its furniture in China, down from 75% at the start of 2019. 'We have been shifting production to Vietnam very aggressively,' said Shawn Nelson, chief executive of the Stamford, Conn., company. Mr Nelson said he plans to have no production in China by the end of next year.*

*Imports from China fell 12% in the year through May 2019, compared with a year earlier, according to the US Census Bureau, the biggest decline since the financial crisis a decade ago.*

*The biggest beneficiaries of that decline have been other countries in Asia where production costs are low, such as Vietnam, India, Taiwan and Malaysia. Many of those countries have recorded sharp increases in exports, although there have been allegations that some of the added traffic stemmed from goods made in China that were routed through those countries without significant alterations to avoid tariffs.*

- 4 Labour costs are much higher in the USA than in Mexico. This was the main reason why US companies such as Ford outsourced production to new factories in Mexico. Moving production back from Mexico to the USA could save on import tariffs, though this effect will be minimal because both Mexico and the USA have signed the North American Free Trade Agreement. However, higher US wage rates generally increase the costs of production borne by multinational companies operating inside the USA. This may be offset by building brand-new factories embodying the latest economies of scale and automated production, and locating these factories in states within the USA such as Alabama where labour costs are low by American standards.

## Application of economics in the real world 14.3: Paul Krugman and strategic trade theory

- 1 Comparative advantage is when a country produces a good or service for a lower opportunity cost than other countries. To explain comparative advantage, let us pretend that the world economy comprises just two countries, Oceana and Eurasia, each with just two units of resource (e.g. man-years of labour), which can produce only two commodities, guns and butter. Each unit of resource, or indeed a fraction of each unit (because it is assumed that resources or inputs are divisible), can be switched from one industry to another if so desired in each country. Finally, the production possibilities of 1 unit of resource are:

In Oceana: 6 guns or 2 tons of butter

In Eurasia: 1 gun or 4 tons of butter

In terms of technical efficiency, Oceana is ‘best at’ — or has an absolute advantage in — gun production, while Eurasia’s absolute advantage lies in butter production. In this particular example, Oceana also has a comparative advantage in guns and Eurasia has a comparative advantage in butter. Comparative advantage is measured in terms of opportunity cost, or what a country gives up when it increases the output of an industry by 1 unit.

Ask yourself how many guns Oceana would have to stop producing or give up in order to increase its butter output by 1 ton. The answer is 3 guns. But Eurasia would only have to give up a quarter of a gun to produce an extra ton of butter. Similarly, the opportunity cost of an extra gun in Eurasia is 4 tons of butter sacrificed, but the opportunity cost of an extra gun in Oceana is only a third of a ton of butter. This tells us that Oceana has a comparative advantage in gun production and Eurasia has a comparative advantage in butter production.

- 2 **Constant returns to scale:** these occur when an increase in inputs (e.g. capital and labour) causes the same proportional increase in output.

**Perfect competition:** Investopedia defines perfect competition as a theoretical market structure in which the following criteria are met: all firms sell an identical product (the product is a ‘commodity’ or ‘homogeneous’); all firms are price takers (they cannot influence the market price of their product); market share has no influence on prices; buyers have complete or ‘perfect’ information — in the past, present and future — about the product being sold and the prices charged by each firm; resources such as labour are perfectly mobile; firms can enter or exit the market without cost.

**Increasing returns:** increasing returns to scale occur when an increase in inputs (e.g. capital and labour) causes a more than proportional increase in output.

**Imperfect competition:** according to Investopedia, imperfect competition exists whenever a market, hypothetical or real, violates the abstract tenets of perfect competition. Since all real markets exist outside of the plane of the perfect competition model, each can be classified as imperfect. In the theory of the firm, the two types of imperfect competition you must understand are monopolistic competition (imperfect competition among the many) and oligopoly (imperfect competition among the few).

**Second best:** when a choice has to be made, provided they are rational and possess perfect information, people always choose what they think at the time is the best alternative, which means that the second-best or next-best alternative is rejected. In this situation, the opportunity cost of any decision or choice is the next-best alternative sacrificed or forgone.

However, when Richard Lipsey and Kelvin Lancaster formulated the theory of the second best in 1956, they argued that if the first-best outcome cannot be achieved, it does not necessarily follow that the second-best outcome should then be chosen.

- 3 One of the assumptions underlying the argument that two countries will benefit if they specialise and trade in accordance with the principle of comparative advantage is that there are constant returns to scale. In the example we used in Chapter 14 of the textbook (p. 522), 1 unit of resource is assumed to produce 4 guns or 2 tonnes of butter in Atlantis, whether it is the first unit of resource employed or the millionth unit. But in the real world, increasing or decreasing returns to scale are both possible and indeed likely. In a world of increasing returns to scale, the more a country specialises in an activity in which it initially has an absolute advantage, the more its productive efficiency and advantage increases. Countries that are 'best' to start with become even 'better'. Other countries are therefore at a disadvantage.

But if decreasing returns to scale occur, specialisation erodes efficiency and destroys a country's initial advantage. A good example occurs in agriculture, where over-specialisation can result in monoculture or the growing of a single cash crop for export. Monoculture often leads to soil erosion, vulnerability to pests and falling future agricultural yields.

The existence of imperfect competition may also weaken the case for unlimited free trade based on the principle of comparative advantage. Imperfect competition can mean that firms in different countries do not all enjoy the benefits of economies of scale: for example, when large oligopolistic firms in one country compete against small firms in competitive markets in other countries, the latter may need protection from larger international competitors until they become mature and stable, and are able to compete competitively. This view is strongly related to the infant industry argument.

- 4 The *Cambridge Dictionary* defines imperialism as a 'system, in which a country rules other countries, sometimes having used force to get power over them'. This definition harks back to the late nineteenth and early twentieth centuries when countries such as the UK and Germany used their military might to annex areas of Africa and to rule them directly from London and Berlin. These days 'first-world economic imperialism' is a narrower term centring on the power of MNCs in economically developed countries to strongly influence and sometimes to control the economies of countries in Africa, Asia and South America.

## Application of economics in the real world 14.4: The UK financial services industry

- 1 A first reason was the fact that some financial firms such as Northern Rock collapsed in the years after 2007, while others such as the Royal Bank of Scotland, which was saved by nationalisation, had to retrench their business models. A second reason stems from the fact that financial collapse was an important cause of the so-called 'Great Recession' in 2008 and 2009. A collapse of consumer and business confidence led to a significant fall in aggregate demand, which in turn reduced the demand for financial services. For example, mortgage demand partially dried up, which reduced the demand for mortgage loans.
- 2 An economy can become 'unbalanced' in a number of ways. For example, it may become unbalanced if it becomes too dependent on the continued growth of financial services and the City of London. This can lead to the manufacturing sector of the economy being starved of investment funds, which are directed solely into financial firms. This in turn can lead to geographical unbalance in which the south of the economy grows while the north languishes in relative poverty. A further type of unbalance is when consumption grows far faster than the other components of aggregate demand, especially investment and export demand.

Defenders of the role of the City of London and of the financial services industry, which is disproportionately located in the City, argue that it would be bad economics to reduce the size of the financial services industry simply to restore balance within the UK economy. They believe it would slow down the economy's rate of growth and harm the UK's most successful growth sector. Instead, where possible, the provision of financial services should be spread to the regions. Positive steps should also be taken to boost manufacturing in the regions through

improving regional rail services and infrastructure: for example, through ‘Northern Powerhouse’ investment. It is also desirable, but easier said than done, to try to replace consumption-led economic growth with investment-led growth and export-led growth.

- 3 Some service industries such as car repairing and hairdressing are in the so-called ‘sheltered economy’. By their nature they are not vulnerable to competition from imports. Unless you live in Dover or Folkestone, you are not going to get your car serviced in Calais simply because you believe French garages are cheaper than their UK equivalent. Likewise, unless you are extremely rich, you are not likely to fly to Paris to get your hair cut, simply because you believe that French hairdressers are better than those near where you live in the UK.

However, the same is not true for many financial services: for example, those provided by the investment banking industry. London-based investment banking firms, which these days are usually UK-based subsidiaries of much larger financial services companies with headquarters in New York City, are in direct competition with financial services companies in New York and Tokyo, as well as those within Europe located in Frankfurt and Paris. They are very much in the ‘unsheltered economy’.

- 4 The withdrawal agreement between the UK and the EU did not cover financial services. This might mean that the UK’s position as one of the world leaders in financial services may be at risk. Certainly the EU has become less important to the UK in the trade in financial services — but it is still a major customer for the UK. The trade surplus in financial services with the USA has increased at the same time.

Most of the large banks and accountancy firms advertise their advice and analysis of how Brexit is affecting or will affect financial services, both in the UK and in the EU. Google the websites of Deloitte, Clifford Chance, Allen and Overy, the *Financial Times* and others.

## End-of-chapter questions

- 1 It may well be true that, for a developed economy such as the UK, the advantages of globalisation exceed any disadvantages. However, for a small developing country such as Jamaica, it may well be not true.

Supporters of globalisation believe that the world as a whole is a net winner from the globalisation process. They argue that globalisation stems in part from the massive increase in world trade that has taken place since the Second World War. This itself has only been possible because of increased trade liberalisation and the reduction of import controls and other forms of protectionism. Free trade leads to a better allocation of resources and additional benefits have been derived from international competition and the spread of technology between countries, which makes most people better off.

However, these benefits are skewed towards the rich. And even in rich developed countries, as a result of their inability to compete and the deindustrialisation process, traditional manufacturing industries have been in terminal decline. Pockets of poverty have emerged which coexist alongside richer regions where new industries and services have emerged that can compete in the globalised world economy. The rustbelt economy of northeast USA is an example, living alongside the prosperous economy of coastal cities such as New York and Boston. So even if, for the country as a whole, the advantages of globalisation exceed the disadvantages, this is not true for the regions within the country which have been left behind.

- 2 A country has an absolute advantage if it can produce more of a good with a given amount of resources than another country. (Alternatively, we may say that it can produce the same amount of the product with fewer resources.)

Comparative advantage is measured in terms of opportunity cost. Comparing two countries, the country with the least opportunity cost when producing a good possesses a comparative advantage in that good, even if it has an absolute disadvantage in the good’s production.

- 3** Almost all economists agree that progress towards free trade has brought significant economic benefits both to the global economy and to the UK. Free trade generates wealth by allowing the free flow of goods across international borders, without taxes and other such barriers.

The principles of absolute and comparative advantage, on which the modern theory of free trade is based, teach nations to focus their time on making and selling goods in which they have an advantage over their rivals, for mutual benefit through free trade. Consumers should benefit from lower prices in all trading nations.

Classical economic theory does not, however, always work in practice, and as stated, the rules require all nations to accept the same rules of trade. When this does not happen, trade creates winners and losers.

There are many ways in which nations can distort the playing field. The most extreme might be the use of military intervention, although far more common are subsidies for particular industries, taxation, spending and the use of the legal system. Trump's import tariffs are the most high-profile recent example.

- 4** A government (or its central bank) can use three different policies to try to cure a persistent deficit caused by an overvalued exchange rate. These are the '3 Ds' of deflation, direct controls, and devaluation or currency depreciation.

A deflationary policy, which in this context refers to a reduction in the level of aggregate demand in the economy, reduces a current account deficit because for the most part it is an example of an expenditure-reducing policy. As aggregate demand falls, people's incomes fall and hence spending on imports is reduced. By contrast, import controls and devaluation are for the most part examples of expenditure-switching policies and affect the balance of payments by changing the relative price of home-produced and foreign goods.

Deflationary policy involves using contractionary monetary and/or fiscal policy to reduce the demand for imports. For example, if the marginal propensity to import in the economy is 0.4, reducing aggregate demand by £10 billion should cause spending on imports to fall by £4 billion.

Direct controls involve imposing quotas or even outright bans (embargoes) on imports. These directly cut or prevent expenditure on imports and, as a result, people switch their spending from foreign to home-produced goods.

If a country wishes to reduce a current account deficit, it must generally choose between deflation and devaluation, or currency depreciation. As with tariffs and export subsidies, a fall in the external value of the currency has a mainly expenditure-switching effect. By increasing the price of imports relative to the price of exports, a successful devaluation switches domestic demand away from imports and towards home-produced goods. Similarly, overseas demand for the country's exports increases in response to the fall in export prices.

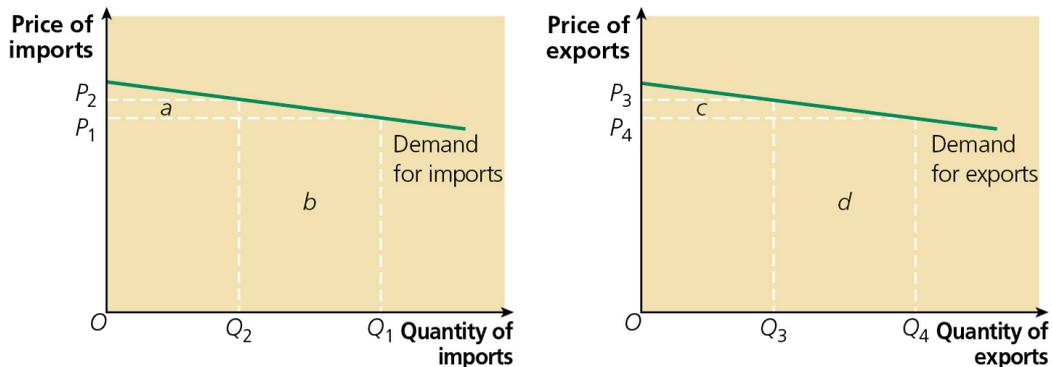
- 5** Deflation, devaluation and direct controls (the '3 Ds') may be effective short-term policies for reducing current account deficits. However, it is now increasingly recognised that long-term improvement in trade flows requires appropriate and successful supply-side policies and supply-side improvements undertaken by firms within the economy.

The ability of the UK economy to deliver sustained growth of exports and meet the challenge of imported goods and services depends on making UK exports quality competitive as well as price competitive. A low exchange rate, low interest rates at which British firms can borrow and low domestic inflation all contribute to increased export price competitiveness. However, price competitiveness on its own is not enough. UK goods and services must also be quality competitive. This involves good design and well-made products.

Improved quality competitiveness may only be achievable in the long run if helped by appropriate government supply-side policies together with supply-side improvements

undertaken by the private sector. Supply-side policies which promote greater investment in research and development and improved marketing strategies can have powerful long-term effects in improving quality competitiveness. Supply-side improvements, followed by an outward shift of the *LRAS* curve, provide the economy with increased capacity — enabling a reallocation of resources towards exporting. Successful supply-side policies can also improve exports and lead to import substitution, by increasing labour productivity, which in turn is likely to improve the price competitiveness of UK exports.

- 6 Figure A14.1 shows that when the demands for exports and imports are both highly price elastic, a devaluation can reduce a current account deficit. Following a devaluation, the domestic price of imports rises from  $P_1$  to  $P_2$ , while the overseas price of exports falls from  $P_3$  to  $P_4$ . As a result, domestic residents spend less on imported goods following an increase in their relative prices. At the same time, residents of overseas countries spend more on the country's exports, whose relative prices have fallen.



**Figure A14.1** Effect of devaluation in a freely floating exchange rate system

On the import side, area *b* in the diagram shows reduced expenditure on goods produced in other countries. Higher import prices mean that consumers switch to the now cheaper domestically produced substitutes. However, expenditure on the goods still being imported rises by area *a*. When demand for imports is price elastic — as in the diagram — total domestic expenditure on imports falls by area  $(b - a)$ . In contrast, when demand for exports is price elastic, expenditure on the country's exports increases by area  $(d - c)$ .

## Test yourself answers

### TEST YOURSELF 14.1

A contestable market is a market in which the potential exists for new firms to enter the market. Consider the UK market for TV sets. If this product market were completely protected by very high import duties or tariffs, it would not be very contestable. Domestically located TV-manufacturing firms would face the very limited competition offered by perhaps a handful of other UK-based TV manufacturers. In reality, however, the UK market is open to the international competition posed by Japanese, Korean and Chinese TV manufacturers. The market is highly contestable, and very few TV sets sold in the UK are produced by UK-based firms manufacturing the sets in the UK.

### TEST YOURSELF 14.2

An LEDC is a less economically developed country, such as Vietnam. Powerful US companies, including AstraZeneca, Coca-Cola, ExxonMobil, GE, Amazon Web Services (AWS), Microsoft, UPS and FedEx, all of which are members of the US-ASEAN Business Council (USABC), have years-long and successful operations in Vietnam. They are even planning to expand further. Investment by these companies creates jobs for Vietnamese workers, raises their living standards and contributes significantly to the growth of the Vietnam economy.

However, investment by a UK-based arms company in the military complex of Saudi Arabia to produce weapons eventually used to destroy the Yemen economy reduces Yemeni living standards. On balance, however, investment by an MNC in an LEDC generally does increase living standards in the recipient country.

### TEST YOURSELF 14.3

The data show that Oceania has an absolute advantage in the production of both guns and butter, but its comparative advantage is in butter production where it is twice as productively efficient. Whilst the first part of statement A is correct, the second part is incorrect, because comparative advantage can be identified so trade can take place. Statement B is also incorrect. While it is true in terms of absolute advantage, it is not in terms of comparative advantage. Statement C is correct. The opportunity cost of producing guns is lower in Eurasia — it gives up a third of unit of butter to produce each unit of guns. Oceania would give up a half a unit of butter to produce each unit of guns. Statement D is incorrect because Eurasia's comparative advantage is in guns rather than in butter.

### TEST YOURSELF 14.4

As page 527 in the textbook states, comparative advantage must not be confused with competitive advantage. A country, or a firm within a country, enjoys a competitive advantage when it produces better-quality goods at lower costs and better prices than its rivals. Competitive advantage is more similar to absolute advantage than to comparative advantage. A country has a comparative advantage in a product when its opportunity cost of production is lower than in another country.

### TEST YOURSELF 14.5

The correct answer is provided by statement B. In a free trade area (statement A), internal trade between member countries is tariff-free, but each country can set its own tariff against non-members. By contrast, in a customs union, all countries must impose a common external tariff. A preference area (statement C, also preferential trade agreement, PTA) is a trading bloc that gives preferential access to certain products from the participating countries. This is done by reducing tariffs but not by abolishing them completely. A monetary union (statement D) is a group of countries all using the same currency.

### TEST YOURSELF 14.6

The United States-Mexico-Canada Agreement is a free trade area but not an economic or monetary union. Not all members of the European Union are members of a monetary union. Armenia, Belarus, Kazakhstan, Kyrgyzstan and Russia formed the Eurasian Economic Union (EEU) with the aim of fostering closer economic cooperation among member states for the well-being of the people of the region. However, the degree of economic integration is not very great. This leaves the Eurozone as the most economically integrated of the four possible answers. The decision to form an economic and monetary union (EMU) was taken by the European Council in the Dutch city of Maastricht in December 1991. It was later enshrined in the Treaty on European Union (the Maastricht Treaty). Economic and monetary union takes the EU one step further in its process of economic integration, which started in 1957 when the EEC was founded. Economic integration brings the benefits of greater size, internal efficiency and robustness to the EU economy as a whole and to the economies of the individual member states. This, in turn, offers opportunities for economic stability, higher growth and more employment — outcomes of direct benefit to EU citizens.

In practical terms, EMU means:

- coordination of economic policy making between member states

- coordination of fiscal policies, notably through limits on government debt and deficit
- an independent monetary policy run by the European Central Bank (ECB)
- the single currency and the euro area
- unified rules and supervision of financial institutions within the euro area

### TEST YOURSELF 14.7

Possible answers A and B are completely irrelevant to this question, relating respectively to monetary policy and to fiscal policy. Statement C does relate to the current account of the balance of payments, but it is far too general. Statement D is therefore the correct answer, itemising the four parts of the current account, namely trade in goods, trade in services, primary income and secondary income. The balance of primary income is made up of inward primary income flowing into the economy, generated by UK-owned capital assets located overseas, and outward primary income flowing out of the economy, generated by overseas-owned capital assets located in the UK. The balance of secondary income is made up of current transfers (e.g. gifts of money, international aid and transfers between the UK and the EU) flowing into or out of the UK economy in a particular year.

### TEST YOURSELF 14.8

An appreciation in the value of sterling is likely to increase the overseas price of UK exports and reduce the UK prices of imports into the UK. As this will widen the size of the UK's current account deficit, this makes statement B the correct answer. Statement C is about the budget deficit and not the balance of payments deficit. While relating to the current account, both statements A and D are the opposite of what is the case.

### TEST YOURSELF 14.9

One possible reason why the country's trade deficit in goods is smaller than its current account deficit shown is that its balance of trade in services was also in deficit. Second and third reasons could be that the primary and secondary income flows were in deficit.

### TEST YOURSELF 14.10

Once again, these are four components of the current account of the balance of payments. The minus signs tell us that three of the four components are in deficit, and only the primary income balance is in surplus. The value of the balance of payments on current account in 2023 is thus:

- £700 million
- £200 million
- +£230 million
- £50 million
- £720 million