Q1. Explain what is meant by a production possibility curve and use a production possibility curve diagram to explain the concepts of scarcity, choice and opportunity cost. [10m]

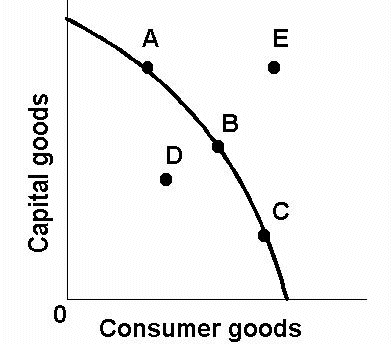
M08/HP2/Q1

“Scarcity” can be defined as the problem with which humans have unlimited wants; however they have limited resources with which to obtain these wants.

“Choice” can be defined as having to choose one use of a limited resource over another, ultimately producing different outputs.

“Opportunity cost” can be defined as what is sacrificed by choosing one thing over another, such as the possible profit from business venture A when business venture B is chosen over it.

A PPC shows the different combinations of goods and services that can be obtained with a given amount of resources in their most efficient way. It compares two commodities, Capital Goods against Consumer Goods, with Capital Goods being defined as the raw materials required to produce the Consumer Goods, whereas the Consumer Goods can be defined as the produce that comes off the Capital Goods.



The (((diagram W))) illustrates the concept of the PPC

A, B and C represent points on the production possibility curve. A represents a production type leaning more towards Capital Goods, which shows that lesser Capital Goods are used to produce the Consumer Goods. C represents a production type leaning more towards Consumer Goods, which utilises more Capital Goods in order to produce these Consumer Goods. B, on the other hand, shows a balance between the two, showing that Capital Goods are used in equal proportions to the Consumer Goods which are produced.

Should the curve shift towards point D, it shows the occurrence of the underutilising of resources, resulting in a lessened production rate of Consumer Goods.

E represents the unattainable combination of two goods, showing a maximum output of Capital and Consumer Goods. This is a theoretical impossibility, as it would mean that no Capital Goods are being sacrificed in order to obtain Consumer Goods. Thus it is known as the unattainable point of the production possibility curve.

Scarcity is the problem which humans have when having unlimited wants that come off as a problem of never being content with their current lifestyles. With these unlimited wants, they will work harder to attain them, however, they will be unable to obtain these unlimited wants as it is comparable to counting to infinity; in essence, it is continually having increased expectations of oneself. However, the problem of having limited resources, such as the factors of land, capital and labour, results in people being unable to fully satisfy their wants. For example, such as in a country as Singapore, there is the problem of having limited land space with which to use for housing space. Should the government want to improve housing conditions and to build more HDB flats for citizens to live in, they would thus have to decrease the space which is used for factories and production. These citizens, who could also be Permanent Residents or foreign workers brought in to Singapore to work in factories, will add to the production rate of factories, however, at the expense of the factories which are used to produce Consumer Goods. Referring to the graph, as the curve moves rightwards to more of Consumer Goods, the problem of scarcity would then be more evident, as it would show people spending more and working harder in order to obtain Consumer Goods. Thus, the problem of scarcity.

Choice in an economic sense shows the decision to choose Capital Goods over Consumer Goods, or Consumer Goods over Capital Goods, in order to obtain more of one over the other. For example, referring to the graph in page 1, the point A represents choosing more Capital Goods over Consumer Goods, resulting in more Capital Goods being left over in the end over Consumer Goods, However, on the other hand, the point C represents choosing more Consumer Goods over Capital Goods, resulting in more Consumer Goods being produced at the expense of more Capital Goods being used to produce these Consumer Goods. For example, should a factory choose to produce more of a certain Consumer Goods, such as cars, it would have to come at the expense of the Capital in the form of raw materials used to produce these Consumer Goods, such as that of oil, metals which are used to form the chassis or the body of the car, and so on. Thus in order to have an increased production rate of Consumer Goods, the amount of raw materials used would have to increase, thus showing point C on the graph on which Consumer Good production is chosen over Capital Goods.

The scenario of opportunity cost comes off as the sacrifice that is made and the possible profit that is lost from choosing one over the other. Referring to the above example in the production of cars, the factory could choose to use more raw materials to produce more cars, or produce lesser cars at the expense of using lesser raw materials. Should this factory use less oil and metals which are used to produce the cars, money can be saved on these Capital Goods, which is the opportunity cost which comes off as a result of choosing to purchase more raw materials and produce more cars. However, on the other hand, the opportunity cost can be counted as the amount of money which is lost from the possible selling profits of cars which are produced from the Capital Goods. Thus, opportunity cost can be seen as the cost of possible profits to a business when choosing to produce more for profit, at the expense of spending more on Capital Goods, or perhaps save more as a safer alternative, at the expense of profits arising from the sale of more potentially producible Consumer Goods. The graph can thus represent a company choosing to have a higher Capital Goods to Consumer Goods ratio (point A), or a higher Consumer Goods to Capital Goods ratio (point C)..

In conclusion, it can be seen that the production possibility curve can be used in order to illustrate economic concepts such as scarcity, choice and opportunity cost, by comparing the production cost in terms of Capital Goods to the profits arising from Consumer Goods.