

WJEC (Wales) Economics
AS-level
Microeconomics

Topic 2: Demand and Supply in
Product Markets

2.3 Consumer and producer surplus

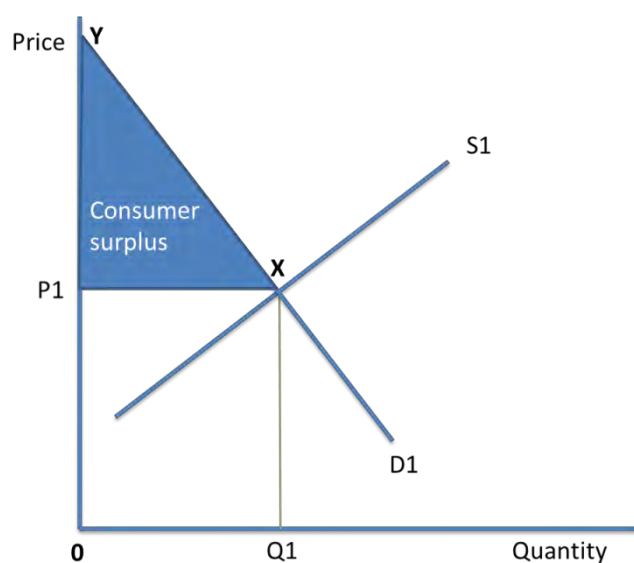
Notes



- 📖 Consumer and producer surplus are both maximised at the free market equilibrium.

📖 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 P_1 and demand a quantity of Q_1 . This is shown by area P_1OQ_1X . The total benefit to the consumer is area OQ_1XY , but because they pay price P_1OQ_1X , the net gain to the consumer P_1XY , 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.

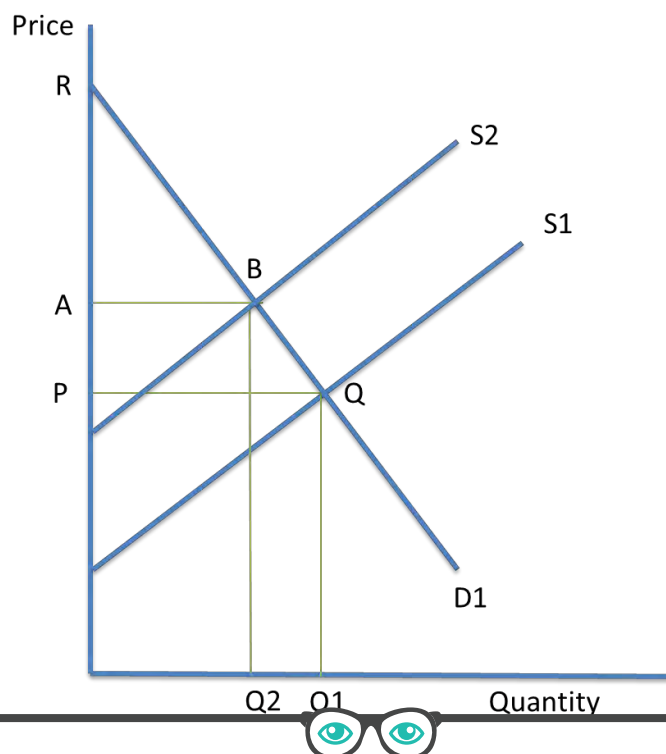



Increasing consumer surplus:




 An increase in demand from D_1 to D_2 increases consumer surplus from PQR to ABC .

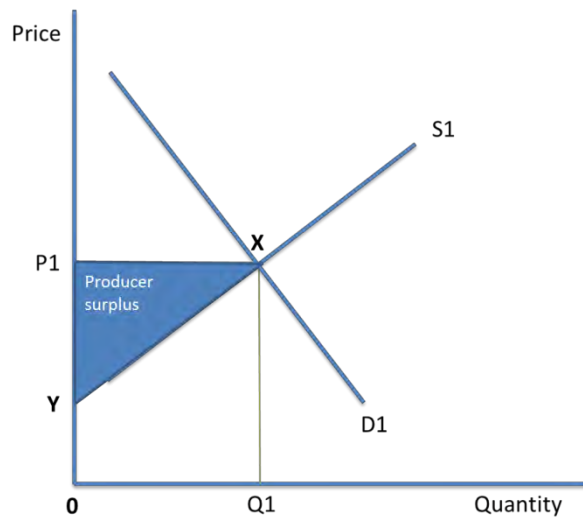
Decreasing consumer surplus:



 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.

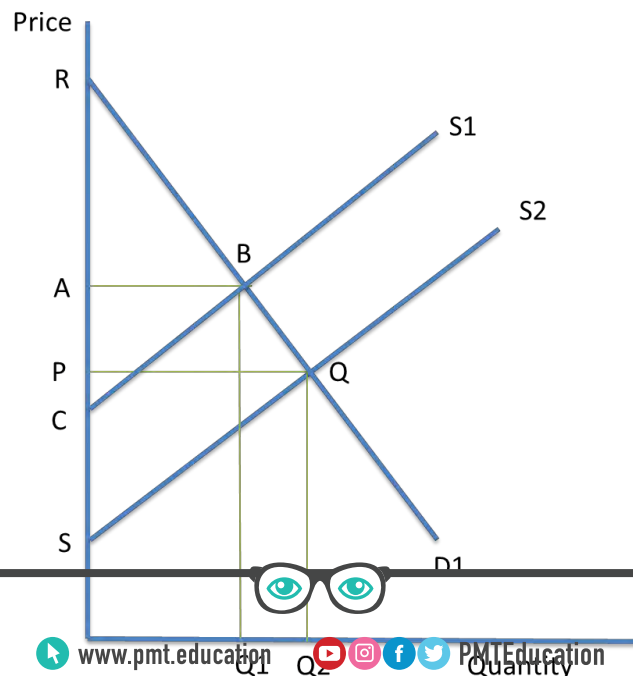
Producer Surplus


 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.





 This is always the area below the market price and above the supply curve.

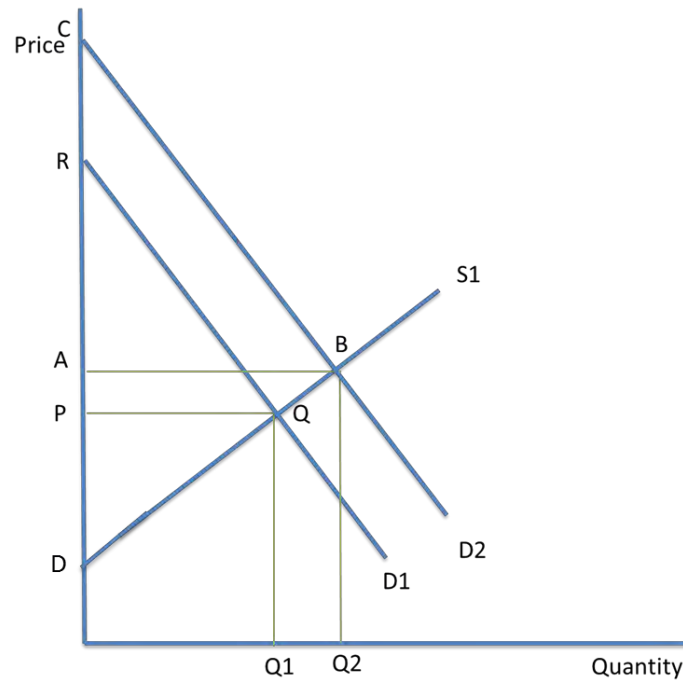
Increasing producer surplus:




 This is caused by a shift in the supply curve from S_1 to S_2 , 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 .

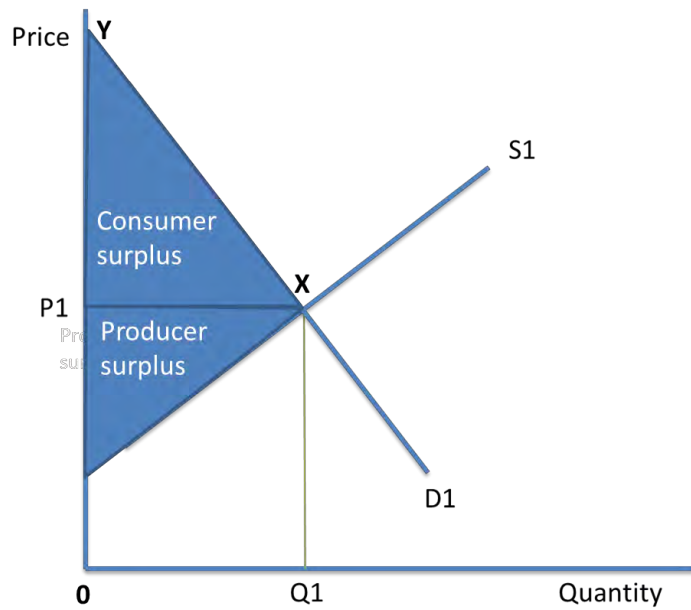
 This could also be due to an increase in demand which causes price to increase.






 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.

