Chapter 2
Choices and trade-offs in the market

Production possibilities frontiers and real-world trade-offs

Learning objective
2.1 Use a production possibility frontier to analyse opportunity costs and trade-offs.

Review questions

1.1 What do economists mean by *scarcity*? Can you think of anything that is not scarce according to the economic definition?

Solution: Scarcity is the situation in which wants exceed the limited resources available to fulfil those wants. There are some things that are available in such abundance that they exceed our wants. For example, for most people there is enough oxygen in the atmosphere that the amount they want to inhale equals or exceeds the amount available—so oxygen isn't scarce for them. Another example might be labour in a country with an undereducated population, but a need for highly skilled workers in the workforce. This would result in a scarcity of labour.

1.2 What is a *production possibility frontier*? How can we show economic efficiency on a production possibility frontier? How can we show inefficiency? What causes a production possibility frontier to shift outward?

Solution: The production possibility frontier (*PPF*) is a curve showing all the attainable combinations of two products that may be produced with available resources and existing technology. Combinations of goods that are on the frontier are efficient because all available resources are being fully used, and the fewest possible resources are being used to produce a given amount of output. Points inside the production possibility frontier are inefficient because the maximum output is not being obtained from the available resources. A production possibility frontier will shift outward (to the right) if more resources become available for making the products or if technology improves so that firms can produce more output with the same amount of inputs.

1.3 What is meant by *increasing marginal opportunity costs*? What are the implications of this idea for the shape of the production possibility frontier?

Solution: Increasing marginal opportunity costs means that as more and more of a product is made, the opportunity cost of making each additional unit rises. It occurs because the first units of a good are produced with the resources that are best suited for making it, but as more and more of the good is produced, resources must be used that are better suited for producing something else. Increasing marginal opportunity costs imply that the production possibilities frontier is bowed out—that its slope gets steeper and steeper as you move down the production possibility frontier.

Problems and applications

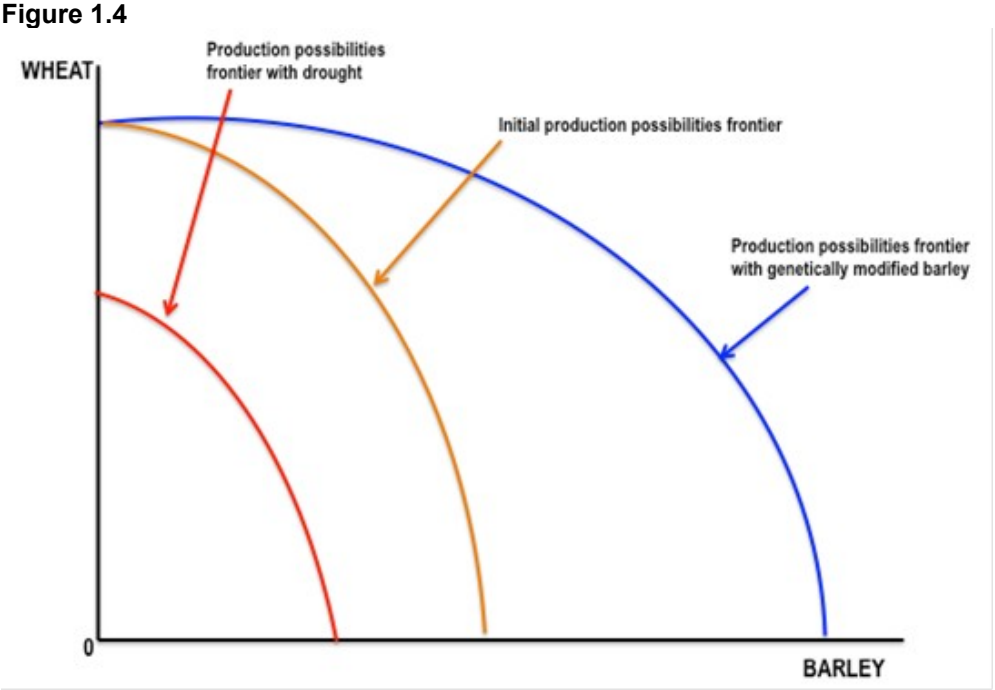
1.4 Draw a production possibility frontier showing the trade-off between the production of wheat and the production of barley.

a Show the effect that a prolonged drought would have on the initial production possibility frontier.

b Suppose genetic modification makes barley resistant to insects, allowing yields to double. Show the effect of this technological change on the initial production possibility frontier.

Solution:

Figure 1.4



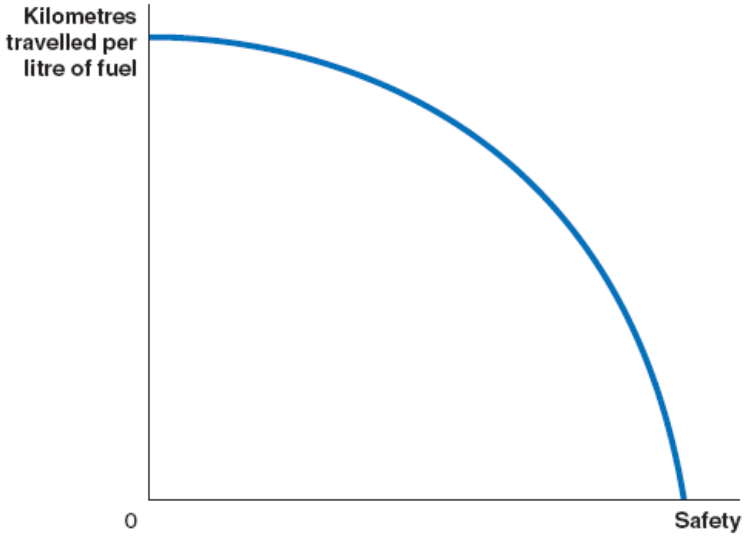
a The production possibility frontiers in Figure 1.4 are bowed to the right from the origin because of increasing marginal opportunity costs. The drought causes the production possibility frontier to shift to the left as shown in Figure 1.4 above.

b The genetic modifications would shift to the right the maximum barley production (doubling it), but not the maximum wheat production.

1.5 One of the trade-offs faced by BMW is between safety and fuel economy. For example, adding steel to a car makes it safer but also heavier, which results in higher fuel consumption. Draw a hypothetical production possibility frontier facing BMW engineers that shows this trade-off.

Solution:

Figure 1.5



Increased safety that adds weight to the motor vehicle will increase fuel consumption, reducing the kilometres travelled per litre of fuel, as shown in Figure 1.5 above. Trade-offs can be between physical goods, such as wheat and barley in problem 1.4, or between less tangible things like fuel consumption and safety.

1.6 Suppose you win free tickets to a movie plus all you can eat at the snack bar for free. Would there be a cost to you to attend this movie? Explain.

Solution: You would still have an opportunity cost represented by the next best use of your time. For example, attending the movie may reduce the time you spend studying for your economics test, thereby reducing your score. The lower score on your test would be an opportunity cost of attending the movie.

1.7 Suppose we can divide all the goods produced by an economy into two types: consumption goods and capital goods. Capital goods, such as machinery, equipment and computers, are goods used to produce other goods.

a Use a production possibility frontier graph to illustrate the trade-off to an economy between producing consumption goods and producing capital goods. Briefly explain why the curve is likely to be concave.

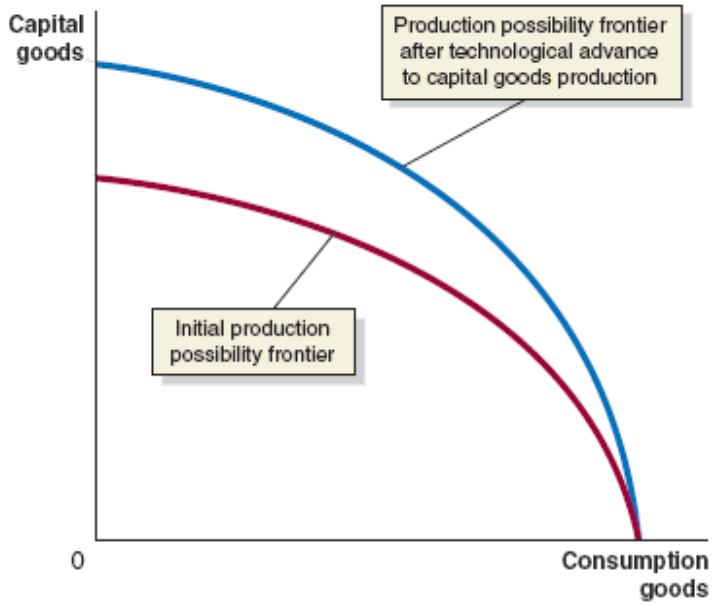
b Suppose that a technological advance occurs that affects the production of capital goods but not consumption goods. Show the effect on the production possibility frontier.

c Suppose that country *A* and country *B* currently have identical production possibility frontiers, but that country *A* devotes only 5 per cent of its resources to producing capital goods over each of the next 10 years, whereas country *B* devotes 30 per cent. Which country is likely to experience more rapid economic growth in the future? Illustrate using a production possibility frontier graph. Your graph should include production possibility frontiers for country *A* today and in 10 years, and for country *B* today and in 10 years.

Solution:

a The production possibility frontier will be concave as shown in Figure 1.7a below because some economic inputs are likely to be more productive when making capital goods, and others are likely to be more productive when making consumption goods.

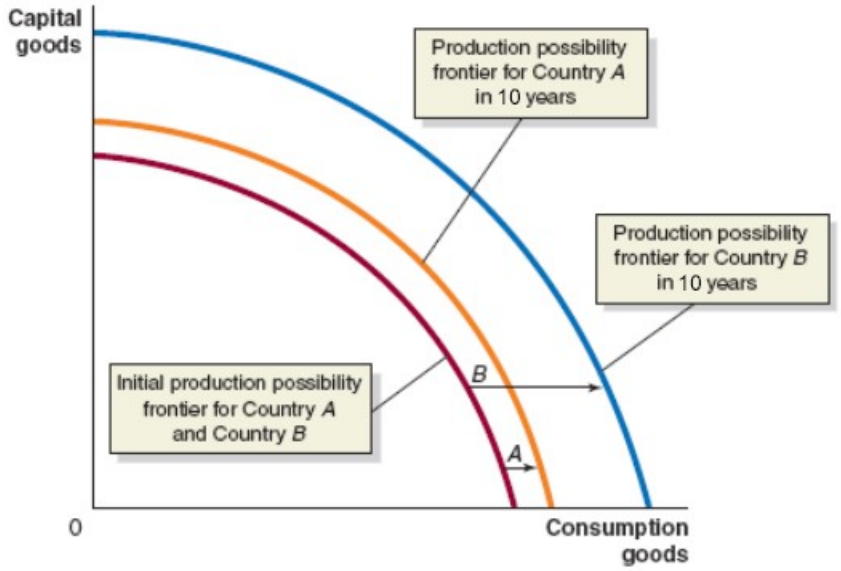
Figure 1.7a



b The technological advance in the production of capital goods will pivot the production possibility frontier outwards from the vertical axis as shown in Figure 1.7a.

c Because it will have more machinery and equipment, the production possibility frontier for country *B* will shift out further than that of country *A*, as shown in Figure 1.7b. The more capital goods the country produces, the greater the capacity of the country to produce goods and services in the future. Therefore, country *B* is likely to experience more rapid growth.

Figure 1.7b



1.8 Use the following production possibility frontier for a country to answer the questions.

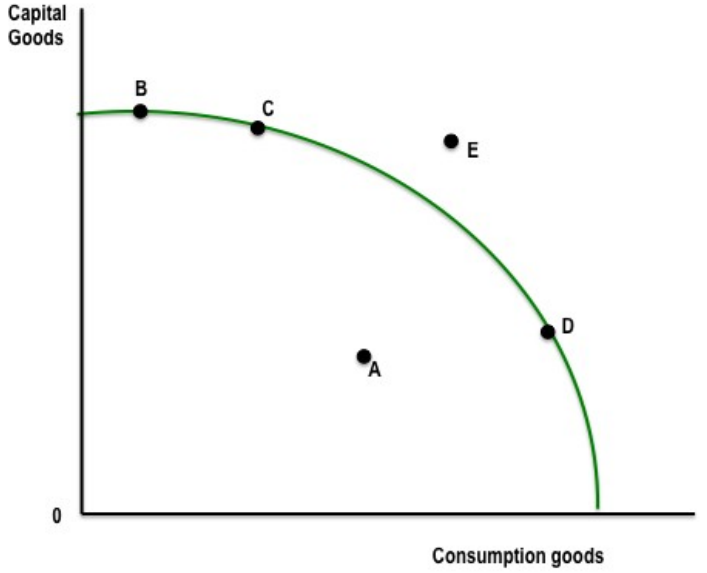
a Which point(s) are unattainable? Briefly explain why.

b Which point(s) are efficient? Briefly explain why.

c Which point(s) are inefficient? Briefly explain why.

d At which point is the country's future growth rate likely to be the highest? Briefly explain why.

Figure 1.8



Solution:

a Point E is outside the production possibility frontier, so it is unattainable.

b Points B, C and D are on the production possibility frontier, so they are efficient.

c Point A is inside the production possibility frontier, so it is inefficient, as the maximum output possible with the given resources is not being achieved.

d At point B, the country is devoting the most resources to producing capital goods, so production at this point is most likely to lead to the highest growth rate in the future.

1.9 You have exams in economics and statistics coming up and five hours available for studying. The table shows the trade-offs you face in allocating the time you will spend in studying each subject.

HOURS SPENT STUDYING			EXAM SCORE	
CHOICE	ECONOMICS	STATISTICS	ECONOMICS	STATISTICS
A	5	0	95	70
B	4	1	93	78
C	3	2	90	84
D	2	3	86	88
E	1	4	81	90
F	0	5	75	91

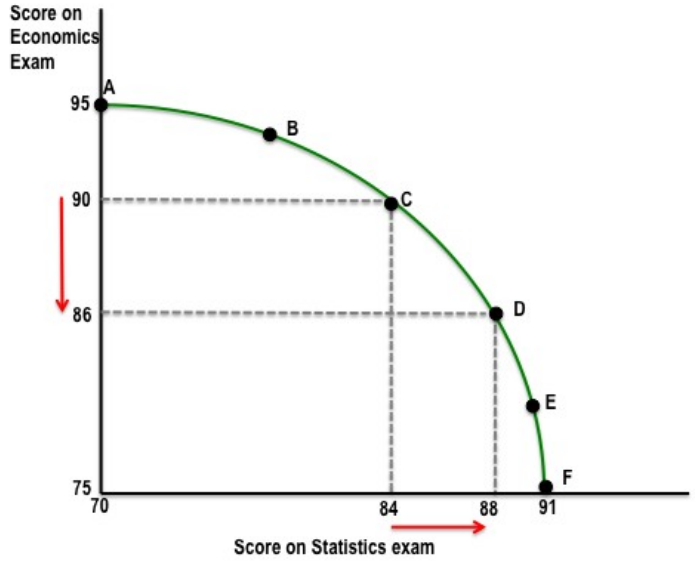
a Use the data in the table to draw a production possibility frontier graph. Label your vertical axis 'Score on economics exam' and label your horizontal axis 'Score on statistics exam'. Make sure you label the values where your production possibility frontier intersects the vertical and horizontal axes.

b Label the points representing choice *C* and choice *D*. If you are at choice *C,* what is your opportunity cost of increasing your statistics score?

c Under what circumstances would *A* be a sensible choice?

Solution:

Figure 1.9



a If you spend all five hours studying for your economics exam, you will score a 95 on the exam; therefore, your production possibility frontier will intersect the vertical axis at 95. If you devote all five hours studying for your statistics exam, you will score a 91 on the exam; therefore, your production possibility frontier will intersect the horizontal axis at 91.

b The opportunity cost of increasing your statistics score by 4 points in moving from choice *C* to choice *D* is the 4-point decline in your economics score. Therefore, the opportunity cost of increasing your statistics score by four points is the four point decline in your economics score.

c Choice A might be sensible if the marginal benefits of doing well on the statistics exam are low relative to the marginal benefits from doing well on the economics exam – for example, the statistics exam is only a small portion of your grade, but the economics exam is a large portion of your grade; or if you are majoring in economics and don't care much about statistics.

1.10 Suppose the federal government is trying to decide whether to spend more on research to find a cure for heart disease. As one of the government's economic advisors, you are asked to prepare a report discussing the relevant factors that should be considered. Use the concepts of opportunity cost and trade-offs to discuss some of the main issues you would include in your report.

Solution: If the federal government has a fixed budget for medical research, then the opportunity cost of funding more research on heart disease is the reduction in funding for research on other diseases. The decision should be made at the margin: to maximise the benefits from government spending on medical research, the last dollar devoted to research on heart disease should result in the same marginal benefit—less disease and fewer deaths—as the last dollar spent on research for other diseases. If the additional funding for research on heart disease comes at the expense of other non-medical research expenditures, then the opportunity cost will be different, but a similar analysis should be conducted.

1.11 Cost-effective analysis looks at the various options that could be used to achieve a goal, with the aim of determining the least-cost strategy. Some individuals oppose cost-effectiveness analysis, arguing that you can't put a price on health or life. Are health and life priceless? Are there any decisions you make during your everyday life that indicated whether you consider health and life to be priceless?

Solution: Taken literally, 'priceless' implies that there is no limit to the price that you would pay; however, with scarce resources, choices do need to be made with regard to the 'price' we are willing or able to pay for various health services. For example, taking the position that you cannot put a price on life, many people who have seriously ill family members would likely support medical decisions that would extend the lives of their loved ones, even if that extension is for a short period of time. Because resources are scarce, however, resources devoted to marginally extending the lives of the very sick are not available for improving other health care outcomes, such as by funding preventive care that, in the long run, may result in people living healthier and longer lives. Nor would these resources be available for use in medical research.

1.12 Suppose that the federal government is deciding which of one out of two different cancer treatments it will fund: Treatment *A*, which will prolong the average lifespan of patients receiving the treatment by 2 years and will cost $750 000 per patient treated; and Treatment *B*, which will prolong the average lifespan of patients receiving the treatment by 1½ years and

will cost $25 000 per patient treated. What factors should the federal government take into account in making its decision?

Solution: The decision should be made at the margin: to maximise the benefits from government spending on cancer treatment, the last dollar devoted to cancer treatment should result in the same marginal benefit – less disease and fewer deaths – as the last dollar spent on treatment for other diseases. In this case Treatment *B* is preferred as, from a purely economic perspective, the marginal cost of prolonging the lifespan of a cancer patient by an extra six months is too high ($725 000) and exceeds the marginal benefit of the extra life expectancy. One also has to consider the opportunity cost of the $725 000 in funding that could have been utilised for medical treatment in other areas. If the additional funding for treatment of cancer comes at the expense of other non-medical expenditures, then the opportunity cost will change, but a similar analysis should be conducted.

1.13 During his 2007 election campaign, the soon-to-be prime minister of Australia, Kevin Rudd (now former Prime Minister), stated that climate change was:
... the greatest moral, economic and environmental challenge of our generation.[1]
In 2009 he stated that only 'political cowards' argue that a country shouldn't act on climate change until other countries do. However, in 2010 he announced he would delay the government's legislation on major environmental policy until at least 2013, when other countries decide what they will do.
A director within former President Obama's government in the United States, and former secretary of the treasury in the Clinton government, Lawrence Summers, has been quoted as giving the following moral defence of the economic approach to climate change:
I don't think there is anything immoral about seeking to achieve environment benefits at the lowest possible costs.[2]
Given that debate on climate change is often argued on moral grounds, would it be more moral to reduce pollution without worrying about the cost or by taking the cost into account? Explain.

Solution: It would be more moral to take the cost of reducing pollution into account as that has the capacity to make the most people better off. While policies designed to reduce carbon emissions and other forms of pollution are ultimately beneficial for the greater society, there are considerable explicit and implicit costs related to the implementation of such policies. For example, the loss of business and profitability suffered by business enterprise due to compliance with emissions legislation; the possible loss of employment and exodus of industries to destinations with more relaxed emissions policies; the reduced real income of households made to pay higher rates and utilities. As such, a robust solution to the issue is unlikely until climate change policies are designed to reconcile the costs and benefits of reducing pollution and, consistent with economic theory, this decision needs to be made at the margin.

1.14 In *The Wonderful Wizard of Oz* and his other books about the Land of Oz, L. Frank Baum observed that if people's wants were modest enough most goods would not be scarce. According to Baum, this was the case in Oz:

There were no poor people in the Land of Oz, because there was no such thing as money. Each person was given freely by his neighbors whatever he required for his use, which is as much as anyone may reasonably desire. Some tilled the lands and raised great crops of grain, which was divided equally among the whole population, so that all had enough. There were many tailors and dressmakers and shoemakers and the like, who made things that any who desired them might wear. Likewise there were jewelers who made ornaments which

pleased and beautified the people, and these ornaments also were free to those who asked for them. Each man and woman, no matter what he or she produced for the good of the community, was supplied by the neighbors with food and clothing and a house and furniture and ornaments and games. If by chance the supply ever ran short, more was taken from the great storehouses of the Ruler, which were afterward filled up again when there was more of any article than people needed…
You will know, by what I have told you here that the Land of Oz was a remarkable country. I do not suppose such an arrangement would be practical with us.[3]
Do you agree with Baum that the economic system in Oz wouldn't work in modern developed economies? Briefly explain why or why not.

Solution: Economic systems that do not allow people to keep most of the output they produce do not provide much incentive for people to work hard. Unfortunately, experience has shown that people are more self-interested and less altruistic than would be necessary for the system used in Oz to work in the real world.

Comparative advantage and trade

Learning objective

2.2 Understand comparative advantage and explain how it is the basis for trade.

Review questions

2.1 What is *absolute advantage*? What is *comparative advantage*? Is it possible for a country to have a comparative advantage in producing a good without also having an absolute advantage? Briefly explain.

Solution: Absolute advantage is the ability to produce more of a good or service than competitors using the same amount of resources. Comparative advantage is the ability to produce a good or service at a lower opportunity cost than competitors. It is possible to have a comparative advantage in producing a good even if someone else has an absolute advantage in producing that good (and every other good). Unless the two producers have exactly the same opportunity costs of producing two goods—the same trade-off between the two goods—one producer will have a comparative advantage in making one of the goods and the other producer will have a comparative advantage in making the other good.

2.2 What is the basis for trade? What advantages are there to specialisation?

Solution: The basis for trade is comparative advantage. If each party specialises in making the product for which it has the comparative advantage, they can arrange a trade that makes both of them better off. Each party will be able to obtain the product made by its trading partner at a lower opportunity cost than without trade.

Problems and applications

2.3 **[Related to Don't let this happen to you]** Using the same amount of resources, Australia and New Zealand can both produce apples and oranges as shown in the following table, measured in thousands of tonnes.

AUSTRALIA		NEW ZEALAND	
APPLES	ORANGES	APPLES	ORANGES
12	0	6	0
3	3	3	3
0	4	0	6

a Who has a comparative advantage in producing apples? Who has a comparative advantage in producing oranges? Explain your reasoning.

b Does either country have an absolute advantage in producing both goods? Explain.

c Suppose that both countries are currently producing 3000 tonnes of apples and 3000 tonnes of oranges. Show that both can be better off if they specialise in producing one good and then engage in trade.

Solution:

a New Zealand has the comparative advantage in producing oranges. New Zealand's opportunity cost of producing 1000 tonnes of oranges is giving up 1000 tonnes of apples. Whereas for Australia, the opportunity cost of producing 1000 tonnes of oranges is giving up 3000 tonnes of apples. Australia has the comparative advantage in producing apples. In Australia, the opportunity cost of producing 1000 tonnes of apples is giving up only 1000/3 of a tonne of oranges, whereas for New Zealand the opportunity cost is giving up 1000 tonnes of oranges to produce 1000 tonnes of apples.

b Neither country has an absolute advantage in making both goods. Australia has the absolute advantage in producing apples, but New Zealand has the absolute advantage in producing oranges.

c If both countries specialise in the good in which they have a comparative advantage and then trade with the other, they can both be better off. Let's use the case in which each trades half of what it makes for half of what the other makes. Australia will specialise by producing 12 000 tonnes of apples and New Zealand will specialise by producing 6000 tonnes of oranges. Since each gets half of the other's production, they both end up with 6000 tonnes of apples and 3000 tonnes of oranges. This means they are better off than before trading, since they end up with the same amount of oranges, but twice as many apples. Others trades will make them better off as well.

2.4 **[Related to Solved problem 2.1]** Suppose Iran and Iraq both produce oil and olive oil. The table shows combinations of both goods that each country can produce in a day, measured in thousands of barrels.

IRAN		IRAQ	
OIL	OLIVE OIL	OIL	OLIVE OIL
0	8	0	4
2	6	1	3
4	4	2	2
6	2	3	1
8	0	4	0

a Who has the comparative advantage in producing oil? Explain.
b Can these two countries gain from trading oil and olive oil? Explain.

Solution:

a When Iraq produces one more barrel of olive oil, it produces one barrel less of crude oil. When Iran produces one more barrel of olive oil, it produces one less barrel of crude oil. Therefore, neither country has a comparative advantage in either good. In both countries, the opportunity cost of one barrel of crude oil is one barrel of olive oil. Comparative advantage arises only if someone has a lower opportunity cost, but these two countries have the same opportunity cost.

b No, the countries can't gain from trade. Trading across the border would result in the same trade-offs that can be made within each country.

2.5 **[Related to Solved problem 2.1]** Suppose that France and Germany both produce schnitzel and wine. The following table shows combinations of the goods that each country can produce in a day.

FRANCE		GERMANY	
WINE (BOTTLES)	SCHNITZEL (kg)	WINE (BOTTLES)	SCHNITZEL (kg)
0	8	0	15
1	6	1	12
2	4	2	9
3	2	3	6
4	0	4	3
		5	0

a Who has a comparative advantage in producing wine? Who has a comparative advantage in producing schnitzel?

b Suppose that France is currently producing one bottle of wine and 6 kg of schnitzel and Germany is currently producing three bottles of wine and 6 kg of schnitzel. Demonstrate that France and Germany can both be better off if they specialise in producing only one good and then engage in trade.

Solution:

a France has the comparative advantage in making wine. When France produces 1 more bottle of wine, it produces 2 fewer kilograms of schnitzel. When Germany produces 1 more bottle of wine, it produces 3 fewer kilograms of schnitzel. Therefore, France's opportunity cost of producing wine—2 kg of schnitzel—is less than Germany's—3 kg of schnitzel. When Germany produces 1 more kilogram of schnitzel, it produces 0.33 fewer bottles of wine. When France produces 1 more kilogram of schnitzel, it produces 0.50 fewer bottles of wine. Therefore, Germany's opportunity cost of producing schnitzel—0.33 bottles of wine—is less than that of France—0.50 bottles of wine. We can conclude that France has the comparative advantage in making wine and that Germany has the comparative advantage in making schnitzel.

b We know that France should specialise where it has a comparative advantage and Germany should specialise where it has a comparative advantage. If both countries specialise, France will make 4 bottles of wine and 0 kg of schnitzel, and Germany will make 0 bottles of wine and 15 kg of schnitzel. After both countries specialise, France could then trade 3 bottles of wine to Germany in exchange for 7 kg of schnitzel. France will have the same amount of wine as they initially had, but 1 more kilogram of schnitzel. Germany will have 3 bottles of wine and 8 kg of schnitzel—that is, the same amount of wine, but 2 more kilograms of schnitzel. Other mutually beneficial trades are possible as well.

2.6 Can an individual or a country produce beyond its production possibility frontier? Can an individual or a country consume beyond its production possibility frontier? Explain.

Solution: An individual or a country cannot produce beyond its production possibility frontier. The production possibility frontier shows the most that an individual or country can produce for a given amount of resources and technology. Without trade, an individual or country cannot consume beyond its production possibility frontier, but with specialisation and trade an individual or country can consume beyond its production possibility frontier. In Table 2.2, both you and your neighbour were able to consume beyond your production possibility frontiers, and in Solved Problem 2.1, both Australia and the New Zealand were able to consume beyond their production possibility frontiers.

2.7 If country *A* can produce twice as much coffee as country *B*, using the same amount of resources, explain how country *B* could have the comparative advantage in producing coffee.

Solution: Country *B* could have the comparative advantage in producing coffee if country *A* has an even larger absolute advantage relative to country *B* at producing another product. For example, if country *A* can produce four times more cashews than country *B* can using the same resources, then country *B* will have a comparative advantage in producing coffee.

2.8 Is specialisation and trade between individuals and countries more about having a job or about obtaining a higher standard of living? Individually, if you go from a situation of not trading with others (you produce everything yourself) to a situation of trading with others, do you still have a job? Does your standard of living increase? Likewise, if a country goes from not trading with other countries to trading with other countries, does it still have jobs? Does its standard of living increase?

Solution: Specialisation and trade are about standard of living, not jobs. In both cases, individuals and countries have jobs. You have a job if you do not trade with others and produce

everything yourself, and you have a job if you specialise and trade with others. But your standard of living will be higher if you specialise and trade. A country will have jobs if it does not trade with other countries, and it will have jobs if it specialises and trades with other countries, but its standard of living will be higher if it specialises and trades with other countries.

2.9 In the early colonial days of Australia, the population was spread thinly over a large area and transportation costs between the colonies (states) were very high because it was difficult to transport products by road for more than short distances. As a result, most of the population very rarely bought or sold anything from another state. Explain why the incomes of people were likely to rise as transportation costs fell.

Solution: Falling transportation costs allowed people to trade more easily and to specialise on the basis of comparative advantage. If people were able to specialise, they could be more productive and, in turn, earn more income.

2.10 During the Global Financial Crisis, which began in late 2007, some countries, including the United States and some countries in the European Union, passed legislation that encouraged or required the reduction of imported goods in some industries. Do you think that this was good policy? Explain.

Solution: Reducing free trade due to the imposition of trade barriers results in a loss of economic efficiency, higher prices for consumers, higher prices for inputs for other producers, fewer choices for domestic consumers, and it also causes trade frictions between trading partners. In the long run, these policies can cause trade distortions in the domestic and international markets. Better policies to manage international exposure and maintain competitiveness would be to ensure a free trading and competitive national currency and open dialogue with trade partners.

The market system

Learning objective

2.3 Explain the basic idea of how a market system works.

Review questions

3.1 What are the two main categories of participants in markets? Which participants are of greatest importance in determining what goods and services are produced?

Solution: The two main categories of market participants are households and firms. Households as consumers are of greatest importance in determining what goods and services are produced. Firms make a profit only when they produce goods and services valued by consumers. Therefore, only the goods and services that consumers are willing and able to purchase are produced.

3.2 What is a *free market*? In what ways does a free market economy differ from a centrally planned economy?

Solution: A free market is one with few government restrictions on how goods or services can be produced or sold, or on how factors of production can be employed. In a free market economy, buyers and sellers in the marketplace make economic decisions. In a centrally planned economy, the government—rather than households and firms—makes almost all the economic decisions. Free market economies have a much better track record of providing people with rising standards of living.

3.3 What is an *entrepreneur*? Why do entrepreneurs play a key role in a market system?

Solution: An entrepreneur operates a business. Entrepreneurs play a key role in the economy by bringing together the factors of production—labour, capital, and natural resources—to produce goods and services for sale. Entrepreneurs decide what to produce and how to produce it. They put their own funds or borrowed funds at risk when they start a business.

3.4 Under what circumstances are firms likely to produce more of a good or service? Under what circumstances are firms likely to produce less of a good or service?

Solution: Firms are likely to produce more of a good or service if consumers want more of it. As consumer demand rises, price will rise, which will lead firms to produce more. If demand falls, price will fall, which will lead firms to cut back on production.

Problems and applications

3.5 Identify whether each of the following transactions will take place in the factor market or in the product market, and whether households or firms are supplying the good or service, or demanding the good or service.

a George buys a Tesla SUV.
b Tesla increases employment at its California plant.
c George works 20 hours per week at McDonald's.
d George sells land he owns to McDonald's so that it can build a new restaurant.

Solution:

a A car purchase takes place in the product market. The household (George) demands the good and the firm (Tesla) supplies the good.
b The labour market is a factor market. Households supply the labour and the firm demands the labour.
c This is a factor market. The household (George) supplies the factor of production (labour), while the firm (McDonald's) demands it.
d The land market is a factor market. The household supplies the factor of production and the firm demands it.

3.6 In *The Wealth of Nations* Adam Smith wrote the following (Book I, Chapter II):
It is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner, but from their regard to their own interest.

a Briefly discuss what he meant by this.
b Explain what Adam Smith meant when he referred to the 'invisible hand' of the market.

Solution:

a The invisible hand was a metaphor used by Adam Smith to explain that people acting in their own self-interest may actually promote the interest of society as a whole. In pursuing their self-interest, business people end up producing the goods and services most desired by consumers.

b The invisible hand is the basic market mechanism. Understanding it is fundamental to all economic analysis.

3.7 Evaluate the following argument: 'Adam Smith's analysis is based on a fundamental flaw: he assumes that people are motivated by self-interest. But this isn't true. I'm not selfish, and most people I know aren't selfish.'

Solution: Adam Smith realised – as economists today realise – that people's motives can be complex. But in analysing people in the act of buying and selling, economists have concluded that, in most instances, the motivation of financial reward provides the best explanation for the actions people take. Moreover, being self-interested – looking out for your own wellbeing and happiness – and being selfish – caring only about yourself – are not exactly the same things. Many successful business people are, in fact, generous: donating to charity, volunteering for activities, and otherwise acting in a generous way. This is not inconsistent with making business decisions that maximise profits for their companies.

3.8 Do you agree that self-interest is an 'ignoble human trait'? What incentives does a market system provide to encourage self-interest?

Solution: Whether self-interest is an 'ignoble human trait' is a matter of opinion. There are certainly more noble traits than self-interest but, without at least some self-interest, a person wouldn't survive. A market system encourages self-interest in the sense that it paradoxically allows people to enrich themselves by fulfilling the needs of others; that is, by producing goods and services that fulfil the wants of consumers.

The legal basis of a successful market system

Learning objective

2.4 Understand why property rights are necessary for a well-functioning market.

Review questions

4.1 What are *private property rights*? What role do they play in the working of a market system?

Solution: Private property rights are the rights individuals or firms have to the exclusive use of their property, including the right to buy or sell it. If individuals and firms believe that property rights are insecure, they will be unwilling to produce goods or services or pay others to produce goods or services.

4.2 Why are independent courts important for a well-functioning economy?

Solution: The enforcement of property rights and contracts is vital for the functioning of the economy. Independent courts are crucial because property rights and contracts will only be

enforced if judges make impartial decisions based on the law, rather than partial decisions in favour of powerful or politically connected individuals.

Problems and applications

4.3 The International Property Rights Index (IPRI) is an annual ranking of the strength of physical and intellectual property rights across 129 countries, representing 98.7 per cent of the world's GDP and 93.6 per cent of the world's population. It is produced by the Property Rights Alliance, who argue that:
Countries that institute and protect a system of property rights experience significant economic growth and prosperity compared to countries that fail to do so...the connection between economic growth and property rights is understood now more than ever…[4]
How would the creation of property rights be likely to affect the economic opportunities available to people in those countries ranking lowest in property rights protection?

Solution: Having secure property rights would enable resource owners to use their resources in more efficient ways, because they would spend less time on activities such as guarding their property. Owners would be able to make improvements to their property without fear that someone would seize the property. They would be more likely to be able to use their property as collateral for a loan. If individuals and firms believe that property rights are insecure, they will be reluctant to risk their wealth by opening up businesses.

4.4 There have been a large number of complaints directed at YouTube by major television companies regarding uploaded sports and TV clips. Do you think copyright holders suffer significant financial damage from having their material posted to YouTube? Is there any way copyright holders might benefit from having their material posted, without approval or compensation, on sites such as YouTube?

Solution: The purpose of copyright law is to encourage the development of software, books, music and other products by assuring the author or artist will receive a financial reward for his or her time, effort and talent. If putting materials on YouTube reduces this financial reward to the point where the products will not be made, then it is important to enforce property rights and demand payment for the use of the material. However, it is probably time to change the mechanism of payments so that material can be easily used and re-used, thereby expanding artists' creativity and encouraging cultural development. Newly released films may suffer from lower cinema attendance if they are easily available online, leading to significant financial damage to copyright holders. However, it is also possible that some copyright holders could benefit from having their material posted online. For example, old broadcast material becoming popular online (maybe even viral) without expenditure on marketing and advertising.

Endnotes

1 van Onselen, Peter (2010), 'Politics trumps a moral challenge', The Australian, 29 April 2010, News Limited, at <www.theaustralian.com.au/news>, viewed 19 May 2010.

2 Wessel, David (2002) 'Precepts from Professor Summers', Wall Street Journal, 17 October.

3 L. Frank Baum, The Wonderful Wizard of Oz, pp. 30–31. First edition published in 1910.

4 Property Rights Alliance (2015), “Introduction by Hernando De Soto” to the 2015 International Property Rights Index Executive Summary, at www.internationalpropertyrightsindex.org, viewed 14 February 206.