







OCR Economics AS-level **Microeconomics**

Topic 1: Scarcity and Choice



1.3 Opportunity cost

Notes

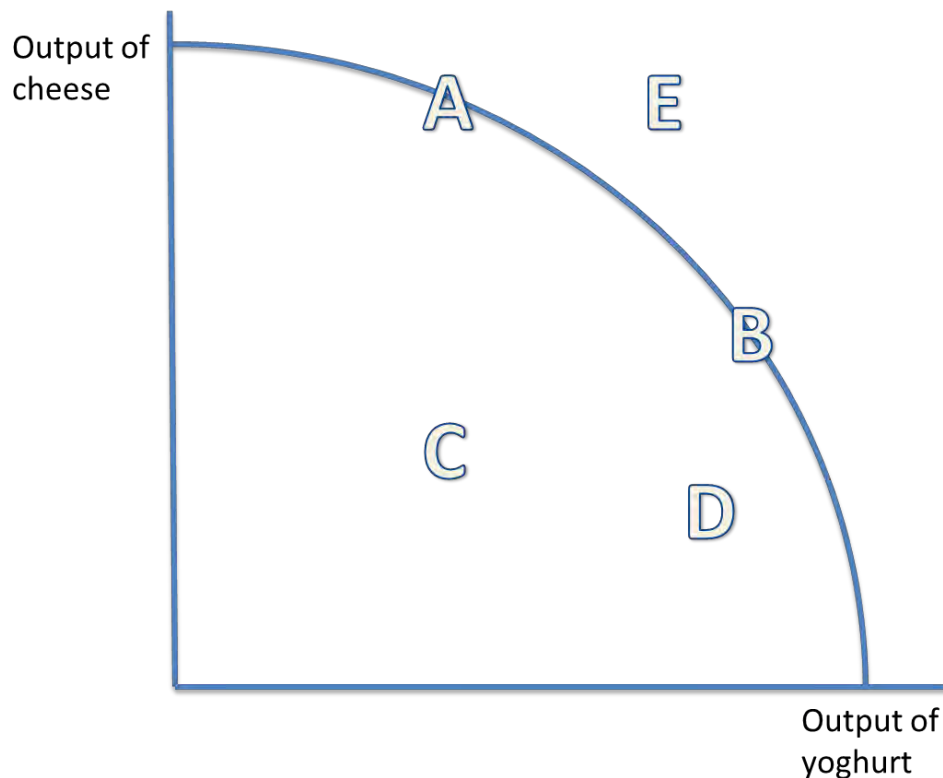







-  The scarcity of resources gives rise to **opportunity cost**.
-  The opportunity cost of a choice is **the value of the next best alternative forgone**.
-  A 'trade-off' is when one thing is lost to gain something else.
-  For example, if you only have £1 and you go to a shop, you can buy either a chocolate bar or a packet of crisps. The scarcity of the resource (the money) means a choice has to be made between the chocolate and the crisps. The opportunity cost of choosing the crisps is the chocolate bar. Consumers face a trade-off.
-  If a car was bought for £15,000 and after 5 years the value depreciates by £5,000, the opportunity cost of keeping the car is £5,000 (which could have been gained by selling the car), regardless of the starting price.
-  Opportunity cost is important to economic agents, such as consumers, producers and governments. For example, producers might have to choose between hiring extra staff and investing in a new machine. The government might have to choose between spending more on the NHS and spending more on education. They cannot do both because of finite resources, so a choice has to be made for where resources are best spent.

Production Possibility Frontiers

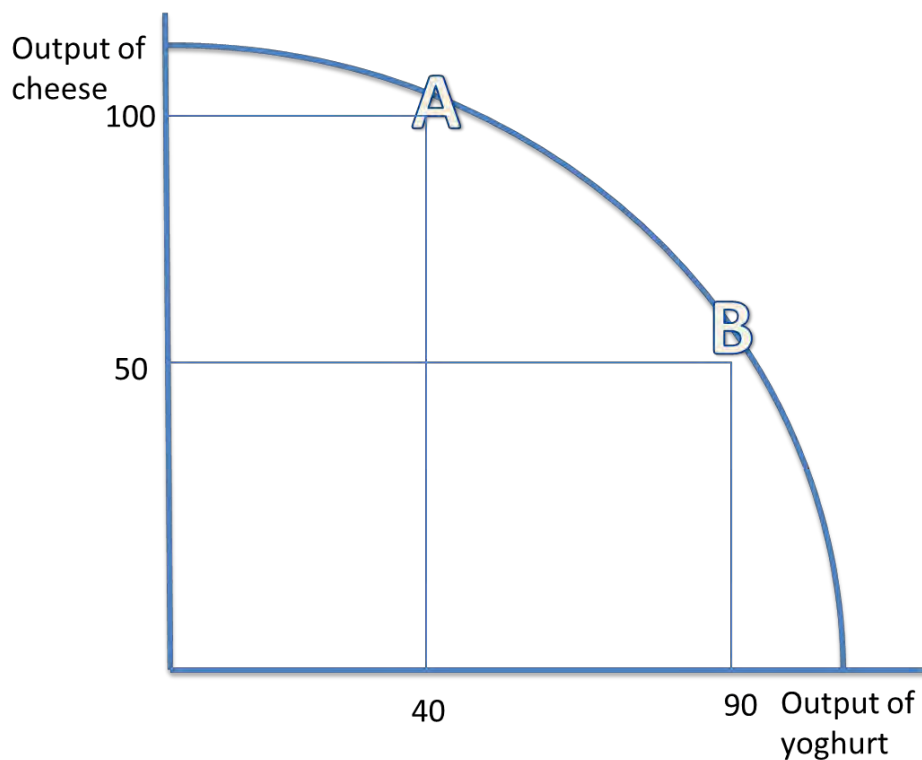
-  Production possibility frontiers (PPFs) depict the maximum productive potential of an economy, using a combination of two goods or services, when resources are fully and efficiently employed.
-  PPF curves can show the opportunity cost of using the scarce resources. For example, if the scarce resource is milk, there is a trade-off between producing more cheese or more yoghurt from the milk. The PPF can show this:







-  Producing at points A and B are the most efficient combinations of output on the PPF. Producing at B, so more yoghurt than cheese is produced, incurs an opportunity cost of producing more cheese. The scarcity of the raw material, milk, means a choice has to be made between cheese and yoghurt.
-  Points A and B are the most **productively efficient** points, because resources are being used to their full productive potential.
-  **The law of diminishing returns** states that the opportunity cost of producing more yoghurt increases, in terms of the lost units of cheese that could have been produced.
-  Producing at C or D is inefficient, and resources are not used to their **full productive potential**. There is the potential to use these resources more efficiently, which would shift production closer to the curve.
-  Producing at E is not yet attainable with the current resources.

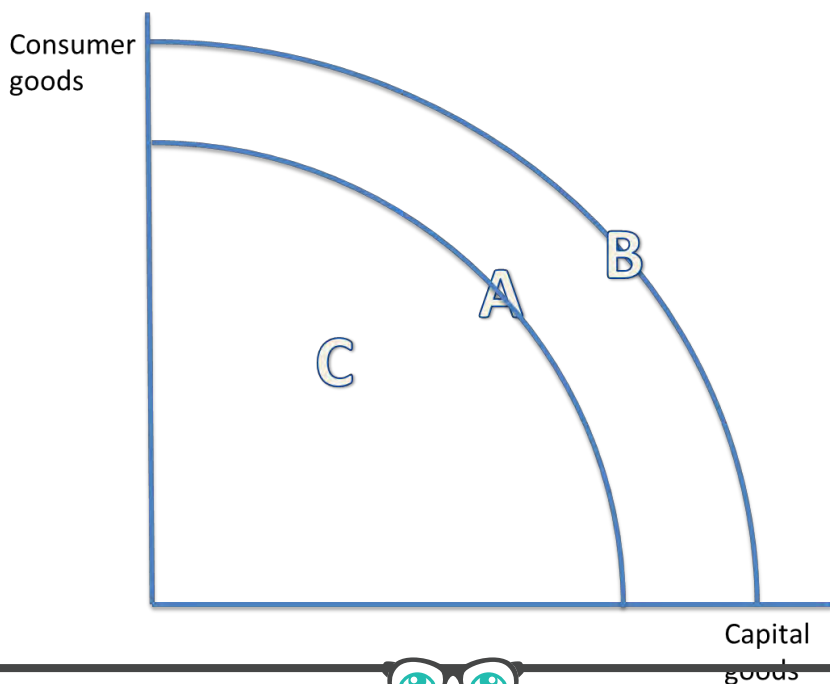















-  This PPF shows the opportunity cost of producing each product. Producing 100 units of cheese means that only 40 units of yoghurt can be produced instead of the potential of 90. Therefore, the opportunity cost is $90 - 40 = 50$ units of yoghurt.

Economic growth and decline:

-  The PPF can also depict economic growth or decline. Only production under and on the PPF is attainable. Production outside of the PPF is not obtainable. However, only production on the PPF uses resources efficiently (A and B). It is inefficient to produce below the PPF (point C).



-  Economic growth can be shown by an outward shift in the PPF, from the curve with point A on it, to the curve with point B on it. A decline in the economy would be depicted by an inward shift.
-  The original curve is drawn assuming:
 - A fixed amount of resources are used
 - There is a constant state of technology
-  An increase in the quantity or quality of resources shifts the PPF curve outwards, so the productive potential of the economy increases, and there is economic growth. This can be achieved with the use of supply side policies.
-  Moving along the PPF is different to shifting the PPF. Moving along the PPF uses the same number and state of resources, and shifts production from fewer consumer goods to more capital goods, for instance. This incurs an opportunity cost. Shifting the PPF curve outwards, for example, uses either more resources or resources of a greater quality. This reduces the opportunity cost of producing either capital or consumer goods, since more goods can be produced overall.
-  **Capital goods** are goods which can be used to produce other goods, such as machinery.
-  **Consumer goods** are goods which cannot be used to produce other goods, such as clothing.
-  **How useful is the concept of opportunity cost?**
-  Some alternatives are not easy to quantify. For example, spending a year travelling or a year gaining work experience will yield different benefits to consumers, which are not necessarily directly comparable.
-  Moreover, because opportunity costs relate to future events, they are difficult to place a monetary value on.
-  Many firms operate on predetermined targets which overlook opportunity cost.
-  Opportunity costs always exist because of scarce resources. Therefore, they are often overlooked in reality.

