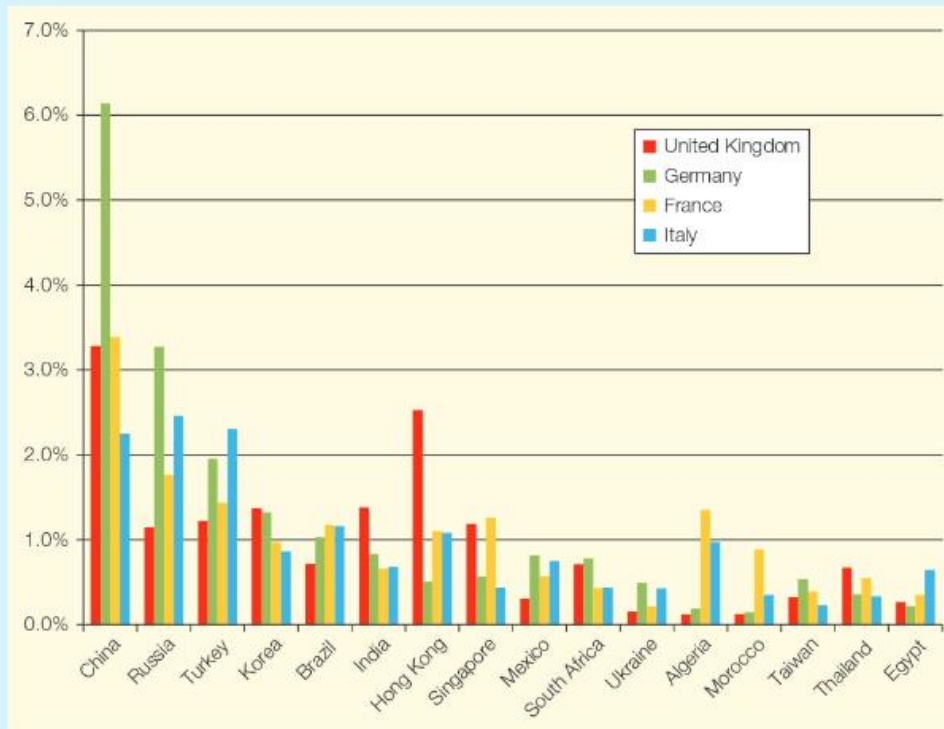


**Figure 5.1** EU exports to emerging economies (in per cent of total exports)



**Note:** Destination countries are in order of their share in EU exports. Data refer to 2013.

**Source:** Authors' creation using Eurostat data.

Kong and South Africa, where they can build on shared language and historical ties that date back to colonial times. French exports are particularly strong in the western part of the Mediterranean (Algeria and Morocco), whereas Italian businesses focus more on the eastern Mediterranean (Turkey and Egypt). East European EU members, like Poland and Lithuania, have strong trade ties with Russia, Ukraine and Belarus. Clearly geography and history still matter a lot in international trade!

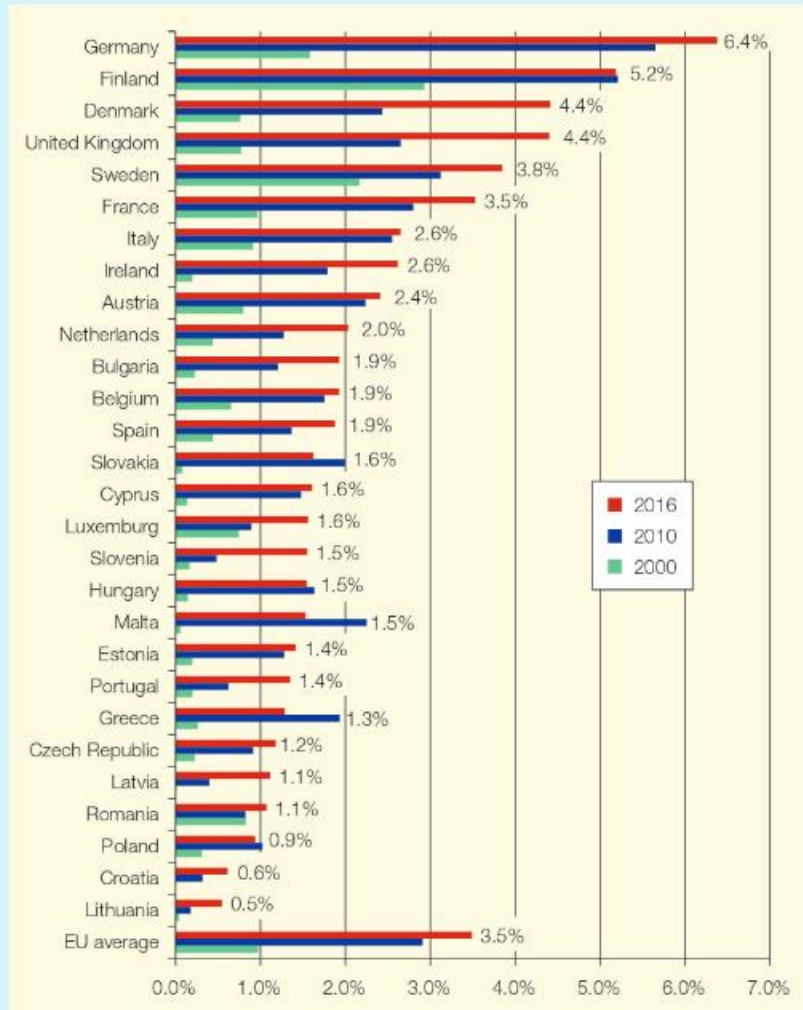
In contrast, China is a distant country, which did not enjoy a long continuous trade relationship with Europe. Yet its recent economic growth offers large trade opportunities. In only ten years, from 2005 to 2014, EU exports to China tripled(!) in volume, from €52 billion to €165 billion. Who has been taking advantage of the growth opportunities in China? The Chinese in fact hold strong views – or country-of-origin images – about some European countries. German products are believed to be of high quality and reliable, which explains why German products account

for a remarkable 45% of EU imports to China. French and Italian products are regarded as fashionable and luxurious; think of *L'Oreal* or *Gucci*. France and Italy thus account for 10% and 6% respectively. The second-largest volume of EU imports are from Britain, which has both high-tech brands like *Rolls-Royce* and fashionable brands like *Burberry*. The real European number 2, however, is not in the EU: Switzerland exports more than the UK or France, and its exports received another boost from a free-trade agreement with China in 2014.

Of course, in part, there are lots of German exports because Germany is big. To assert who is most savvy in the pursuit of the China market, we should look at how much China accounts for relative to all of a country's exports (Figure 5.2). In fact, German businesses are most China oriented; 6.4% of German exports go to China, which is almost twice the weighted average across all EU countries of 3.5%.

The Nordic countries and the UK have also been very active in the China market. In Finland, the rise and

**Figure 5.2** EU exports to China (in per cent of total exports)



**Note:** Data for Croatia 2000 and 2010 are not available.

**Source:** Authors' creation using Eurostat data.

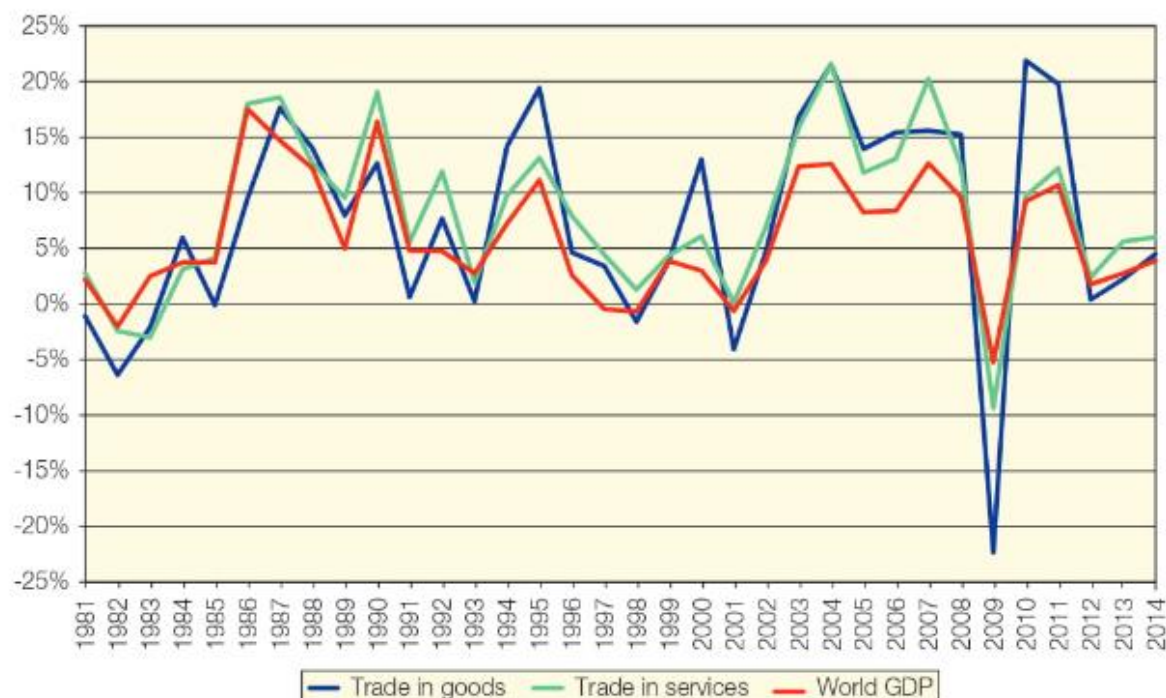
decline of *Nokia* is evidence of Finland's China trade, while Sweden and Denmark are fast catching up (Figure 5.2). On the other hand, Eastern and Southern European countries are relatively less directly active in China. Yet the data disguise an important indirect effect. Many cars and car components may be exported from Germany, but their value chain extends across the continent. Hence engines made in Hungary and assembled into cars in Germany count as Hungarian exports to Germany, and as German exports to the country of the final consumer. Some automotive suppliers in, for example, Slovakia may also directly export to factories of *VW* or *BMW* in China.



Why do China and Russia import products from Europe, even though most products are more expensive than those ‘made in China’? What are the underlying economic forces that make it beneficial for nations to trade – whether they are distant or nearby? International trade is the oldest and still the most important building block of international business. It is a major driving force of globalization and has been growing faster than GDP in recent decades. Figure 5.3 shows that world trade growth outpaces GDP growth. Trade in goods has grown on average by 7.2% per year since 1980, while trade in services has grown even faster, averaging 8.3%. During the same time, worldwide GDP grew annually by 6.0%. However, trade is more volatile than GDP: in the recessions of 1982, 1998 and 2001 trade in goods shrank; during the recession of 2008 it fell by as much as 22.3%.

Unsurprisingly, international trade is also a hot topic in politics, as the benefits of trade are often unevenly distributed. Debates on international trade tend to be very ferocious because so much is at stake. This chapter will help you to participate in such debates. We start by outlining the theoretical foundations of international trade. These theories provide a structured way of thinking and analyzing issues that are central to both businesses and government policy. We begin by outlining how the two core perspectives introduced in earlier chapters – namely, resource-based and institution-based views – can help us understand the crucial issue of why nations trade. The remainder of the chapter deals with (1) theories and (2) institutions shaping international trade. As before, debates and implications for action follow.

**Figure 5.3** Growth in world trade outpaces growth in world GDP



**Note:** Annual percentage growth; world trade estimated from sum of national export data.

**Source:** Authors' creation using data from WTO (WTO database, 2014 version); IMF (World Economic Outlook database, October 2014 version).

## WHY DO NATIONS TRADE?

Most nations actively participate in international trade, which consists of **exporting** (selling abroad) and **importing** (buying from abroad). Table 5.1 provides a snapshot of the top ten exporting and importing nations in terms of goods and services. In goods exports, Germany has for many years been the world champion, though China has taken the lead in recent years. In services, the US leads with the UK leapfrogging into second place, mainly due to its financial services. As importers, the USA, China and Germany lead both the goods and the services tables.

**Table 5.1** Leading trading nations

Top 10 exporters of goods		Value (€ billion)	World share (%)	Top 10 importers of goods		Value (€ billion)	World share (%)
1	China	1941	13.15	1	USA	2032	13.88
2	USA	1346	9.12	2	China	1433	9.78
3	Germany	1239	8.40	3	Germany	952	6.50
4	Japan	597	4.04	4	UK	574	3.92
5	Netherlands	527	3.57	5	Japan	548	3.74
6	Hong Kong, China	478	3.24	6	France	517	3.53
7	France	464	3.14	7	Hong Kong, China	494	3.37
8	Korea	458	3.11	8	Netherlands	454	3.10
9	Italy	427	2.89	9	Canada	376	2.57
10	UK	379	2.57	10	Korea	367	2.50
<b>World total</b>		<b>14 759</b>	<b>100</b>	<b>World total</b>		<b>14 643</b>	<b>100</b>

Top 10 exporters of services		Value (€ billion)	World share (%)	Top 10 importers of services		Value (€ billion)	World share (%)
1	USA	661	15.24	1	USA	435	10.27
2	UK	292	6.73	2	China	406	9.58
3	Germany	242	5.57	3	Germany	280	6.62
4	France	213	4.90	4	France	213	5.02
5	China	187	4.31	5	UK	176	4.14
6	Netherlands	160	3.69	6	Ireland	173	4.09
7	Japan	152	3.51	7	Japan	165	3.89
8	India	146	3.35	8	Netherlands	153	3.60
9	Singapore	135	3.11	9	Singapore	140	3.31
10	Ireland	132	3.04	10	India	120	2.83
<b>World total</b>		<b>4339</b>	<b>100</b>	<b>World total</b>		<b>4236</b>	<b>100</b>

**Source:** Authors' calculations using from World Trade Organization database, accessed January 2018. All data are for 2016. <http://stat.wto.org/Home/WSDBHome.aspx>.

Relative to domestic trade, international trade entails much greater complexities. So why do nations go through these troubles to trade internationally? They involve not just the exporter and importer but specialist intermediaries such as logistics firms and ports through which goods are shipped (In Focus 5.1), and despite the money these intermediaries make, the trade is profitable. Without getting into details, we can safely say that there must be economic gains from trade. More importantly, such gains must be shared by *both* sides, otherwise there would be no willing exporters and importers. In other words, international trade is a *win-win* deal. Empirical evidence suggests that openness to international trade is, on average, associated with lower unemployment and higher economic growth.<sup>1</sup> How are these gains from trade created? This chapter sheds some light on these questions.

## **Port of Rotterdam: gateway to the world**

The Netherlands has a long tradition as a trading nation dating back to the *Dutch East India Company* in the 17th century. The hub of modern trade is the Port of Rotterdam, Europe's largest. It stretches over 40 kilometres and covers 12 000 hectares of land. Every day, over one million tons of goods are loaded, unloaded and distributed in Rotterdam – more than twice the turnover of the next largest European ports, Antwerp and Hamburg. Worldwide, Rotterdam is the largest port outside of East Asia. Every year, 30 000 ocean-going ships call at the port, 7 million containers are transferred and 130 million cubic metres of crude oil and mineral oil products arrive to be refined and distributed throughout Europe. The transportation businesses in the port add €6.3 billion to Dutch GDP, while other industries, especially petroleum and chemical industries located in the vicinity, add another €6.6 billion. Over 90 000 people work in the port area, including 27 000 in road transport.

Seaports are key nodes of international trade, as 90% of world trade (by volume) is transported by ship. The Port of Rotterdam is the main hub for sea-bound transportation in and out of Europe. Containers arrive from Asia on mega-ships that are too large even for medium-sized ports such as Hamburg or Le Havre. Thus containers are transferred in Rotterdam to smaller ships sailing to ports along the Atlantic coast into the North and Baltic Seas, up the river Rhine and across to the UK. More than 500 liner services connect Rotterdam with over 1000 ports worldwide.

Huge investments have expanded the port, and more are planned for the future. The infrastructure is

built around the Nieuwe Waterweg (New Channel), which opened in 1870 and connects the city of Rotterdam directly to the North Sea. It has been continuously widened and deepened, while far out in the North Sea a man-made channel allows easy access even for the largest ships of the world. Maasvlakte 1, which contains the largest container terminals, was reclaimed from the estuary 30 years ago. A new expansion of the port, called Maasvlakte 2, is to extend the port further into the North Sea, creating 1000 hectares of industrial land directly on deep water by the year 2030.

The fastest growing businesses of the Port of Rotterdam, and of maritime transport worldwide, is container shipping. Containers are standardized and allow a much faster transfer over different modes of transport. In Rotterdam, over 100 mega-cranes work day and night to unload containers arriving from overseas and reload them on to regional container ships, inland boats, trains and trucks.

The Dutch government has invested heavily in transportation infrastructure to connect Rotterdam with its hinterland, including regional shipping lines, inland waterways (especially the Rhine connecting to Germany, France and Switzerland), oil pipelines, roads and railways – with strategically located trans-shipment points between different transport modes. Many goods from the German industrial heartlands of the Ruhr region are loaded on riverboats or direct trains in Duisburg and then shipped downstream to Rotterdam and from there out into the world.

Sources: (1) R. Wrights, 2007, Rotterdam struggles to contain its enthusiasm as demand surges ahead, *Financial Times*, December 5; (2) Port of Rotterdam, 2014, *Port Statistics*, mimeo; (3) [www.portofrotterdam.com](http://www.portofrotterdam.com) (accessed March 2015).

Before proceeding, it is important to clarify that ‘nations trade’ is a misleading statement. A more accurate expression would be ‘firms from different nations trade’.<sup>2</sup> Unless different governments directly buy and sell from each other (such as arms sales), the majority of trade is conducted by firms which pay little attention to country-level ramifications. For example, oil majors such as *Shell* and *BP* import oil to Europe (often via Rotterdam) and do not export much. They thus directly contribute to the **trade deficit** (a surplus of imports over exports) of countries like France and Spain, which is something their government may not like. However, in most countries, governments cannot tell firms, such as *Shell* or *BP*, what to do (and not do) unless firms engage in illegal activities. Therefore, we need to be aware that when we ask ‘Why do nations trade?’ we are really asking ‘Why do firms from different nations trade?’ When discussing imbalance of trade where Germany and China run a **trade surplus** (a surplus of exports over imports), we are really referring to thousands of firms buying from and selling to Germany and China, which also have thousands of firms buying from and selling to other countries. The aggregation of such buying (importing) and selling (exporting) by both sides leads to the country-level **balance of trade** – namely, whether a country has a trade surplus or deficit.

Having acknowledged the limitations of statements such as ‘nations trade’, we will still use them. This is not only because these expressions have been commonly used but also because they serve as a shorthand version of the more accurate but more cumbersome ones such as ‘firms from different nations trade’. This clarification does enable us to use the two *firm-level* perspectives introduced earlier – resource- and institution-based views – to shed light on why nations trade.

Recall from Chapter 4 that resources and capabilities determine the competitive advantage of a firm. Applied to international trade, this insight suggests that firms use their resources and capabilities to produce goods and services that have a competitive advantage in markets abroad, and hence they export. Firms in different countries have different resources and capabilities and thus export different products. Therefore, the exchange of goods through exports and imports is mutually beneficial. Theories of international trade explore in more detail why this is so.

Further, recall from Chapters 2 and 3 that numerous politically and culturally derived rules of the game, known as institutions, constrain individual and firm behaviour. In international trade, various regulations in the form of both tariffs and non-tariff barriers (NTBs) hamper trade around the world. On the other hand, we also see the rise of rules that facilitate trade, such as those promoted by the World Trade Organization (WTO) (see Chapter 9). Explanations of the actual flows of trade thus need to consider these institutions. The remainder of this chapter expands on these two perspectives.

## THEORIES OF INTERNATIONAL TRADE

Theories of international trade provide one of the oldest, richest and most influential bodies of economics. In this section, we briefly review major theories of international trade in the order in which they evolved: (1) mercantilism, (2) absolute advantage, (3) comparative advantage, (4) factor endowment theory, (5) product life cycle, (6) strategic trade and (7) national competitive advantage. The first four are often regarded as **classic trade theories**, and the last three are viewed as **modern trade theories**.

### trade deficit

An economic condition in which a nation imports more than it exports.

### trade surplus

An economic condition in which a nation exports more than it imports.

### balance of trade

The aggregation of importing and exporting that leads to the country-level trade surplus or deficit.

### classic trade theories

The major theories of international trade advanced before the mid-20th century: mercantilism, absolute advantage, comparative advantage and factor endowments.

### modern trade theories

The major theories of international trade advanced in the second half of the 20th century: product life cycle, strategic trade and national competitive advantage.

### LEARNING OBJECTIVE

- 2 Understand classic and modern theories of international trade

## Mercantilism

### theory of mercantilism

A theory that holds that the wealth of the world (measured in gold and silver) is fixed and that a nation that exports more and imports less would enjoy the net inflows of gold and silver and thus become richer.

In the 1600s and 1700s, international trade was widely regarded as a zero-sum game. Politicians like French statesman Jean-Baptiste Colbert believed in the **theory of mercantilism**, which suggests that the wealth of the world (measured in gold and silver at that time) was fixed and that a nation that exported more and imported less would enjoy the net inflows of gold and silver and thus become richer. On the other hand, a nation experiencing a trade deficit would see its gold and silver flowing out and, consequently, would become poorer. The implication? Exports are good; imports are bad.

Although mercantilism is largely discredited by scholars, it is not an extinct dinosaur. Very much alive, mercantilistic arguments are often used by politicians focusing singularly on the trade balance as a national performance indicator and thus arguing for governments to actively protect domestic industries from imports and vigorously promote exports.

## Absolute advantage

### free trade

Trade uninhibited by trade barriers.

The theory of absolute advantage, advocated by Adam Smith in *The Wealth of Nations* in 1776, opened the floodgates of the free trade movement that is still going on today. Smith argued that in the aggregate, it is the 'invisible hand' of markets, rather than governments, that should determine the scale and scope of economic activities. Thus the principles of a market economy (Chapter 2) should apply to international trade as they do to domestic trade. By trying to be self-sufficient and to (inefficiently) produce a wide range of goods, mercantilist policies *reduce* the wealth of a nation in the long run. Smith thus argued for **free trade**, which is the idea that free market forces should determine how much to trade with little (or no) government intervention.

### theory of absolute advantage

A theory that suggests that under free trade, each nation gains by specializing in economic activities in which it has absolute advantage.

### absolute advantage

The economic advantage one nation enjoys due to higher productivity in an economic activity.

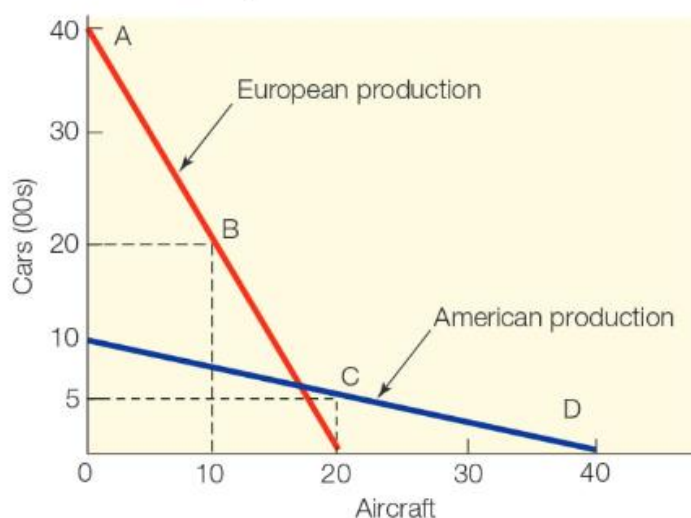
Specifically, Smith proposed a **theory of absolute advantage**: under free trade, each nation gains by specializing in economic activities in which the nation has absolute advantage. What is **absolute advantage**? It is the economic advantage one nation enjoys from higher productivity in an economic activity or product category than other nations. When two nations enjoy opposite absolute advantages for two product categories, the potential for trade is obvious. For example, Smith argued that because of better soil, water and weather, Portugal enjoyed an absolute advantage over England in the production of grapes and wines. Likewise, England had an absolute advantage over Portugal in the production of sheep and wool. England could grow grapes at a greater cost and with much lower quality. Smith suggested that England should specialize in sheep and wool, Portugal should specialize in grapes and wines, and they should trade with each other. Smith's greatest insights were in the argument that (1) by specializing in the production of goods for which each has an absolute advantage, both can produce more and (2) by trading, both can benefit more. In other words, international trade is not a zero-sum game as suggested by mercantilism. It is a *win-win* game.

How can this be? Let us use an example with hypothetical numbers (Figure 5.4 and Table 5.2). For the sake of simplicity, assume there are only two nations in the world: Europe and America. They produce only two products: cars and aircraft. Production of cars or aircraft, naturally, requires resources such as labour, land and technology. Assume that both are equally endowed with 800 units of resources. Between the two activities, America has an absolute advantage in the production of aircraft – it takes 20 resources to produce an aircraft (for which Europe needs 40 resources) and the total American capacity is 40 aircraft if it does not produce cars (point D in Figure 5.4). Europe has an absolute advantage in the production



of cars – it takes 20 resources to produce 100 cars (for which America needs 80 resources) and the total European capacity is 4000 cars if it does not make aircraft (point A). It is important to note that America can build cars and Europe can build aircraft, albeit inefficiently. But because both nations need cars and aircraft, without trade, they produce both by spending half of their resources on each – Europe at point B (2000 cars and 10 aircraft) and America at point C (500 cars and 20 aircraft). Interestingly, if they stay at points A and D, respectively, and trade one-quarter of their output with each other (that is, 1000 European cars with 10 American aircraft), these two countries, and by implication the global economy, both produce more and consume more (Table 5.2). In other words, there are *net* gains from trade based on absolute advantage.

**Figure 5.4** Absolute advantage



**Table 5.2** Absolute advantage

Each country has 800 resources		Europe	America	Total
	Resources for 100 cars	20	80	
	Resources for 1 aircraft	40	20	
<b>1</b> Production and consumption with no specialization and without trade (each country devotes half of its resources to each activity)	cars	2000	500	2500
	aircraft	10	20	30
<b>2</b> Production with complete specialization at points A and D respectively	cars	4000	0	4000
	aircraft	0	40	40
<b>3</b> Consumption after each country trades one-quarter of its output	cars	3000	1000	4000
	aircraft	10	30	40
<b>4</b> Gains from trade	cars	+1000	+500	+1500
	aircraft	0	+10	+10

## Comparative advantage

Absolute advantage is a rare occurrence. However, what happens when one nation has absolute advantages in all product categories? Is it still worthwhile to trade? Consider a hypothetical example of two countries at different stages of economic development, which we call 'Europe' and 'India'. What if India were absolutely inferior to Europe in the production of both cars and aircraft? Obviously, the theory of absolute advantage runs into a dead end.

In response, British economist David Ricardo developed a **theory of comparative advantage** in 1817. This theory suggests that even if Europe has an absolute advantage over India in both cars and aircraft, as long as India is not equally less efficient in the production of both goods, India can still choose to specialize in the production of one good (such as cars) in which it has **comparative advantage** – defined as the relative (not absolute) advantage in one economic activity that one country enjoys in comparison with another country.<sup>3</sup> Figure 5.5 and Table 5.3 show that India's comparative advantage lies in its *relatively less inefficient* production of cars: if India devotes all resources to cars it can produce 1000 units, which is four-fifths of the 1250 cars Europe can produce. However, at a maximum, India can produce only 20 aircraft, which is merely one-half of the 40 aircraft Europe can make. By letting India specialize in the production of cars and importing some cars from India, Europe is able to leverage its strengths by devoting its resources to aircraft. For example, if (1) Europe devotes four-fifths of its resources to aircraft and one-fifth to cars (point C of Figure 5.5), (2) India concentrates 100% of its resources on cars (point E) and (3) they trade with each other, both countries produce and consume more than they would if they devote half of their resources to each activity (see Table 5.3).

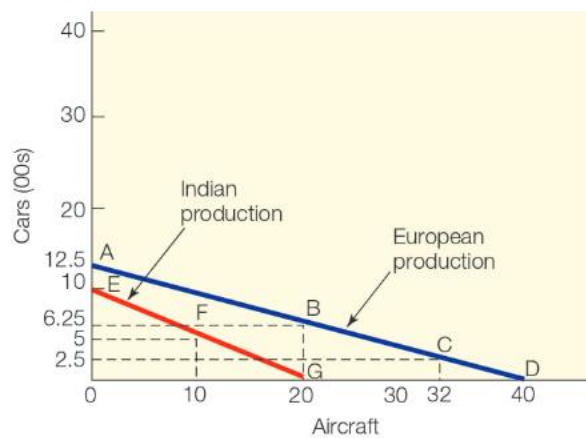
### theory of comparative advantage

A theory that focuses on the relative (not absolute) advantage in one economic activity that one nation enjoys in comparison with other nations.

### comparative advantage

Relative (not absolute) advantage in one economic activity that one nation enjoys in comparison with other nations.

**Figure 5.5** Comparative advantage



Again, there are net gains from trade, this time from comparative advantage. One crucial concept here is **opportunity cost** – given the alternatives (opportunities), this is the cost of pursuing one activity at the expense of another activity. For Europe, the opportunity cost of concentrating on cars at point A in Figure 5.5 is tremendous relative to producing aircraft at point D, because it is only 25% more productive in cars than India, but is 100% more productive in aircraft.

The theory of comparative advantage may seem counterintuitive. However, this theory is far more realistic and useful to explain the patterns of trade in the real

### opportunity cost

Given the alternatives (opportunities), the cost of pursuing one activity at the expense of another activity.

world. It may be easy to identify an absolute advantage in a highly simplified, two-country world, as in Figure 5.4, but how can each nation decide what to specialize in when there are more than 200 nations in the world? It is simply too complex to ascertain that one nation is absolutely better than all others in one activity. The theory of comparative advantage suggests that even without an absolute advantage, Europe can still profitably specialize in aircraft as long as it is *relatively* more efficient than others. The message of comparative advantage is that it may pay to import products from countries that are absolutely inferior in the production of these products, just as it may pay for you to delegate some of your work (see In Focus 5.2 overleaf).

**Table 5.3** Comparative advantage

Each country has 800 resources		India	Europe	Total
	Resources for 100 cars	80	64	
	Resources for 1 aircraft	40	20	
<b>1</b> Production and consumption with no specialization and without trade (each country devotes half of its resources to each activity), at points F and B respectively	cars	500	625	1125
	aircraft	10	20	30
<b>2</b> Production with specialization (India devotes all resources to cars and Europe devotes one-fifth of its resources to cars and four-fifths to aircraft), at points E and C respectively	cars	1000	250	1250
	aircraft	0	32	32
<b>3</b> Consumption after India trades 400 cars for 11 European aircraft	cars	600	650	1250
	aircraft	11	21	32
<b>4</b> Gains from trade	cars	+100	+25	125
	aircraft	+1	+1	2

The concept of comparative advantage is probably the most important theoretical concept in international business. Thus, even though it is somewhat complicated, make sure you understand it before you proceed. Comparative advantage is especially powerful to explain international trade between advanced and emerging economies, which has been growing fast in recent years (as illustrated in the opening case).<sup>4</sup> It can also be used to explain the specialization of countries in activities within global value chains and in service industries.<sup>5</sup>