

## Case A.4

# Scarcity and Abundance

### Is lunch ever free?

The central economic problem is scarcity. But are all goods and services scarce? Is anything we desire truly abundant?

First, what do we mean by *abundance*? In the economic sense we mean something where supply exceeds demand at a *zero* price. In other words, even if it is free, there is no shortage. What is more, there must be no opportunity cost in supplying it. For example, if the government supplies healthcare free to the sick, it is still scarce in the economic sense because there is a cost to the government (and hence the taxpayer).

Two things that might seem to be abundant are air and water.

#### *Air*

In one sense air *is* abundant. There is no shortage of air to breathe for most people for most of the time.

But if we define air as clean, unpolluted air, then in some parts of the world it is scarce. In these cases, resources have to be used to make clean air available. If there is pollution in cities or near industrial plants, it will cost money to clean it up. The citizen may not pay directly – the cleaned-up air may be free to the ‘consumer’ – but the taxpayer or industry (and hence its customers) will have to pay.

Another example is when extractor fans have to be installed to freshen up air in buildings.

Even if you live in a non-polluted part of the country, you may well have spent money moving there to escape the pollution. Again there is an opportunity cost to obtain the clean air.

#### *Water*

Whether water is abundant depends again on where you live. It also depends on what the water is used for.

Water for growing crops in a country with plentiful rain *is* abundant. In drier countries, resources have to be spent on irrigation.

Water for drinking is not abundant. Reservoirs have to be built. The water has to be piped, purified and pumped.

#### *Question*

1. There is a saying in economics, ‘There’s no such thing as a free lunch’ (hence the subtitle for this case study). What does this mean?
2. Are any other (desirable) goods or services truly abundant?