

Chapter 1 The economic problem and opportunity cost

Answers to Knowledge checks

- 1.1** There are some key ‘needs’ that we can all relate to — such as, food, water and shelter. Our ‘wants’ may vary — I like to eat fresh mangoes and would like to go to the opera more often, but these are clearly not essential for my existence. Your preferences for your ‘wants’ are no doubt different!
- 1.2** This is a **normative** statement — the clue is in the words ‘ought to’, which indicates that the statement is an expression of opinion, not fact. In other words, it is a value judgement.
- 1.3** The government undertakes expenditure in a variety of ways, through its provision of health and education services, law and order, national defence, road-building, upgrading the rail network and providing administrative support for parliament etc. It also makes transfer payments such as social security benefits for the vulnerable.
- 1.4** Examples of labour, capital, enterprise and land are (respectively) a bus driver, a bus, a self-employed web designer and a plot of land on which an office has been built.
- 1.5** The opportunity cost of a project such as building a new school hall is seen in terms of the alternative uses to which the funds could be put. This might include a range of different alternatives, such as improving the quality of school meals, upgrading the computer network and many other things that I’m sure you have identified.
- 1.6** Efficient points are those that are located on the *PPC*, namely, *A*, *B* and *C*. This does not mean that all are equally desirable.
- 1.7** A forklift truck used in the production process is a **capital** good.
- 1.8** This will lead to an outward shift of the *PPC*.

Answers to Exercises and Case studies

Exercise 1.1

The question of rational choice is important in economics. When economic agents take decisions with a clear objective in mind, it becomes possible for us to explore how they are likely to behave. However, it is also important to be aware of situations in which they may not appear to act rationally.

In the case of consumers, the issue is whether they will always set out to maximise their utility. You will be able to think of situations in which this may not happen. In your own day-to-day life, there may be things that you choose to do, even if they don’t necessarily maximise your utility — for example, you may give to charity.

Firms do not always set out to maximise profits but adopt a variety of strategies that seem to contradict rational behaviour. We will be exploring some of these aspects of firms’ behaviour later in the course.

As far as government is concerned, it is hard to see whether it always acts rationally, partly because it has such a variety of different objectives that it is committed to achieving. These may not always be mutually consistent.

Exercise 1.2

- a** Timber is a natural resource and therefore it is part of the factor land.
- b** The services of a window cleaner are an example of a human resource (labour).

- c A combine harvester is an example of capital.
- d A computer programmer who sets up a company to market her software is an example of enterprise.
- e A computer is capital.

Exercise 1.3

If English was Andrew's next-best choice of subject, then the opportunity cost of choosing French is that he is then unable to study English.

Exercise 1.4

- a This is point C, where Amy picks no coconuts.
- b Point E is beyond the production possibility curve (PPC), so cannot be reached.
- c An example of such a point is B. Of course there are many other examples at points along the PPC.
- d This is point A, where Amy ignores the fish.
- e In this situation Amy spends only part of her time fishing and gathering coconuts, and therefore ends up at a point within her PPC, such as at D.

Case study 1.1

Plantains and tobacco

- a The opportunity cost of a decision is defined as the value of the next-best alternative that could have been chosen. In Jacob's case, the decision is to produce more tobacco. He can only do this by producing fewer plantains, so the opportunity cost is the plantains forgone in switching the land to producing tobacco.
- b Figure A1.1 shows a PPC for Jacob's choice between plantains and tobacco. Notice that it is drawn as a curve rather than a straight line to reflect the fact that some of the land may be more suitable for one of the crops, so the opportunity cost of tobacco in terms of plantains changes as more land is used for tobacco production.

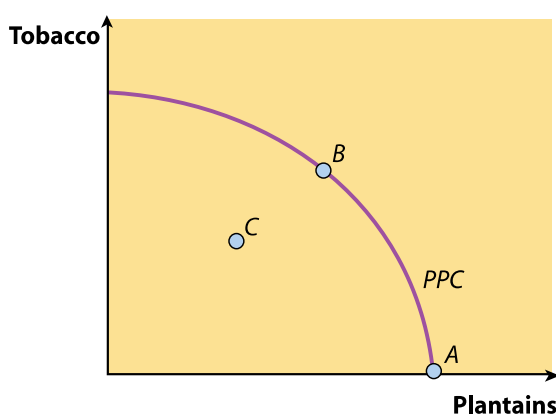


Figure A1.1 Plantains and tobacco

- c i See point A on Figure A1.1.
- ii Any point such as B that lies somewhere on the PPC shows a situation in which Jacob uses some of his land for growing tobacco, and the rest for plantains.
- iii If Jacob does not use all of his land, then he would be operating at a point somewhere within the PPC, for example at C.

- d** The *PPC* itself shows the possible combinations of plantains and tobacco that Jacob could choose to produce if he uses his resources efficiently. If he chooses a point inside the *PPC*, he would be underusing some resources. However, he would not be able to choose a point that was outside the *PPC*. If producing efficiently, he needs to be aware of the opportunity cost of producing the crops. If he wants to grow more of one, he must produce less of the other.

Answers to end-of-chapter questions

A Multiple-choice questions

- 1** d. Unlimited wants in the face of limited resources
2 b. Unemployment in the UK has increased
3 d. Labour, capital, enterprise, land

B Stimulus response question

4 a

Correctly labelled axis	1 mark
Correctly drawn <i>PPF</i>	1 mark
Correctly labelled points A–E	1 mark

b 25 bananas = 50 cereal bars

50 cereal bars/25 bananas = 2 cereal bars

c Reasons for a shift in the production possibility curve may include the following:

- The group might increase their budget to buy stock
- The group might get a discount on crisps and/or sweets (or the price may fall)

C Essay question

5

AO1 Knowledge	3 marks
AO2 Application	4 marks
AO3 Analysis	6 marks
AO4 Evaluation	7 marks

Knowledge (3 marks) is likely to include:

- Rationality
- Choices
- Opportunity cost

Application (4 marks) is likely to include:

- Choices about other subjects
- Choices about staying at school/college or working/taking an apprenticeship etc.
- Other uses of time

Analysis (6 marks) is likely to include:

Analysis that taking A Level Economics will be a rational choice, for example:

- The financial benefits of taking A Level Economics, such as the potential to earn high wages in later life
- The lesser benefits of taking the subjects on offer

- The belief that taking A Levels may lead to better jobs/better life in the future
- Comparisons with other possible qualifications, such as apprenticeships
- Parental influence to take A Level Economics

Evaluation (7 marks) is likely to include:

Evaluation that taking A Level Economics may not have been a rational choice, for example:

- The choice was impulsive, not a rational, thought-out choice
- There was no/little actual choice
- Did not do enough research into the choices

A judgement of the extent to which a rational choice was made and justification of this judgement.