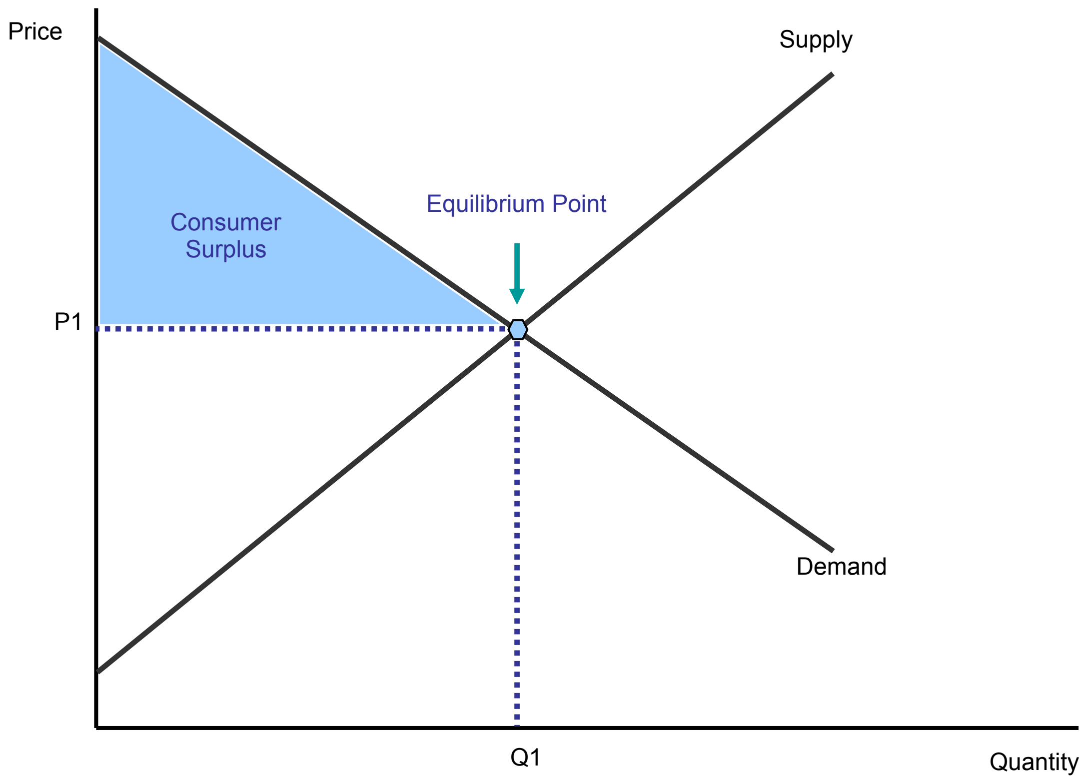
Consumer Surplus

When there is a difference between the price that you pay in the market and the value that you place on the product, then the concept of consumer surplus becomes a useful one to look at.

Consumer surplus is a measure of the **welfare** that people gain from the consumption of goods and services, or a measure of the benefits they derive from the exchange of goods.

Consumer surplus is the difference between the total amount that consumers are **willing and able to pay** for a good or service (indicated by the demand curve) and the total amount that they actually do pay (i.e. the market price). The level of consumer surplus is shown by the area under the demand curve and above the price as in the diagram below.

Consumer surplus is the difference between the price that a consumer is prepared to pay and the actual price paid

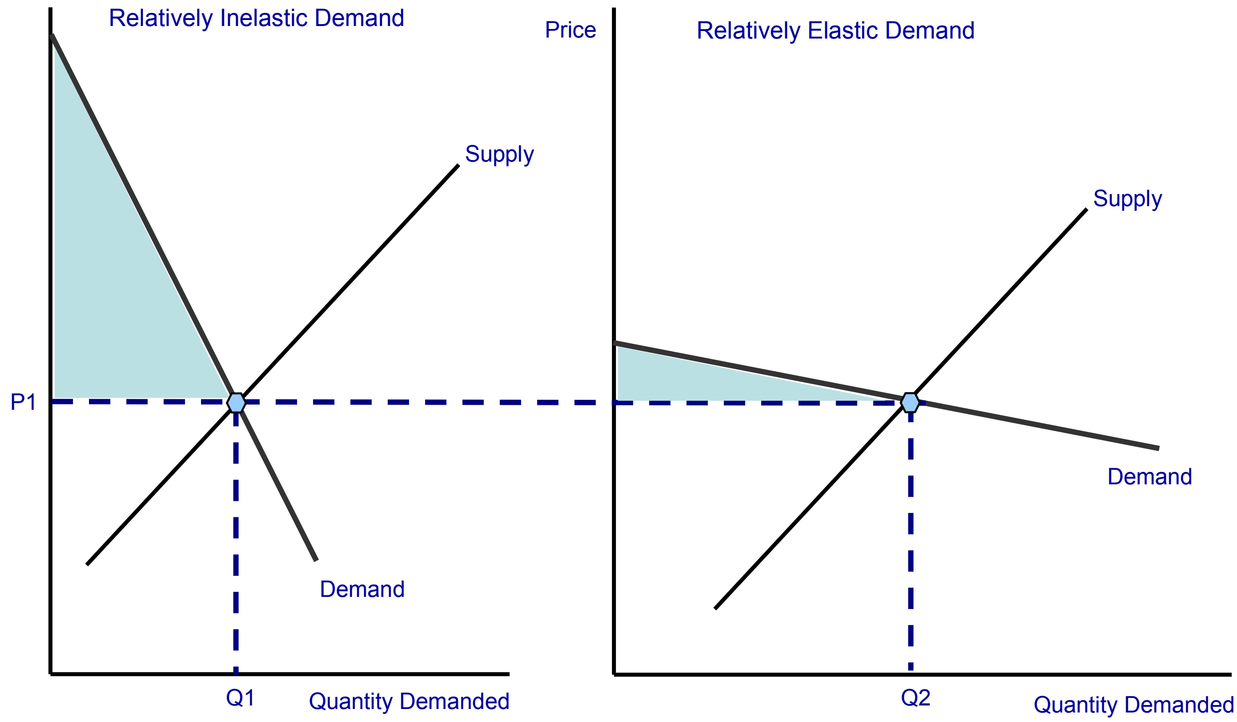


Consumer surplus and price elasticity of demand

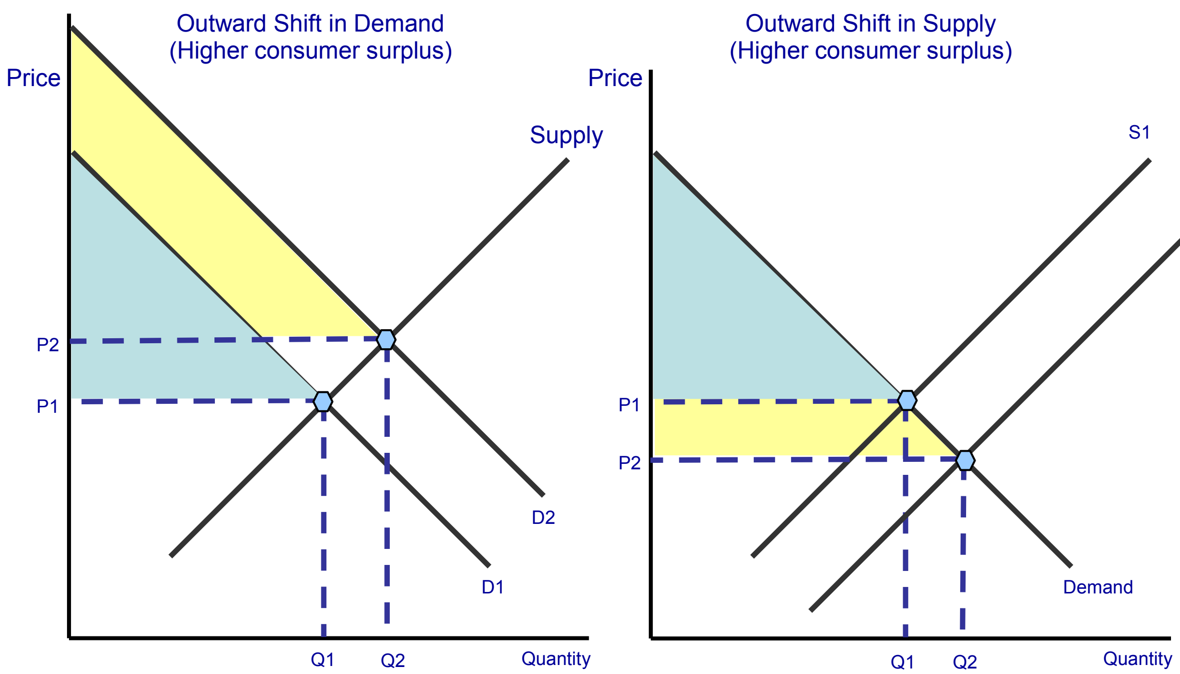
1. When the demand for a good or service is perfectly elastic, consumer surplus is zero because the price that people pay matches what they are willing to pay.

2. In contrast, when demand is perfectly inelastic, consumer surplus is infinite. Demand does not respond to a price change. Whatever the price, the quantity demanded remains the same. Are there any examples of products that have such a low price elasticity of demand?

3. The majority of demand curves are downward sloping. When demand is inelastic, there is a greater potential consumer surplus because there are some buyers willing to pay a high price to continue consuming the product. This is shown in the diagram below.



Changes in demand and consumer surplus



When there is a shift in the demand curve leading to a change in the equilibrium market price and quantity, then the level of consumer surplus will alter. This is shown in the diagrams above. In the left hand diagram, following an increase in demand from D1 to D2, the equilibrium market price rises to from P1 to P2 and the quantity traded expands. There is a higher level of consumer surplus because more is being bought at a higher price than before.

In the diagram on the right we see the effects of a **cost reducing innovation** which causes an outward shift of market supply, a lower price and an increase in the quantity traded in the market. As a result, there is an increase in consumer welfare shown by a rise in consumer surplus. Consumer surplus can be used frequently when analysing the impact of government intervention in any market – for example the effects of indirect taxation on cigarettes consumers or the introducing of road pricing schemes such as the London congestion charge.

Text calls and consumer welfare

The EU Competition Commission is capping the cost of mobile phone text messages as complaints rise that consumers are being ripped off. Their research finds that texting across borders carries a big price tag in Europe - British holidaymakers in Spain can pay up to €0.63 for a message home.

EU Telecoms commissioner Viviane Reding has decided that such charges are unjustified and should be capped at €0.11, down from an average price of €0.29 in the 27-member EU. "EU citizens should be free to text across borders without being ripped off," Reding said. "Roaming charges have already drained the wallets of mobile customers too much." 2.5 billion roaming messages sent every year by mobile users in the EU and they cost over 10 times more than the messages they send when at home.

Sources: Adapted from EU Commission press releases and newspaper reports

Price discrimination and consumer surplus

Producers often take advantage of consumer surplus when setting prices. If a business can identify groups of consumers within their market who are willing and able to pay different prices for the same products, then sellers use **price discrimination** – this is a way of turning consumer surplus into producer surplus, put simply to make higher revenues and profits.

Airlines and train companies are expert at this, extracting from consumers the price they are willing and able to pay for flying to different destinations are various times of the day, and exploiting **variations in elasticity of demand** for different types of passenger service. You will always get a better deal / price with airlines such as EasyJet and Ryan Air if you are prepared to book in advance. The airlines are happy to sell tickets more cheaply because they get the benefit of cash-flow together with the guarantee of a seat being filled. The nearer the time to take-off, the higher the price. If a businessman is desperate to fly from Newcastle to Paris in 24 hours time, his or her demand is said to be price inelastic and the corresponding price for the ticket will be much higher.

One of the main arguments against firms with **monopoly power** is that they exploit their monopoly position by raising prices in markets where demand is inelastic, extracting consumer surplus from buyers and increasing profit margins at the same time. We shall consider the issue of monopoly in more detail when we come on to our study of market failure.