

Figure 1-1 The production possibility frontier

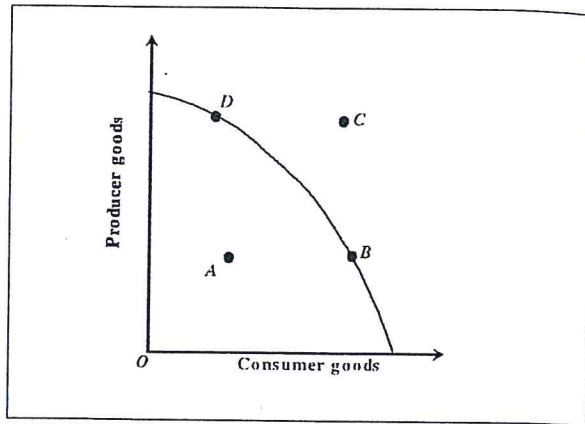


Figure 1-2 Production possibility frontier for an economy

Exercises

- A tribe living on a tropical island includes five workers whose time is devoted either to gathering coconuts or to collecting turtle eggs. Regardless of how many other workers are engaged in the same occupation, a worker may gather either 20 coconuts or 10 turtle eggs in a day.

 - Draw the production possibility frontier for coconuts and turtle eggs.
 - Suppose that a new climbing technique is invented making the harvesting of coconuts easier. Each worker can now gather 28 coconuts in a day. Draw the new production possibility frontier.
- Figure 1-1 shows a society's production possibility frontier for cameras and watches.

 - Identify each of the following combinations of the two goods as either efficient, inefficient, or unattainable:
 - 60 cameras and 200 watches.
 - 60 watches and 80 cameras.
 - 300 watches and 35 cameras.
 - 300 watches and 40 cameras.
 - 58 cameras and 250 watches.
 - Suppose the society is producing 300 watches and 40 cameras, but wishes to produce an additional 20 cameras. How much output of watches must be sacrificed to enable these cameras to be made?
 - How much output of watches would need to be given up for a further 20 cameras (80 in all) to be produced?
 - Explain the difference in the shape of the frontier in Figure 1-1 as compared with the ones you drew in exercise 1.
- Figure 1-2 illustrates a production possibility frontier for an economy. Associate each of the points (A, B, C, D) marked on Figure 1-2 with one of the following statements:

 - A combination of goods which cannot be produced by the society given its current availability of resources and state of technology.
 - The combination of goods produced by an economy with full employment which wishes to devote its resources mainly to the production of investment goods.
 - A combination of goods produced by an economy in recession.
 - The combination of goods produced by an economy with full employment which wishes to devote its resources mainly to the production of goods for consumption.
- Which of the following statements are *normative*, and which are *positive*?

 - The price of oil more than tripled between 1973 and 1974.
 - In the late 1990s, the poor countries of the world received less than their fair share of world income.
 - The world distribution of income is too unjust, with poor countries having 35 per cent of the world's population, but receiving only 2 per cent of world income.
 - Since the 1970s, inflation has fallen in most Western economies, but the unemployment rate has increased.
 - The UK government ought to introduce policies to reduce the unemployment rate.
 - Smoking is antisocial and should be discouraged.
 - The imposition of higher taxes on tobacco will discourage smoking.
 - The economy of the USA is closer to a free market system than that of Cuba.
- Which of the following statements are the concern of microeconomics and which of macroeconomics?

 - Along with other Western economies, the UK faced a sharp rise in unemployment in the early 1980s.
 - The imposition of higher taxes on tobacco will discourage smoking.

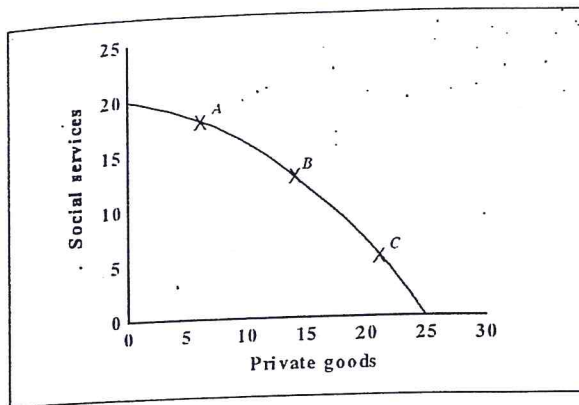


Figure 1-3 Society's choice between social services and private goods

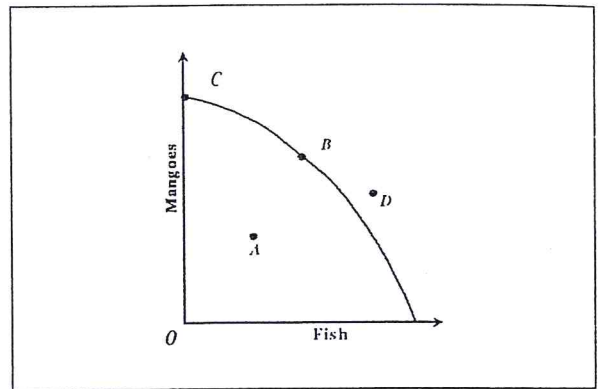


Figure 1-4 Fish or mangoes?

- (c) Unemployment among building labourers rose sharply in the early 1980s.
- (d) An increase in a society's aggregate income is likely to be reflected in higher consumer spending.
- (e) A worker who has received a pay rise is likely to buy more luxury goods.
- (f) A firm will invest in a machine if the expected rate of return is sufficiently high.
- (g) High interest rates in an economy may be expected to discourage aggregate investment.
- (h) The level of gross domestic product in the UK is higher this year than in 1991.
- 6 Figure 1-3 shows society's choice between social services and private goods, in the form of a production possibility frontier. The three points A, B, and C represent economies in which the government plays a more or less active role. Match each of the points with the most appropriate of the following descriptions of hypothetical economies:
- (a) An economy in which the government intervenes as little as possible, providing only the minimum necessary amounts of essential services.
- (b) An economy in which the government takes a great deal of responsibility, taxing at a high level and providing considerable social services.
- (c) An economy in which the government provides more than the minimum necessary amounts of social services, but leaves room for a buoyant private sector.
- 7 A jungle tribe catches fish and gathers mangoes. The tribe's production possibility frontier for these two goods is shown in Figure 1-4. Which of the following bundles of the goods can be reached with present resources?
- (a) Only A.
- (b) Only B.
- (c) Only A and B.
- (d) Only A, B, and C.
- (e) Only D.
- 8 Which of the following statements would not be true for a pure 'command economy'?

- (a) Firms choose how much labour to employ.
- (b) The distribution of income is government-controlled.
- (c) The government decides what should be produced.
- (d) Production techniques are not determined by firms.
- (e) A government planning office decides what will be produced, how it will be produced, and for whom it will be produced.

True/False

- Economics is about human behaviour, so cannot be a science.
- The oil price shocks of 1973-74 and 1979-80 had no effect on what was produced in the UK.
- An expansion of an economy's capacity to produce would be reflected in an 'outwards' movement of the production possibility frontier.
- An economy in which there is unemployment is not producing on the production possibility frontier.
- Adam Smith argued that individuals pursuing their self-interest would be led 'as by an invisible hand' to do things that are in the interests of society as a whole.
- China is an example of a command economy in which private markets play no part.
- The government should subsidize the health bills of the aged.
- Gross domestic product is the value of all goods produced in the economy during a period.
- Many propositions in positive economics would command widespread agreement among professional economists.

Questions for Thought

- We have seen that economics is concerned with three fundamental questions: *what* is produced, *how* it is produced, and *for whom* it is produced. For each