



# Chapter 1:

# Basic economic ideas and

# resource allocation

## AS Level

12

## Learning objectives

**On completion of this chapter you should know:**

- what is meant by the fundamental economic problem of limited resources and unlimited wants
- what is meant by scarcity and the inevitability of choices that have to be made by individuals, firms and governments
- what is meant by opportunity cost
- why the basic questions of what, how and for whom production takes place have to be addressed in all economies
- the meaning of the term '*ceteris paribus*'
- what is meant by the margin and decision making at the margin
- the importance of the time dimension in Economics
- the difference between positive and normative statements
- what is meant by factors of production, namely land, labour, capital and enterprise
- what is meant by the division of labour
- how resources are allocated in market, planned and mixed economies
- problems of transition when central planning in an economy is reduced
- the characteristics of a production possibility curve and how opportunity cost can be applied
- the functions and characteristics of money and types of money
- how goods can be classified into free goods, private goods, public goods, merit goods and demerit goods
- the problems associated with information failure.

## One economic problem or many?

Economists have to deal with a whole range of economic problems. You may have seen TV programmes about the misery of unemployment and poverty; you may have read about the difficulties caused by inflation or heard politicians discuss exchange rate crises on the evening news. You may also be aware of debates surrounding issues such as the acute shortage of skilled labour, the benefits of greater liberalisation of international trade, the problems of global warming and the population explosion in many developing economies. Despite this extensive range of issues, which economists are trained to consider, they often talk about ‘the economic problem’. This is the fundamental problem from which all others arise. This is the fact that we have scarce **resources** to satisfy our unlimited **wants**. As a result of this problem, which is sometimes called the problem of **scarcity**, we have to make a **choice**, and it is the task of the economist to explain and analyse the nature of choice facing economic agents, such as consumers, producers and governments.

### KEY TERMS

**Resources:** inputs available for the production of goods and services.

**Wants:** needs that are not always realised.

**Scarcity:** a situation in which wants and needs are in excess of the resources available.

**Choice:** underpins the concept that resources are scarce so choices have to be made by consumers, firms and governments.



### TOP TIP

In economics, a need is not the same as a want; consumer wants are not always satisfied because of limited income whereas a need tends to be more important in a scale of priorities.

## The fundamental economic problem

The **fundamental economic problem** is: ‘scarce resources in relation to unlimited wants’. This problem is summarised in Figure 1.1.



### KEY TERM

**Fundamental economic problem:** scarce resources relative to unlimited wants.



### KEY CONCEPT LINK

**Scarcity and choice:** The fundamental problem in economics is that resources are scarce and wants are unlimited, so there is always a choice required between competing uses for the resources. This is the first of five key concepts that are central to the subject content of the Cambridge International AS Level and A Level Economics syllabus. This concept is a recurring theme, particularly in this first chapter.

## Scarce resources

In Economics we categorise the resources available to us into four types. These are known as **factors of production**:

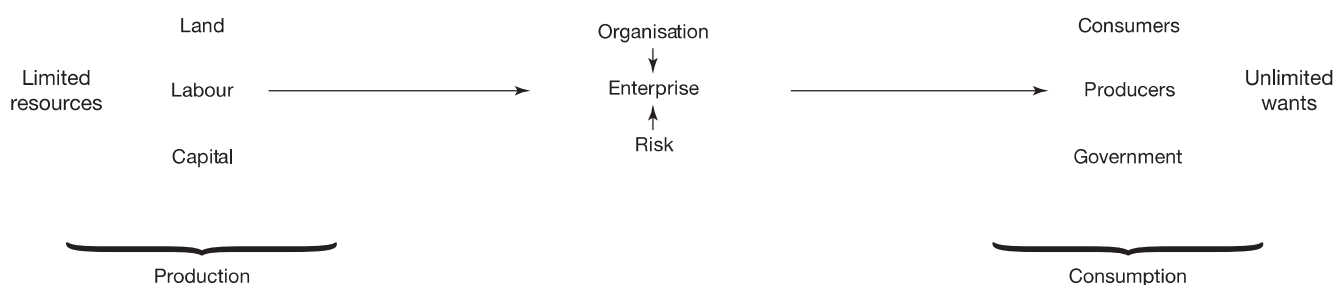
- Land:** This factor is the natural resource. It includes the surface of the earth, lakes, rivers and forests. It also includes mineral deposits below the earth and the climate above, as well as the small area of land that makes up a farm or factory. The reward for owning land is the income that is generated.



### KEY TERMS

**Factors of production:** anything that is useful in the production of goods and services.

**Land:** natural resources in an economy.



**Figure 1.1** Elements of the fundamental economic problem



**2 Labour:** This factor is the human resource, the basic determinant of which is the nation's population. Not all of the population is available to work, because some are above or below the working population age and some choose not to work. The reward for labour is the wage or salary that is paid.

**3 Capital:** This factor is any man-made aid to production. In this category we would include a simple spade and a complex car-assembly plant. Capital goods help land and labour produce more units of output – they improve the output from land and labour. The reward to capital is the rate of return that is earned.

These three factors are organised into units of production by firms.

**4 Entrepreneur:** This factor carries out two functions. First, the enterprise factor organises the other three factors of production. Second, enterprise involves taking the risk of production, which exists in a free enterprise economy. Some firms are small with few resources. The functions of enterprise are undertaken by a single individual, the entrepreneur. In larger, more complex firms the functions are divided, with salaried managers organising the other factors and shareholders taking the risk. The return for enterprise is the profits that are made.



#### KEY TERMS

**Labour:** human resources available in an economy.

**Capital:** a man-made aid to production.

**Entrepreneur:** organises production and is willing to take risks.

Some economies have a large quantity of high-quality factors of production at their disposal. They can create lots of goods and services to satisfy the wants of their population. They are said to have a good factor endowment. Other economies lack sufficient quantities of one or more of the factors. Developing countries, for example, might have large quantities of land and labour but lack sufficient capital and enterprise. The former planned economies of Eastern Europe, such as Poland and Slovakia, found it difficult to develop because they had few people with entrepreneurial experience as well as a lack of business capital. Entrepreneurship was not encouraged in their socialist economic systems. This has now changed with the move to a market economy and the opportunities presented through membership of the European Union. Poland, Slovakia and other former planned economies have benefited from increased foreign investment from the rest of the EU and elsewhere. Firms have been able to make good use of skilled labour especially.



Car assembly plant in Slovakia

## Production and consumption

Resources are combined in the process of **production** to create goods and services. Goods and services have the capacity to satisfy wants. The process through which individuals use up goods and services to satisfy wants is known as **consumption**. Some goods, such as a chocolate bar, are quickly used up to satisfy our wants. Other things satisfy wants over a longer period. These are called consumer durables. Examples of consumer durables include television sets, refrigerators and vehicles.



#### KEY TERMS

**Production:** the process of creating goods and services in an economy.

**Consumption:** the process by which consumers satisfy their wants.

## Unlimited wants

We can all identify certain basic needs that must be satisfied if we are to stay alive. These include the obvious essentials of food, shelter and clothing. We might also identify those wants that are clearly less essential but we think improve our quality of life. These might include television sets, cars, trips to the cinema and so on. These are sometimes called luxuries, but it is important to remember that what might be a luxury for one individual may be considered an essential for others.

This is because we all have a scale of preference with our more urgent wants at the top and the less urgent ones at the bottom. Each individual's scale of preference is a product of a complex set of influences, involving culture, upbringing and life experiences. These together influence our likes and dislikes. Unsurprisingly, since we all have different experiences, there is bound to be great variation between any two individuals' scales of preferences. You may find it interesting to conduct a class exercise in which everyone makes a list of ten wants in descending order of priority. When you compare results you may be surprised to find that, although there may be broad agreement on the first few choices, there is likely to be considerable variation as you compare people's choices over the full list. You may also consider how your list would compare to lists compiled by others with very different life experiences, such as your teacher, your grandparents or even a student of Economics in another country. A further point to consider is whether you could imagine any end to your list if you were not limited to ten choices. It is important to remember that our wants are continually expanding, developing and changing.

Some wants expand as we grow up, marry and raise a family. Imagine how our housing needs change as we go through this process or how we change from wanting a small car with two doors to wanting a large, family saloon with four doors. Some of our wants develop and expand when we see others around us enjoying goods and services and we feel the need to keep up. Sometimes our wants change as we have new experiences, for example we might decide to go on a diet because we have seen a TV programme about obesity.

All of this points to the fact that we can never imagine a time when all our wants are satisfied. Our wants are continually expanding and changing. Despite the fact that we are continually finding new, more efficient ways to produce more and more goods and services with the resources available to us, we are still faced with the fundamental economic problem that we have limited resources and unlimited wants. As stated earlier, this is sometimes called the problem of scarcity and as a result we have to make choices.

## Choice and opportunity cost

Given limited resources and unlimited wants we have to choose which wants to satisfy. The true cost of any choice we make between alternatives is expressed by economists through the notion of **opportunity cost**.

This looks at the cost of our choice in terms of the best alternative forgone. For example, suppose you were given a \$15 gift voucher for your birthday. You could either buy a new DVD that costs \$15 or two paperback books for \$7.50 each. It is clear that you could not have the DVD and the books. The opportunity cost of the DVD, therefore, is the two paperback books. The value of the concept of opportunity cost is that it brings home to us the real cost of our choices. It can be applied in a variety of contexts in Economics and is helpful for economic decision-makers, such as households, firms and governments.



### KEY TERM

**Opportunity cost:** the cost expressed in terms of the best alternative that is forgone.

## Basic questions: what to produce, how and for whom?

Because the fundamental economic problem exists, societies need to confront the following three interrelated questions:

- 1 What to produce?** Because we cannot produce everything, we need to decide what to produce and in what quantities. We have to choose, for example, whether to produce lots of goods and services, such as food, clothing and vehicles, to improve our standard of living, or whether we need to produce lots of military hardware to improve our defences.
- 2 How to produce?** This question arises since resources are scarce in relation to unlimited wants; we need to consider how resources are used so that the best outcome arises. We need to consider how we can get the maximum use out of the resources available to us. It should be noted, however, that other issues besides purely economic concerns should be considered when deciding how to produce. It may be true, for example, that through cheap labour we could produce more goods and services in an economy, but there is a moral objection to such arrangements. Similarly, crop yields could be increased through the introduction of genetically modified plants but this may lead to damage to the ecosystem. The decision to maximise output and satisfy more wants would need to consider the full impact on the environment and any potential long-term health risks.
- 3 For whom to produce?** Because we cannot satisfy all the wants of all the population, decisions have to be taken concerning how many of each person's wants are to be satisfied. On a broad level we need to decide whether everyone is going to have a more or less equal share of what

is produced or whether some will have more than others. In some economies there are deliberate attempts to create a more egalitarian society through policies that redistribute wealth and income from the rich to the poor. This could be achieved through progressive taxation systems. In other economies there are no such policies and inequalities of income and wealth, often based upon inheritance, remain extreme. As an issue, it has become very significant in most emerging economies with a widening gap between rich and poor.

## Meaning of the term ‘*ceteris paribus*’

This Latin term is widely used by economists to refer to a situation where ‘other things remain equal’. The idea behind this is to be able to simplify an actual situation by assuming that apart from a single change of circumstances, everything else is unchanged. In this way, economists can model one change at a time.

### SELF-ASSESSMENT TASK 1.1

Read the feature below and then answer the questions that follow.

#### Food versus fuel – a classic application of opportunity cost

World food prices have been rising since 2007. The rises have been particularly strong for vegetable oil, wheat and corn. This has resulted in civil unrest and riots in many poor countries. In response, for example in India, exports of grain products have been banned in order to maintain supplies in the home market. China has also taken steps to quell the rise in the price of cooking oil.

One factor that has been driving up world food prices has been the increased demand for biofuels which are produced from agricultural crops traditionally used for food and animal feed. The most important biofuel is

ethanol which is produced from corn and sugar cane. These crops are very important sources of biofuel production in the USA, Brazil and India.

As global oil prices increase, there is a growing need for the increased agricultural production of corn, soya beans and sugar cane for conversion into biofuels. This may be good news for farmers producing these products and indeed, for users of biofuels. It is not good news for livestock farmers who experience increased feed prices or for consumers who experience rising grain and meat prices.

Source: Adapted from S. Sexton et al, *Agricultural and Resource Economics*, Vol 12, No 1, 2008.

- 1 Use the information above to show how the concept of opportunity cost might be used to explain the trade-offs as they affect:
  - governments
  - farmers
  - consumers.
- 2 Outline the likely costs and benefits of the increased global demand for biofuels.

### SELF-ASSESSMENT TASK 1.2

Read the feature below and then answer the questions that follow.

#### China: the challenges of an ageing population

An ageing population is one usually associated with developed economies. Falling birth rates and increased life expectancy in many European countries and Japan has created a situation in which younger generations are facing the prospect of caring for an ageing population.

This demographic situation is now a major problem in China. The origin lies in China’s one-child policy which has restricted the number of children that most urban families could have and was originally designed to reduce the rate of growth of a booming population. There have