

1.2 Introduction to Economics

At the end of this section a student should be able to:

- explain the difference in focus between micro and macro economics
- differentiate between positive and normative economic statements; identify instances of their use in local, national or international media/economic commentary
- explain how scarcity of economic resources relative to wants results in choices being made between competing uses of resources; predict possible consequences of these choices
- evaluate the opportunity costs involved in economic decisions made by individuals, firms and the government at local and national levels
- discuss the role of incentives and the motivating influences for individuals, firms, the business sector and the government in economic decisions; describe conflicting incentives with reference to local, national or international examples
- explain the principle of specialisation and outline how it may apply to individuals and firms seeking to increase efficiency

What is Economics?

Economics is a social science concerned with the production, distribution, and consumption of goods and services often shortened to the *science of scarcity*. It studies how individuals, businesses, governments, and nations make choices about how to allocate scarce resources that have alternative uses.

Any society has to address the problem of how and what to produce for its material survival, and how goods and services which are produced should be distributed among its population. Economists explore how people and institutions behave and function when producing, exchanging and using goods and services. In studying economics our main motivation is to find mechanisms which encourage efficiency in the production and use of material goods and resources, while at the same time producing a pattern of income distribution which society finds acceptable.

Many of the problems which dominate our newspaper headlines are economic problems. Why are some countries poor with very low growth rates while a small number of countries enjoy high living standards and high growth rates? What is the role of international trade and the movement of capital from one country to another, in explaining these global inequalities? Why are some countries so much more successful at creating employment or reducing unemployment than other countries? Within countries, why do some people earn so much more than others, and what are the best ways to tackle and reduce poverty? Is it possible to pursue economic growth and still protect our natural and physical environments? How should governments try to raise the finance needed to pay for health and education services and income support programmes? What is the proper role for government in the economy? Would we be better off with much lower taxes but also poorer social services than we presently enjoy?

In terms of methodology, economists, like other social scientists, are not able to undertake controlled experiments in the way that chemists and biologists are. Hence, economists have to employ different methods, based primarily on observation and deduction and the construction of models.

Microeconomics versus Macroeconomics

Microeconomics is that branch of economics which studies the behaviour of individual markets and of decision-makers (consumers and firms) within these markets. Each individual market has its own unique characteristics - think of the Dublin taxi market, or the market for charter holidays, or the market for legal

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services. What determines prices in these markets? Do these markets work efficiently? Is the nature of government intervention in these markets appropriate? These are the sorts of questions asked by micro-economists.

The other main branch of economics is macroeconomics. Macroeconomics is concerned with the behaviour and functioning of the whole economy. Macroeconomists work with questions such as what determines the overall growth rate of an economy and what policies would be effective in trying to raise an economy's growth rate? What determines the overall rate of price inflation in any economy and how might governments try to maintain price stability?

Watch: [Economics explained](#)

Positive and Normative statements

Normative statements are **subjective statements** – i.e. they carry [value judgements](#). A normative statement is one that **cannot be tested**.

Examples of normative statements include:

- “The price of housing is too expensive” is a normative statement as it is based on a value judgement and cannot be tested to be ‘true’ or ‘false’.
- “The government should enforce minimum prices for beers and lagers sold in supermarkets and off-licences in a bid to control alcohol consumption”
- “Unemployment is more harmful than inflation”
- “Pollution is the most serious economic problem”
- “Resources are best allocated by allowing the market mechanism to work freely”

Positive statements are **objective statements** that **can be tested**, amended or rejected with data and are **not** based on value judgments.

Examples of positive statements include:

- “The current level of unemployment is 4.1%” is a positive statement because it can be tested and either verified or falsified. Stating that the level of unemployment is 20% is also positive, even if not true – because the statement can be tested and falsified.
- “A fall in incomes will lead to a rise in demand for own-label supermarket food”
- “The rising price of crude oil on world markets will lead to an increase in cycling to work”
- “Higher interest rates will reduce house price”

Watch: [Statements explained](#) and [again](#) and [again](#)

Scarcity

Scarcity is one of the fundamental issues in economics. Scarcity refers to resources being finite and limited. Scarcity means we have to decide how and what to produce from these limited resources. The resources that we value—time, money, labour, tools, land, and raw materials—exist in limited supply. As these resources are limited, so are the numbers of goods and services we can produce with them. Combine this with the fact that human wants seem to be virtually infinite, and you can see why scarcity is a problem.

Every society, at every level, must make choices about how to use its resources. Families must decide whether to spend their money on a new car or a fancy vacation. Firms must decide how many people to employ and what goods they should produce. Nations must decide whether to devote more funds to national defence or to protecting the environment. In most cases, there just isn't enough money in the budget to do everything.

Examples of scarcity

- **Land** – a shortage of fertile land for populations to grow food. For example, the desertification of the Sahara is causing a decline in land useful for farming in Sub-Saharan African countries.
- **Water scarcity** – Global warming and changing weather, has caused some parts of the world to become drier and rivers to dry up. This has led to a shortage of drinking water for both humans and animals.
- **Labour shortages**. In recent years, shortages have been focused on particular skilled areas, such as nursing, doctors and software engineers and well as unskilled roles in hospitality.
- **Health care shortages**. In any health care system, there are limits on the available supply of doctors and hospital beds. This causes waiting lists for certain operations.
- **Seasonal shortages**. If there is a surge in demand for a popular Christmas present, it can cause temporary shortages as demand is greater than supply and it takes time to provide.
- **Fixed supply of roads**. Many city centres experience congestion – there is a shortage of road space compared to number of road users. There is a scarcity of available land to build new roads or railways.

Watch: [Scarcity explained](#) and [again](#) and [again](#)

Opportunity Cost

In economics, “there is no such thing as a free lunch! Even if we are not asked to pay money for something, scarce resources are used up in production and there is an opportunity cost involved.

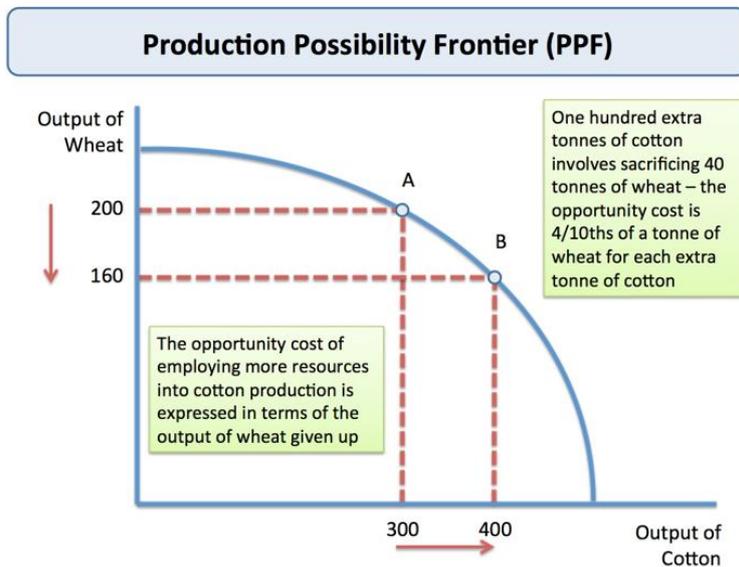
What is opportunity cost?

With limited resources, and faced with a choice, the item (or course of action) you **do not** choose, is the opportunity cost.

Opportunity cost measures the cost of any choice in terms of the next best alternative foregone. i.e. what you gave up in order to take a particular action.

- **Work/Leisure Choices:** The opportunity cost of deciding not to work an extra ten hours a week is the lost wages foregone. If you are being paid to work at the local supermarket, if you take a day off from work you might lose income. Or if you choose to work you miss out on time with your family.
- **Government spending priorities:** The opportunity cost of the government spending nearly €10 billion on investment in the HSE might be that €10 billion less is available for spending on education or improvements to the transport network

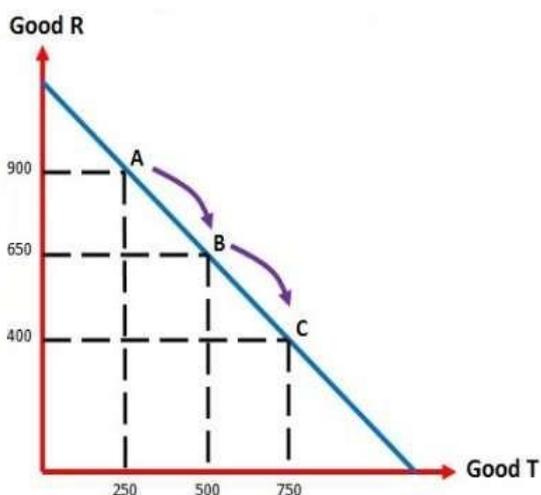
Opportunity costs for economies can be illustrated by using production possibility frontiers (PPFs). A PPF shows the maximum possible output combinations of two goods or services an economy can achieve when all resources are fully and efficiently employed.



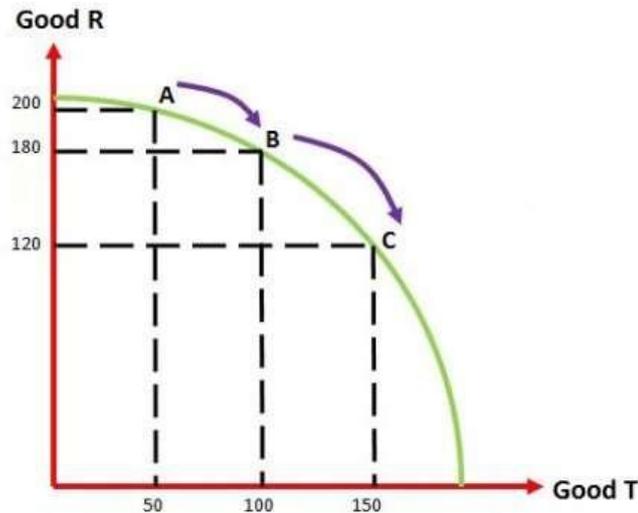
In the above example 40 (200 to 160) units of wheat are given up (opportunity cost) in order to increase production of cotton by 100 (300 to 400) units.

We normally draw a PPF on a diagram as **concave from the origin**. Most of the PPF curves are concave due to **the inadaptability of the resources**. Not all factor inputs are equally suited to producing item there the law of increasing opportunity cost applies.

Difference between Constant Opportunity Cost and Increasing Opportunity Cost



Constant opportunity cost occurs when the production possibility curve is linear. The relationship between opportunity cost and quantity supplied is the same. Assuming that a factory wishes to increase their production of good T from 250 units to 500 units, the factory has to sacrifice 250 units of good R in order to increase the production of good T. Thus, the ratio between opportunity cost and quantity supplied is constant, 1:1.



The production possibility curve of increasing opportunity cost is concave from its origin. Increasing opportunity cost means the more units of good T produced, the more the opportunity cost of good R. Assuming that the factory has to forgoe 20 units of good R so that the factory is able to produce 50 more units of good T. If the factory wishes to increase the production of good T from 100 units to 150 units, they have to let go 60 units of good R. In this case, it clearly shows us an increasing opportunity cost.

The law of increasing opportunity cost: As you increase the production of one good, the opportunity cost to produce the additional good will increase.

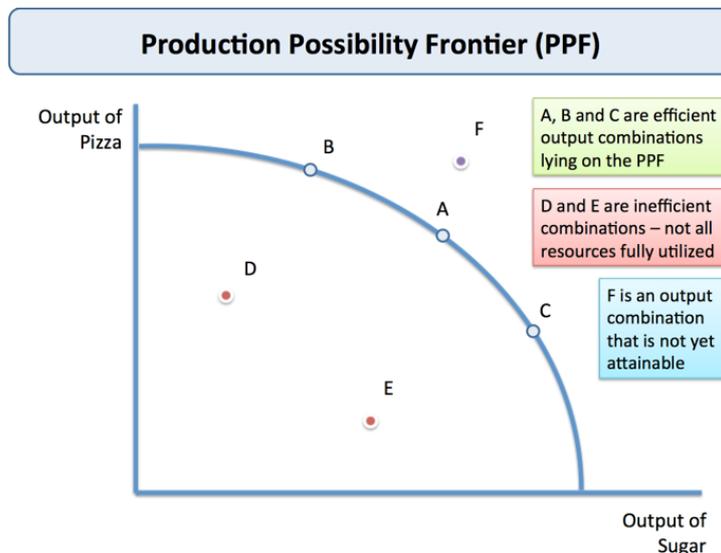
When choosing between the production of two goods, the more similar the resources needed to produce each good, the straighter the PPC will be. The less similar the resources needed to produce each good, the further the PPC will be bowed out from the origin.

This is an explanation of the law of diminishing returns (See chapter 2.3 The Firm) and it occurs because not all factor inputs are equally suited to producing items

Points inside and outside the PPF

Points within the curve (points D&E in diagram below) show when a country's resources are not being fully utilised. Combinations of the output of consumer and capital goods lying inside the PPF happen when there are unemployed resources or when resources are used inefficiently. We could increase total output by moving towards the PPF.

Combinations that lie beyond the PPF are unattainable at the moment (point F). A country would require an increase in factor resources (land, labour, capital) along with an increase in productivity and technological improvement to reach this combination



Watch: [PPF explained](#) and [again](#)

Try: [Quiz](#)

Incentives

Incentives matter enormously in any study of microeconomics, markets and market failure. Incentives motivate consumers/firms to do something, engage in a particular course of action.

Incentives affect our daily lives in many ways. A famous example is the analogy that if you hold a carrot in front of a donkey—offering it an incentive to move forward—and also thwack its rump with a stick—offering a disincentive to stand still—then likely it will start walking forward. Parents typically offer both rewards and punishments to encourage good behaviour and discourage bad behaviour by their children.

In economics, incentives may involve either cultural norms, or financial rewards and punishments. Cultural norms may offer incentives by rewarding with social acclaim those who help the needy, or may offer disincentives by punishing those who engage in theft. Financial incentives may involve offering financial prizes or financial fines for good or bad behaviour, or often just a change in a price that ends up with your having to spend more or less for what you want to sell or buy.

Incentives and disincentives are not guarantees of behavioural changes. But, they tend to induce behavioural changes by choice rather than by force. Your parents can tell you that you are forbidden to text your friends after 8 p.m. and if you do it, they'll take away your phone for a month. Or, they can dock your pocket money by €1 per text message after 8 p.m. Both kinds of incentive structure may grate on you but it will likely change your behaviour at least a small bit.

The most common economic incentive is something we take for granted every day: **Prices are incentives.**

For example, a rise in the price of any good is an incentive for us to back off from buying it as much as we used to. Perhaps we'll buy a different good instead. So, for example, a rise in the price of butter creates an incentive to buy less butter. Maybe we'll buy margarine instead. Or maybe we'll use butter more sparingly and simply buy it less frequently. Or, if I'm a baker, maybe I won't change my use of butter directly, but I'll

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cut back on buying something else to be able to keep buying butter. No matter what, though, the change in the price of butter creates an incentive for me to change my behaviour—my economic behaviour.

And buyers are not the only ones affected by and with revised incentives in the fact of a price change. If I raise dairy cows and sell them for milk, a rise in the price of butter may give me an incentive to breed more cows or sell more raw milk to butter producers who are willing to pay more than they used to, what with the increased price of butter they are receiving. I may even have an incentive to change the seed I plant so as to encourage my cows to produce milk more conducive to butter production.

The moral is that every price change entails incentives for almost everyone in the economy. Though you may not think about it a lot, you probably make a lot of decisions every day that involve responding to your ever-changing personal incentives. Incentives matter, not only in your personal decisions but also across a whole economy, because often those incentives result in similar choices which accumulate across many individuals.

Taxes change prices. Thus, a change in tax rates affects incentives. Some economists argue that taxes should in fact be used with the express purpose of changing behaviour. For example, if a government decides it does not want its citizens to use plastic straws, it can do that by publicising the ill effects of plastic straw use, or by forbidding the use of plastic straws, or by taxing the use of plastic straws. Taxing the use of plastic straws, while it does not guarantee that there will be less use of plastic straws, does allow both buyers and sellers a degree of choice. Families with disabled children who need straws to drink at restaurants may still be able to find restaurants that offer paper straws. Restaurants that cater to traveling truck and car drivers who rely on straws to sip drinks while they drive can still decide what to do to serve their clientele.

Watch: [Incentives explained](#)

Specialisation

Specialisation takes place when an individual, firm or country produces a narrow range of goods or services and over time develops a comparative cost advantage in producing these goods and services. Specialisation is a fundamental concept in economics and is closely associated with the efficient use of scarce resources.

Specialisation happens at all levels:

- The specialisation of tasks within families: who is best at washing the dishes, gardening etc
- Within businesses and organisations. For example, teachers specialising in the subjects they teach. Workers specialising in the tasks they complete within a business.
- In a country – Bangladesh is a major producer and exporter of textiles; Norway is a leading oil exporter. And Ghana is one of the biggest producers of cocoa in the world.
- In a region of a country – for many years Galway has been a centre for medical device manufacturing

By concentrating on what people and businesses do best rather than relying on self-sufficiency we make better use of limited resources and this leads to:

- **Higher Output:** Total production of goods and services is raised and quality can be improved
- **Variety:** Consumers have access to a greater variety of higher quality products
- **A bigger market:** Specialisation and global trade increase the size of the market offering opportunities for economies of scale
- **Competition and Lower Prices:** Increased competition acts as an incentive to minimise costs, keep prices down and therefore maintains low inflation

Division of Labour

Specialisation occurs when workers are assigned specific tasks within a production process. This is known as ‘the division of labour’.

Workers will require less training to be an efficient worker. Therefore this will lead to an increase in labour productivity and firms will be able to benefit from economies of scale (lower average costs with increased output) and increased efficiency.

In the process of producing cars, there will be a high degree of labour specialisation.

- Some workers will design the cars
- Some will work on testing cars
- Some will work on marketing.
- Some workers will work on different sections of the assembly line. Their job may be highly specific such as putting on tyres e.t.c.

Watch: [Division of Labour explained](#)

Advantages from the division of labour:

- Higher productivity and efficiency – e.g. rising output per person hour
- Lower unit costs leading to higher profits
- Encourages investment in specific capital – economies of scale

Disadvantages from the division of labour:

- Risk of worker alienation. It may become boring and their productivity may fall as a result. High levels of specialisation could lead to possible diseconomies of scale.
- Risk of disruptions to production process. If an assembly line becomes highly specialised, production could be brought to a halt if there is a blockage in one area. It can be beneficial if there are more people specialised in different aspects.
- Risk of structural unemployment due to occupational immobility

Country Specialisation

Specialisation can also mean that individual countries can produce certain goods that they are best at producing and then exchange them with other countries.

The theory of **comparative advantage** states countries should specialise in producing those goods where they have a lower opportunity cost (relatively best at producing) and trade for their other requirements.

Specialisation requires trade. Specialisation and trade mean that countries that produce no oil can consume oil products and countries with large reserves of raw materials can export them in exchange for other goods that they need. This helps reduce the problem of scarcity in individual countries and enables countries PPF to shift outwards.

Advantages for a country of specialising and trading

- Allows a country to make full use of their economic resources
- Increases the scale of production – leads to lower costs and prices
- Surplus can be exported, an injection into the circular flow of income

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- If there is increased trade there will also be increased competition. This means that domestic monopolies will now face competition from abroad, therefore, they have increased incentives to cut prices and be efficient.

Disadvantages for a country of specialising and trading

- Critics of free trade argue that with increased specialisation there will be intense competition to cut costs and therefore wages will have to fall. However, this point is not necessarily true because firms can compete by producing capital-intensive goods with better technology
- Specialisation could lead to structural unemployment if there is a downturn in the industry in which the country has specialised.
- Poor countries may be encouraged to use up their non-renewable resources to sell to developing countries, therefore in the long term we could run out of non-renewable resources.

Watch: [Specialisation explained](#) and [again](#)

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