

Part 1: Microeconomics

Chapter 1: Economic methodology and the economic problem

Application of economics in the real world

Application of economics in the real world 1.1: Allocating resources through the price mechanism and the planning mechanism

- 1 A pure market economy is one in which markets exist for all goods and services and in which no goods or services are provided ‘outside the market’ — for example, by the state. Such economies do not actually exist, at least in the developed world. In more developed economies, such as the UK, market and non-market sectors exist side by side — though in the UK at the present time the market sector is growing, and the non-market sector is declining. The market sector is the part of the economy in which markets exist, and in which goods and services are bought and sold with prices being charged.
- 2 Planned economies are also known as command economies. In such an economy the state is responsible for production, making all or most of the decisions about which goods and services to produce. It is worth remembering that few, if any, real-world economies are either complete command economies or pure market economies.
- 3 The price mechanism has three main functions: first, the *signalling function*, which signals the value of a product to traders in the market; second, the *incentive function*, which creates incentives or disincentives to traders; and third, the *rationing function*, which allocates society’s scarce resources. For example, in the oil market the price mechanism allocates oil between competing uses. If the price of a barrel of oil is low, this signals to buyers and sellers that oil is cheap. The low price creates incentives for buyers to enter the market and take advantage of the price. Airlines may start flying more planes to holiday destinations because the cheaper oil price will cut the cost of aviation fuel and the airlines’ production costs will fall. This will enable airlines to cut prices to consumers and sell more seats on planes. In turn, demand for aviation fuel and oil will increase, and the market will allocate scarce resources towards the competing uses that are willing to buy the product. However, as demand increases, the price of oil will begin to increase. This will add to firms’ costs of production and businesses will come under pressure to raise their prices. Consumers confronted with a price rise have a disincentive to buy the good. In the case of airlines, planes will begin taking off with empty seats. Airlines will start losing money and the managers of the firms will start to question the viability of their product. Flights will be cancelled and the demand for oil will decrease, rationing the consumption of a scarce resource.
- 4 The command economies of central and eastern Europe failed because they did not allocate resources in their economic system in a manner that met the needs and wants of their citizens. Average living standards were lower than those in western countries. Households in the Soviet bloc lacked basic consumer goods, and by the 1980s the Soviet Union had become dependent on the USA for importing food.

Command economies fail because they lack incentives. Market economies may have unpleasant features but they create incentives for individuals to invent new products, innovate production methods and work hard to run successful businesses. Farmers in the USA produce large quantities of food to feed the domestic population and export overseas because they can grow rich by selling their produce at a profit. They are incentivised to work hard and develop new, efficient techniques by the profit incentive. Throughout the 1960s and 1970s US crop

yields increased. In contrast, farmers in the Soviet Union were not incentivised to increase output in the hope of keeping the profits. Their crops were taken by the state and allocated by government officials. Citizens had the money to purchase food but had to queue for hours in the hope that the stores had enough supply to meet demand. Frequently there was excess demand and households had to make do with what was available.

Those who did well in the Soviet Union had good connections with the officials who allocated resources. Corruption was rife because personal connections to Communist Party officials were more important than money. The Soviet Union eventually broke up when a new generation of government officials became disillusioned with their economic system. They saw that average living standards of households in the USA and western Europe were significantly better and they did not defend the system against protesters who called for an end to the communist system in 1991.

Application of economics in the real world 1.2: The UK as a mixed economy

- 1 In 1980, the then newly elected prime minister Margaret Thatcher described the so-called mixed economy she had inherited as a 'mixed-up' economy. She believed it to be inefficient and performing badly. The UK still has a mixed economy in the sense that large parts of economic activity, such as the maintained education system, NHS and BBC, are owned by the state and run by government agencies. During the great financial crisis, large banks such as RBS and HBOS were partly nationalised by the government. However, successive governments have sought to mix up the public sector by implementing market-based reforms. Some public companies, such as BT, British Gas and Royal Mail, were privatised. These industries are now regulated by the government, which still expresses a view on how they should be run. For example, in 2019 the government introduced price caps in the energy market to control the price increases of private companies. The pro-market economic policy approach has been to talk of market forces and private ownership, but to regulate markets and have government agencies intervening in how firms operate.
- 2 Private enterprise, which is often called free enterprise, occurs when the means of production are privately owned. For some, this may conjure up the picture of the economy depicted by Napoleon Bonaparte, who described Britain as a 'nation of small shopkeepers'. Millions of small businesses do, of course, exist in a private enterprise economy, typified by sole traders or individual proprietorships, and small partnerships. However, private enterprise in the UK is dominated by companies, in which the means of production are owned by company shareholders. Private companies can be recognised by the letters 'Ltd' in the business name, while the name of a public company contains the letters 'PLC'.
- 3 Privatisation and marketisation are two processes through which the size of the market sector of the economy has increased in the UK, and is continuing to increase. Privatisation, which relates to the changing ownership of firms or indeed whole industries, occurs when the state sells previously state-owned firms or industries to the private sector. The private sector grows at the expense of the public sector or state sector of the economy. Marketisation, by contrast, occurs when prices are charged for goods or services that were previously provided free at the point of consumption, with their cost of provision previously borne by taxpayers.
- 4 Markets work best when firms compete to offer consumers the best products at the lowest price. In the telecommunications industry, technological change has meant that competition between firms is real and market conditions can offer consumers a good service. The privatisation of BT has been largely successful because rivals such as Vodafone and Virgin Media have challenged the former state-owned monopoly for market share. Consumers have been offered choice, and prices have fallen in real terms since 1984, although intervention in the market in the form of regulation has been necessary to guard against collusion and price

fixing. However, in some industries there is a strong case to reverse privatisation. In the water industry, it has been difficult to create a functioning market. Water companies in many regions have been shown to have exercised monopoly power. They can charge excessive prices and have been caught dumping pollution into the local environment. The owners of the firms have received healthy dividend payments from the profits generated, but consumers have been issued with higher bills and serious questions have been asked about the lack of long-term investment. Nationalisation has many drawbacks. State-owned companies lack the profit incentive and the quality of service offered to consumers is often poor. Government officials do not have to compete against rivals for market share, and are prone to shy away from making difficult decisions to cut waste and embrace new technology. Nonetheless, a privatised company in an uncompetitive market has the same drawbacks but has the opportunity to exploit consumers with excessive prices. Nationalisation is better in this situation than privatised monopoly.

End-of-chapter questions

- 1 The statement that ‘Milton Friedman was a famous economist who died aged 94 in 2006’ is a positive statement. It is a factual statement that can be tested to see if it is true or false. By contrast, the statement that ‘Milton Friedman was the greatest economist of all time’ is a normative statement, being a matter of opinion.
- 2 The fundamental economic problem is scarcity.
- 3 Most, but not all, economic resources are scarce in the sense that, at zero price, demand is greater than supply. A choice to put one more of a resource to a particular use means that less is available for alternative uses. The opportunity cost of the choice is the sacrificed opportunity to use these units of the resource in alternative ways.
- 4 Factors of production are inputs into the production process. The great nineteenth-century economist Alfred Marshall identified four factors of production: land, labour, capital and enterprise.

Land includes any natural resource used to produce goods and services. The income that resource owners earn in return for land resources is called rent.

Labour is the effort that people contribute to the production of goods and services. The income earned by labour resources includes wages and salaries.

Capital includes the machinery, tools and buildings that humans use to produce goods and services. The income earned by owners of capital resources is interest.

The fourth factor of production is entrepreneurship. An entrepreneur is a person who combines the other factors of production — land, labour and capital — to earn a profit. The most successful entrepreneurs are innovators who find new ways to produce goods and services, or who develop new goods and services to bring to market. The payment to entrepreneurship is profit.

- 5 A production possibility frontier (*PPF*) is a curve illustrating the different possible amounts of two separate goods that may be produced when there is a fixed amount of resource that both items require for them to be produced.

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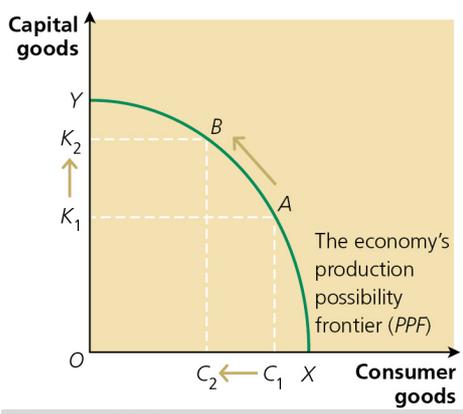


Figure A1.1 The choice between producing capital goods and consumer goods

Point *X* on Figure A1.1 shows the maximum possible output of consumer goods, assuming that the economy only produces consumer goods (i.e. no capital goods are produced). Likewise, point *Y* shows the maximum possible output of capital goods, assuming that the economy only produces capital goods. In fact, points *X* and *Y* show the two extreme production possibilities, since all goods are either consumer goods or capital goods. Finally, the line drawn between points *X* and *Y* is the economy's production possibility frontier, showing all the different combinations of consumer goods and capital goods that can be produced, assuming full employment of available resources and a given state of technical progress. Point *A*, for example, shows K_1 capital goods and C_1 consumer goods being produced. An increase in capital goods production to K_2 , shown at point *B*, means that consumer goods production falls to C_2 .

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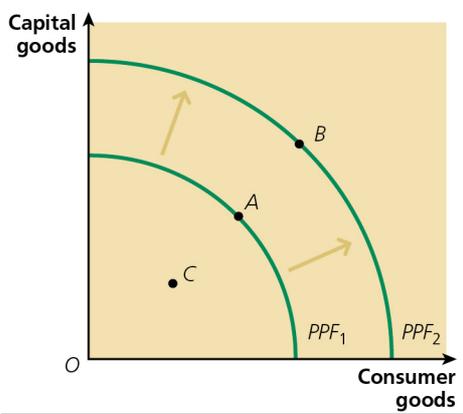


Figure A1.2 Economic growth

Long-term (or *true*) economic growth is shown in Figure A1.2 by an outward movement of the economy's production possibility frontier, for example from PPF_1 to PPF_2 .

Whereas the movement from point *A* to point *B* illustrates long-term growth, short-term growth (or economic recovery) is shown by the movement from a point *inside* the frontier, such as *C*, to a point *on* the frontier, such as point *A* on PPF_1 .

Test yourself answers

TEST YOURSELF 1.1

Economics is the study of scarcity, the study of how people use resources and respond to incentives, and the study of economic decision-making.

TEST YOURSELF 1.2

The famous economist John Maynard Keynes developed his theory of cyclical unemployment from observing the nature of unemployment in the UK in the 1920s and 1930s.

TEST YOURSELF 1.3

Psychology, sociology and anthropology.

TEST YOURSELF 1.4

The correct answer is provided by statement C.

TEST YOURSELF 1.5

People are faced with the need to eat food. A want is a choice, say preferring pizza to chips.

TEST YOURSELF 1.6

There are two ways of defining a mixed economy: first, in terms of possessing a large market sector and a large non-market sector; and second, in terms of containing a large private sector and a large public sector. The current UK economy meets both definitions, with the nature of the mix shifting between 1979 and 2020, involving a growth of the market sector and the private sector at the expense of the non-market sector and the public sector, especially before the 2008/09 recession, but less so during the 2020 Covid-19 recession.

TEST YOURSELF 1.7

Renewable environmental resources, which are reproducible and perpetually maintainable, include forests, animals and water. The availability of these resources depends, however, on their management by humans. By contrast, non-renewable environmental resources, such as oil, gas and minerals, cannot be regenerated or their regeneration is so slow that the stock of resources cannot meaningfully be increased.

TEST YOURSELF 1.8

Rational behaviour refers to a decision-making process that is based on making choices that result in the best possible outcome for an individual, given the often unrealistic assumption that they possess perfect information when making the choice.

TEST YOURSELF 1.9

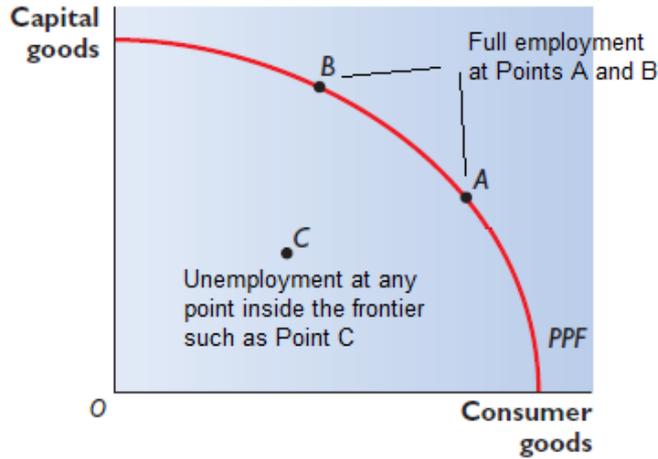
Following on from the answer to the previous question, one factor that in real life may prevent a person from making a rational decision is the possession of imperfect information.

An example of an irrational decision based on imperfect information is the ‘gambler’s fallacy’. For example, if the gambler throws a coin five times and it lands as ‘heads’ in each case, he may believe that the next throw will also be ‘heads’, or the opposite, that a ‘tails’ is about due. In reality, each throw is an independent event with a 50/50 likely outcome.

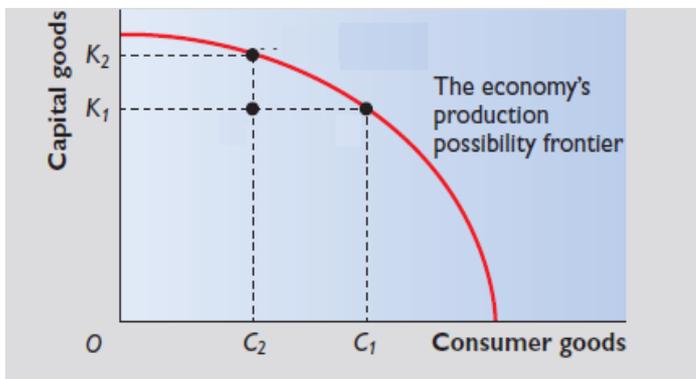
TEST YOURSELF 1.10

An example would be deciding not to read an economics textbook such as this one.

TEST YOURSELF 1.11



TEST YOURSELF 1.12



The opportunity cost of increasing the output of capital goods from K_1 to K_2 is sacrificed output of consumer goods of $C_1 - C_2$.

TEST YOURSELF 1.13

The correct answer is provided by statement D.

TEST YOURSELF 1.14

The slope or gradient of a production possibility frontier shows the opportunity cost of producing one extra unit of a good in terms of another good. If the production possibility frontier is a straight line, it shows a constant opportunity cost. If it 'bows outward' and is concave to origin, as in the previous two questions, it shows an increasing opportunity cost moving from point to point along the curve. This is the traditional shape of a *PPF* curve. However, it is possible for a *PPF* curve to be convex to the origin or 'bowing inwards', showing a decreasing opportunity cost moving from point to point along the curve.