

CIE Economics AS-level

Topic 2: Price System and the Microeconomy

f) Consumer and producer surplus

Notes



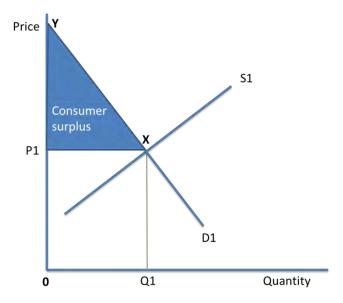






Consumer Surplus

This is the difference between the price the consumer is willing and able to pay and the price they actually pay. This is based on what the consumer perceives their **private benefit** will be from consuming the good.



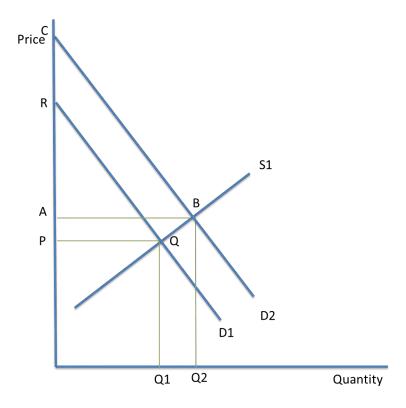
- Consumers pay price P1 and demand a quantity of Q1. This is shown by area P10Q1X. The total benefit to the consumer is area 0Q1XY, but because they pay price P10Q1X, the net gain to the consumer P1XY, the shaded triangle. This is consumer surplus.
- It is always the area above market price and below the demand curve.
- Due to the law of diminishing marginal utility, consumer surplus generally declines with extra units consumed. This is because the extra unit generates less utility than the one already consumed. Therefore, consumers are willing to pay less for extra units.
- Inelastic demand curves give a larger consumer surplus. This is because consumers are willing to pay a much higher price to consume the good.





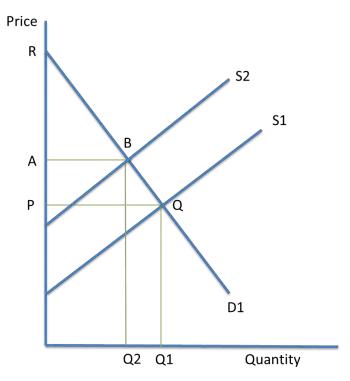


Increasing consumer surplus:



An increase in demand from D1 to D2 increases consumer surplus from PQR to ABC.

Decreasing consumer surplus:





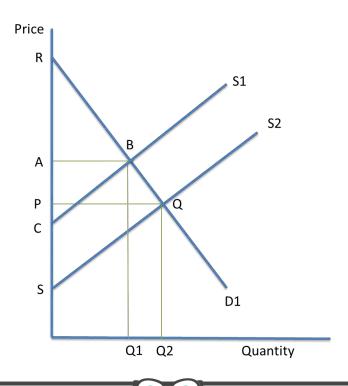
Supply has shifted to the left, which could be due to higher costs of production. This causes market price to increase, and consumer surplus decreases from PQR to ABR.

Producer Surplus

This is the difference between the price the producer is willing to charge and the price they actually charge. In other words, it is the private benefit gained by the producer that covers their costs, and is measured by profit.

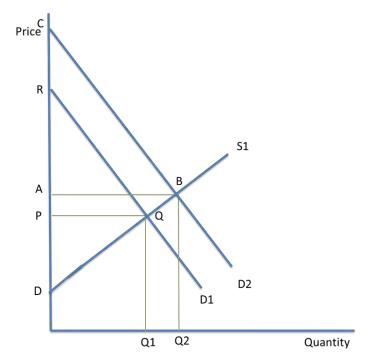


- $oxedsymbol{oxed}$ This is always the area below the market price and above the supply curve.
- Increasing producer surplus:

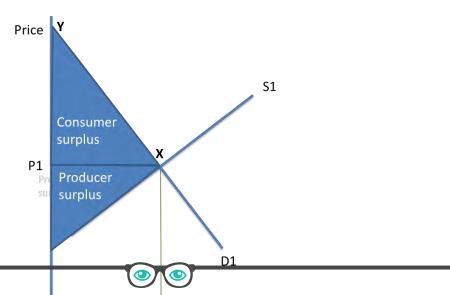




- This is caused by a shift in the supply curve from S1 to S2, which could be due to lower average production costs, for example. Therefore market price decreases and producer surplus increases.
- Producer surplus increases from ABC to PQS.
- This could also be due to an increase in demand which causes price to increase.



- Producer surplus increases from area PQD to ABD.
- Economic Welfare





- This is the total benefit society receives from an economic transaction.
- It is calculated by the area of producer surplus and consumer surplus added together.
- It is important when considering the effects of government policies, which could affect either producer or consumer surplus.



