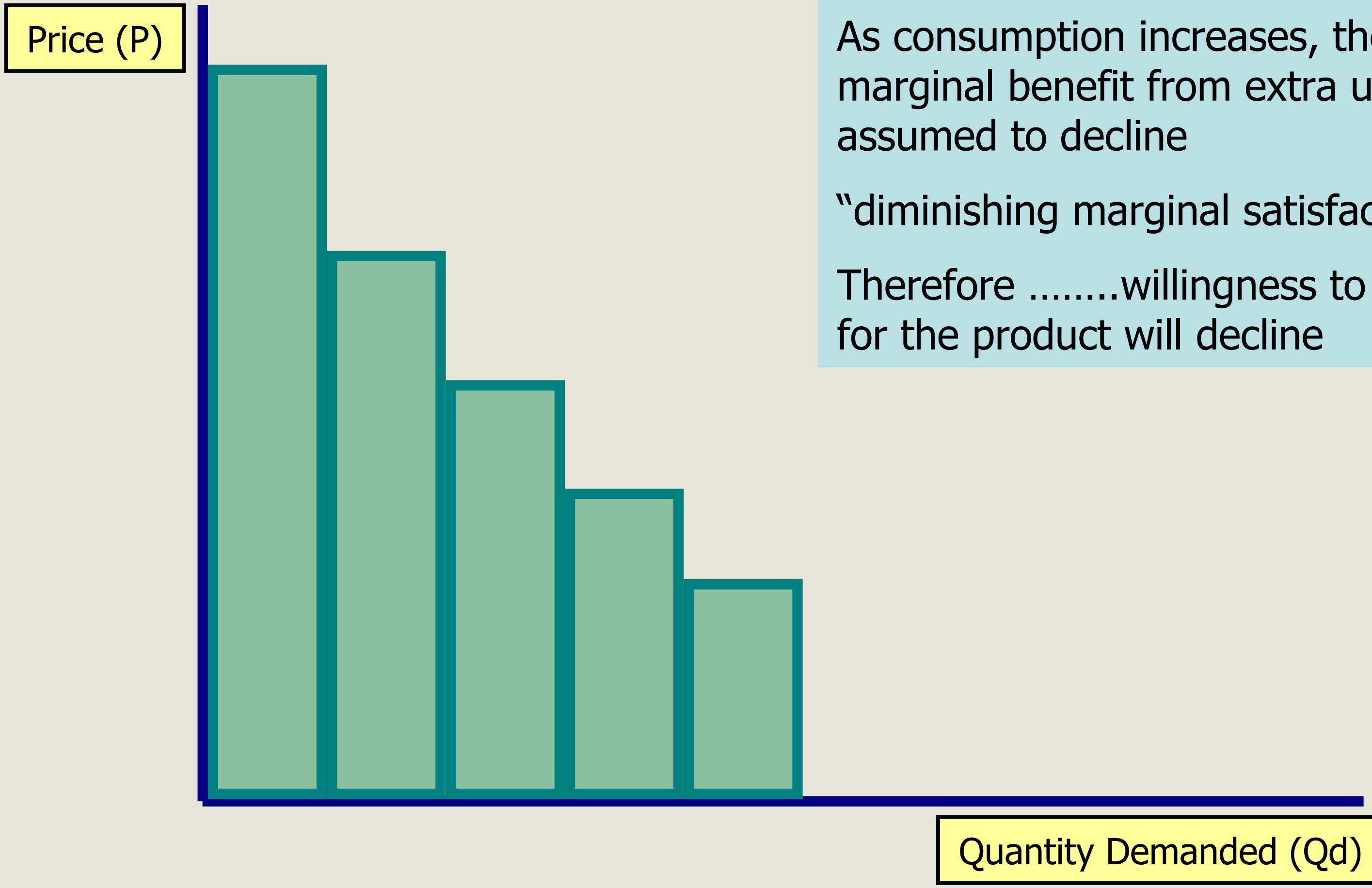
Consumer and Producer Surplus

Consumer and producer surplus are important concepts to use when discussing economic welfare. This presentation looks at each concept and their application to market conditions

Value, Price and Surplus

- What does "getting value for money mean"?
  - Value: - what we get from consuming a good or service
  - Price: - what we pay for the right to consume something
- Value:
  - The private marginal benefit is the gain in satisfaction (utility) from consuming an extra unit of a product
  - As consumption rises, we assume that the marginal benefit falls
  - The demand curve is the marginal benefit curve
  - As marginal benefit falls – so we are willing to pay less for the next unit – suppliers have to tempt us with lower prices to persuade us to buy more
- But consumers don't always have to pay the maximum price they are willing to pay
  - When was the last time you got a genuine "bargain"?

Willingness to Pay

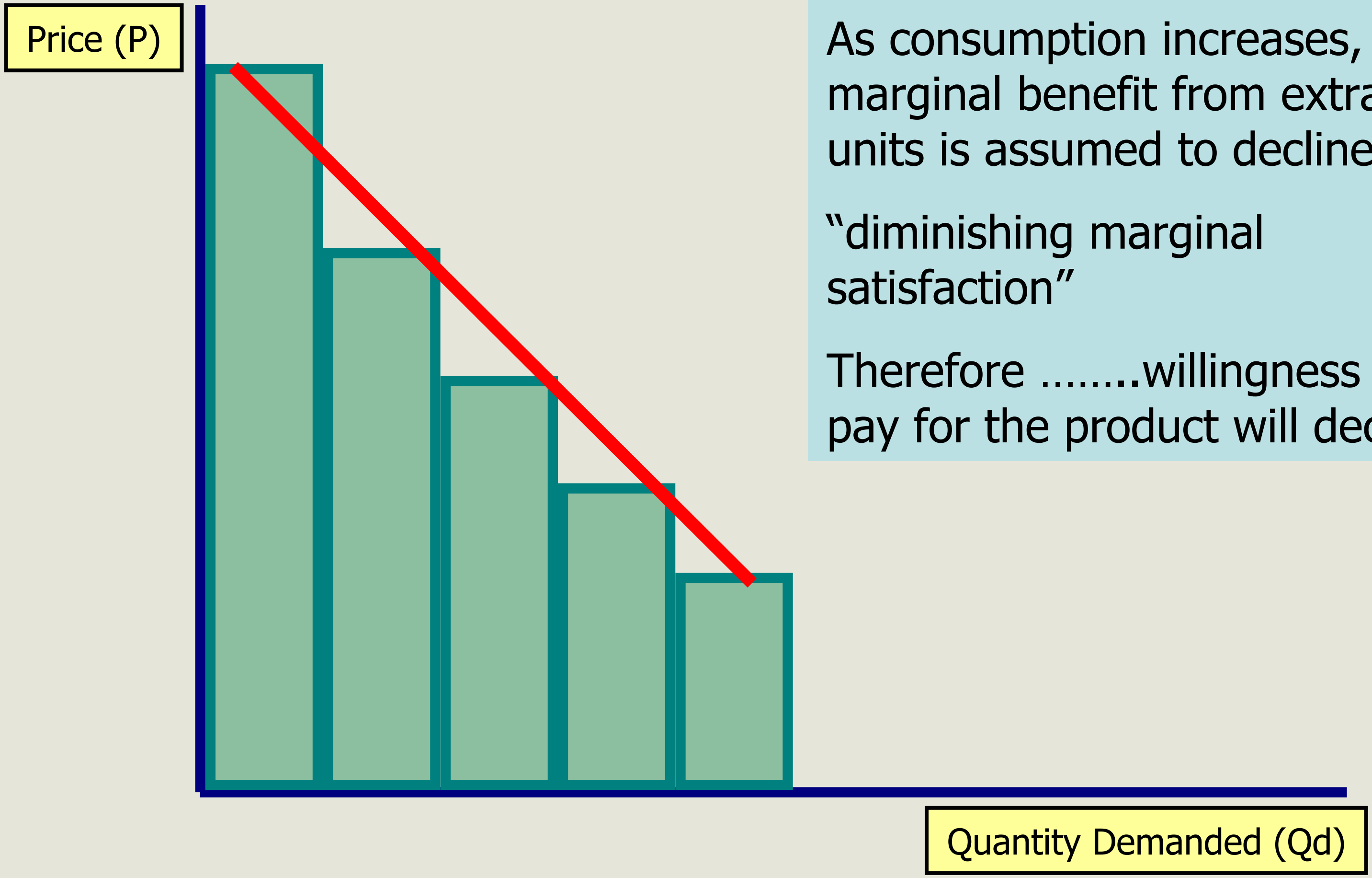


As consumption increases, the marginal benefit from extra units is assumed to decline

"diminishing marginal satisfaction"

Therefore ……..willingness to pay for the product will decline

Deriving the Demand Schedule



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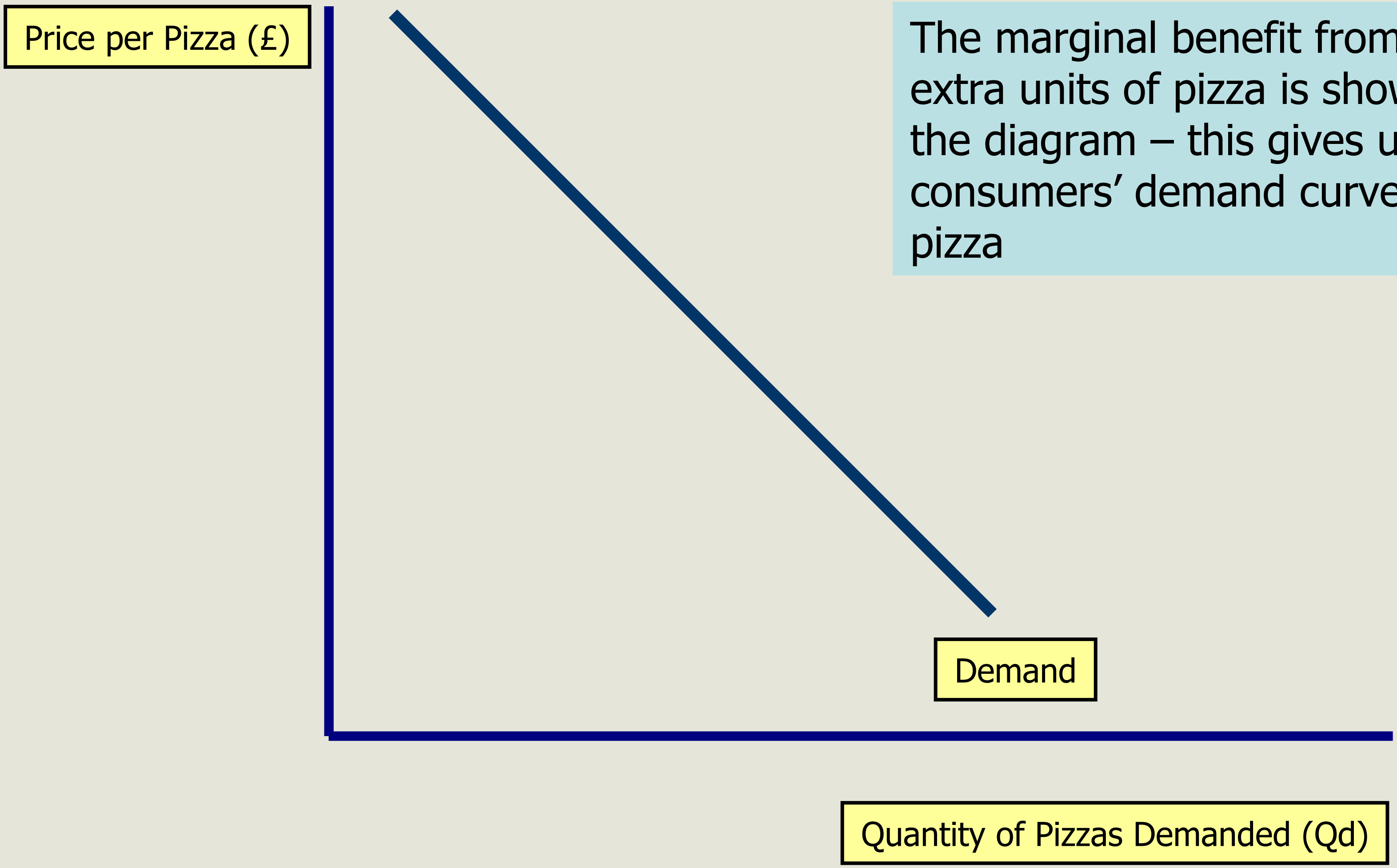
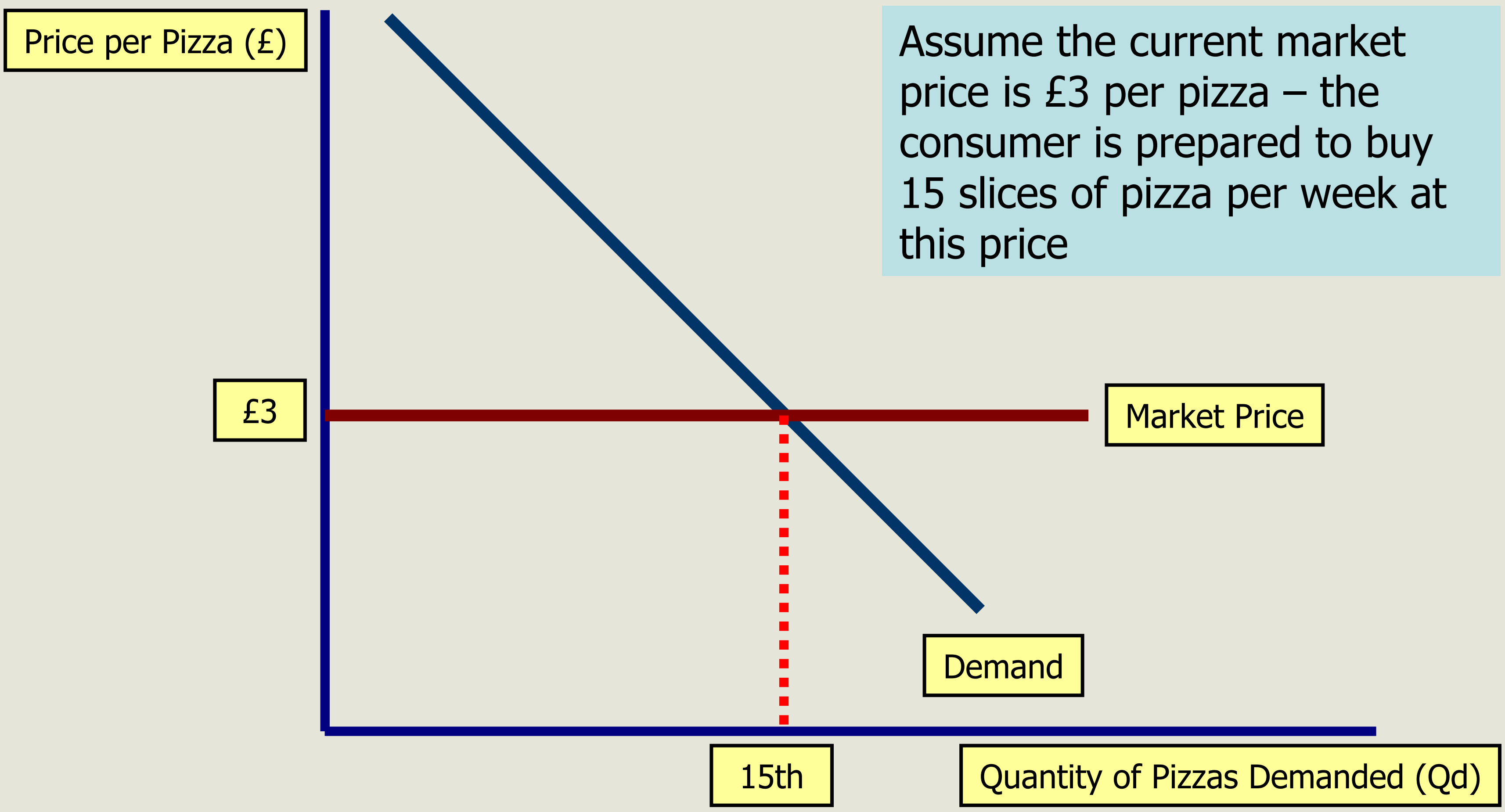
Demand and Consumer Surplus



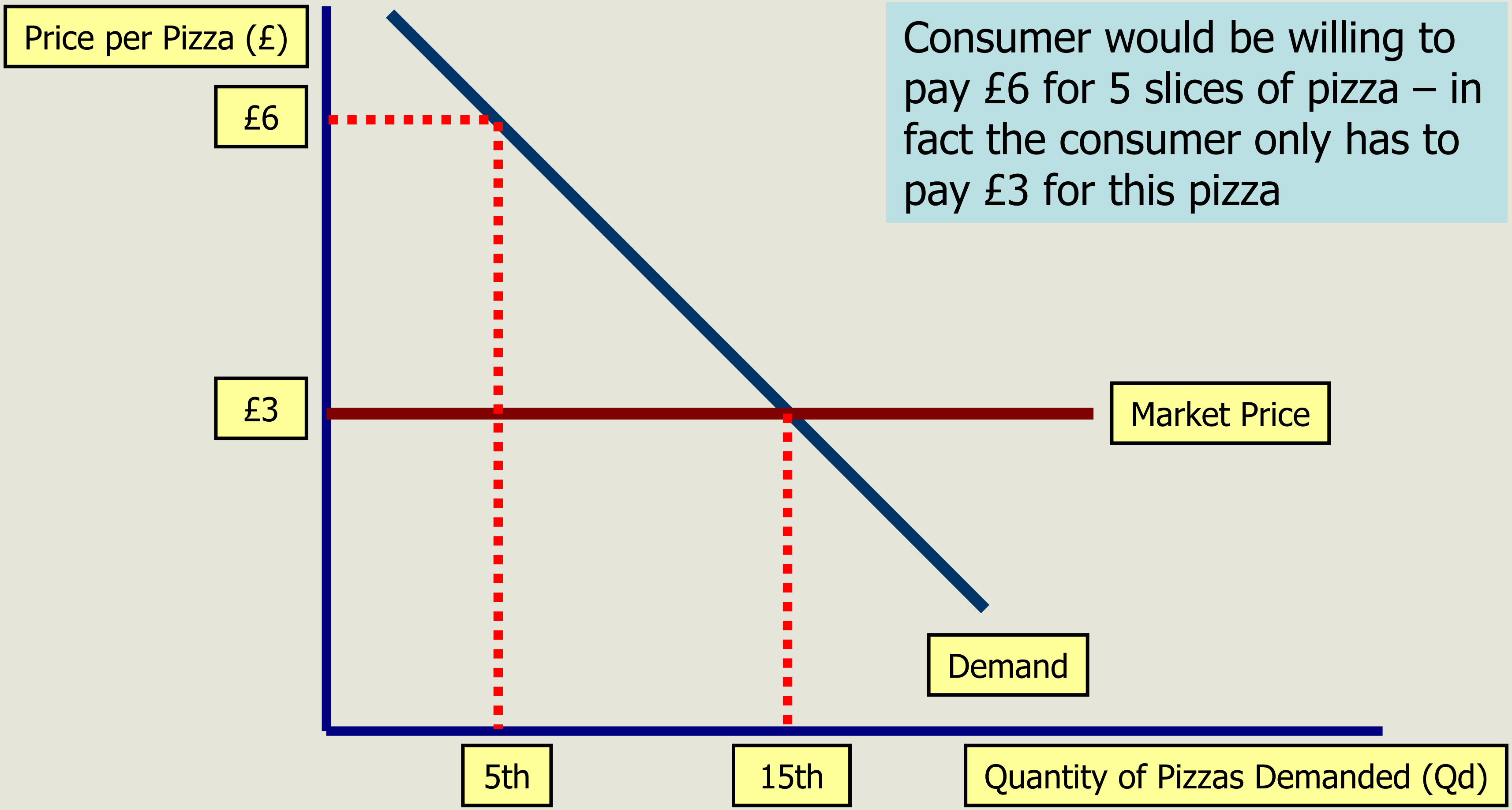
The marginal benefit from extra units of pizza is shown in the diagram – this gives us the consumers' demand curve for pizza

Demand and Consumer Surplus



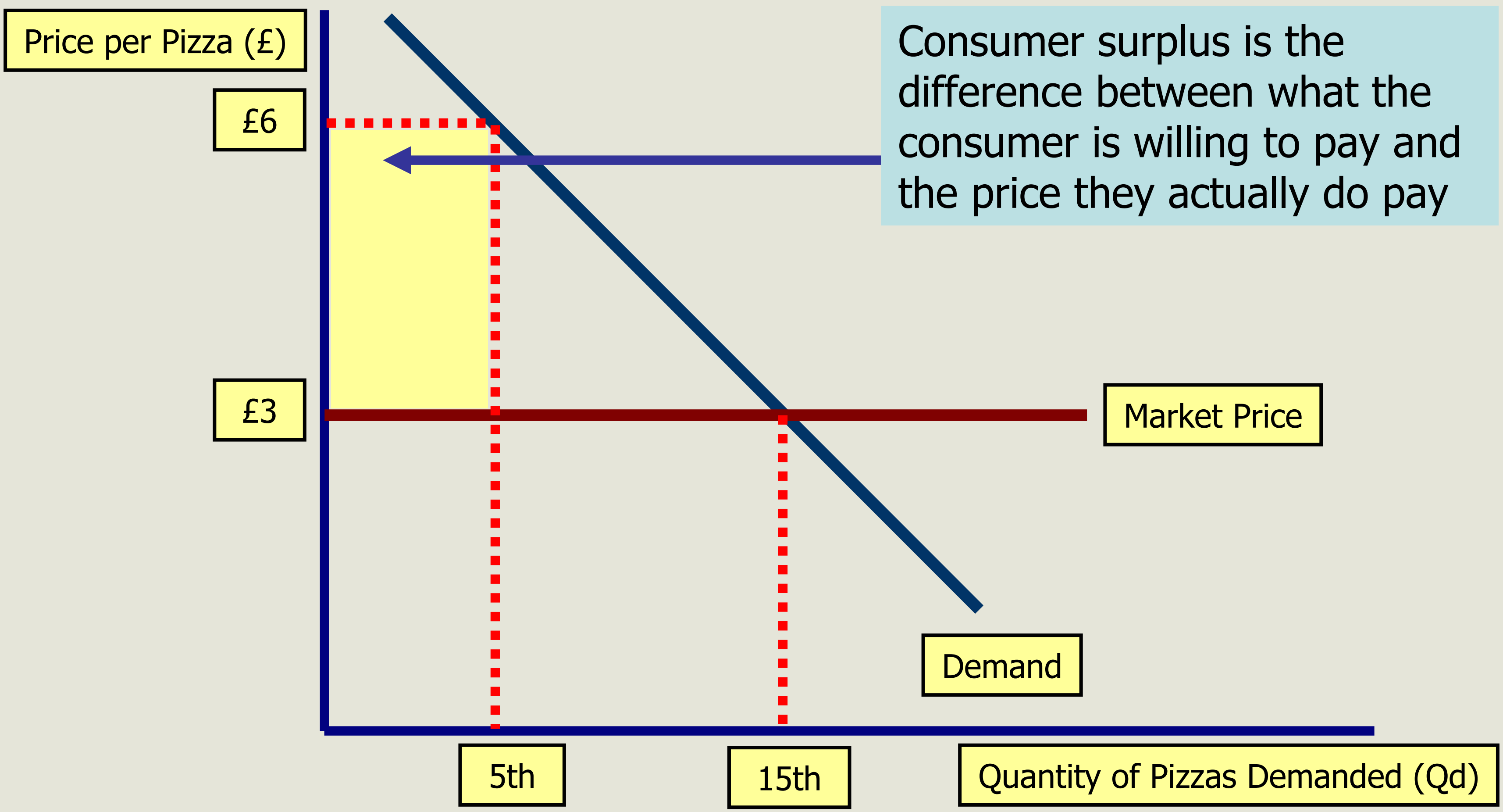
Assume the current market price is £3 per pizza – the consumer is prepared to buy 15 slices of pizza per week at this price

Demand and Consumer Surplus

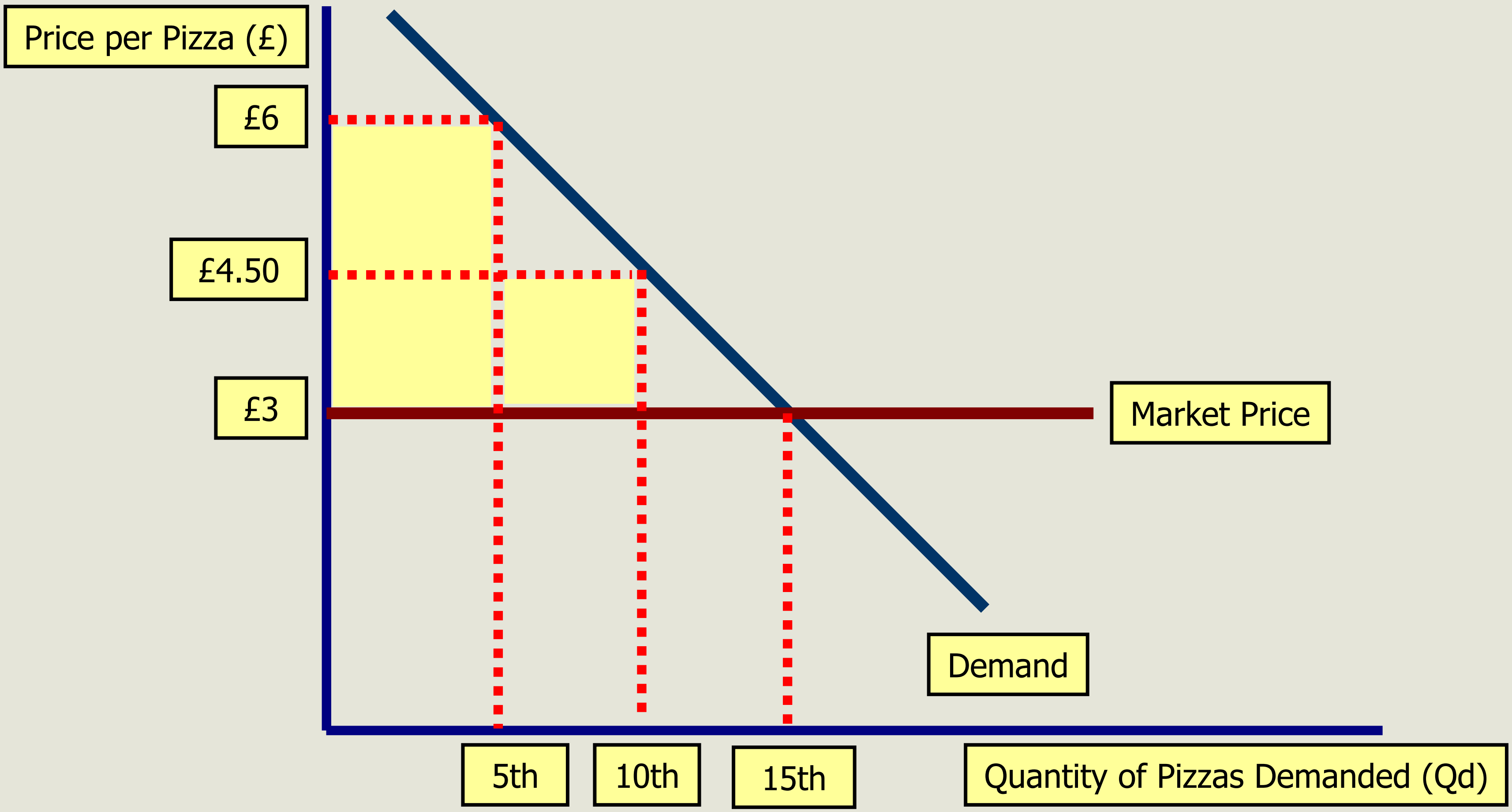


Consumer would be willing to pay £6 for 5 slices of pizza – in fact the consumer only has to pay £3 for this pizza

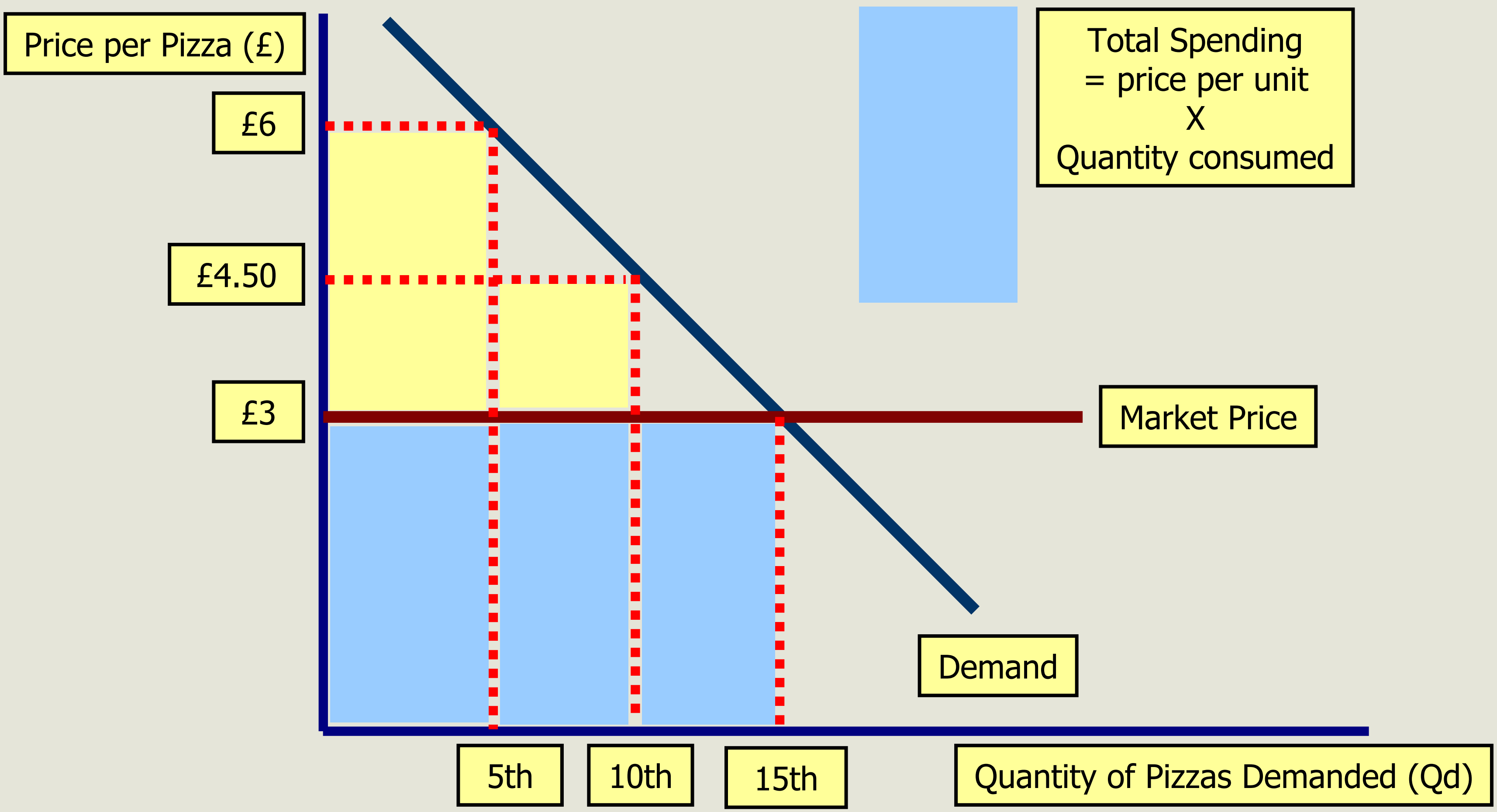
Demand and Consumer Surplus



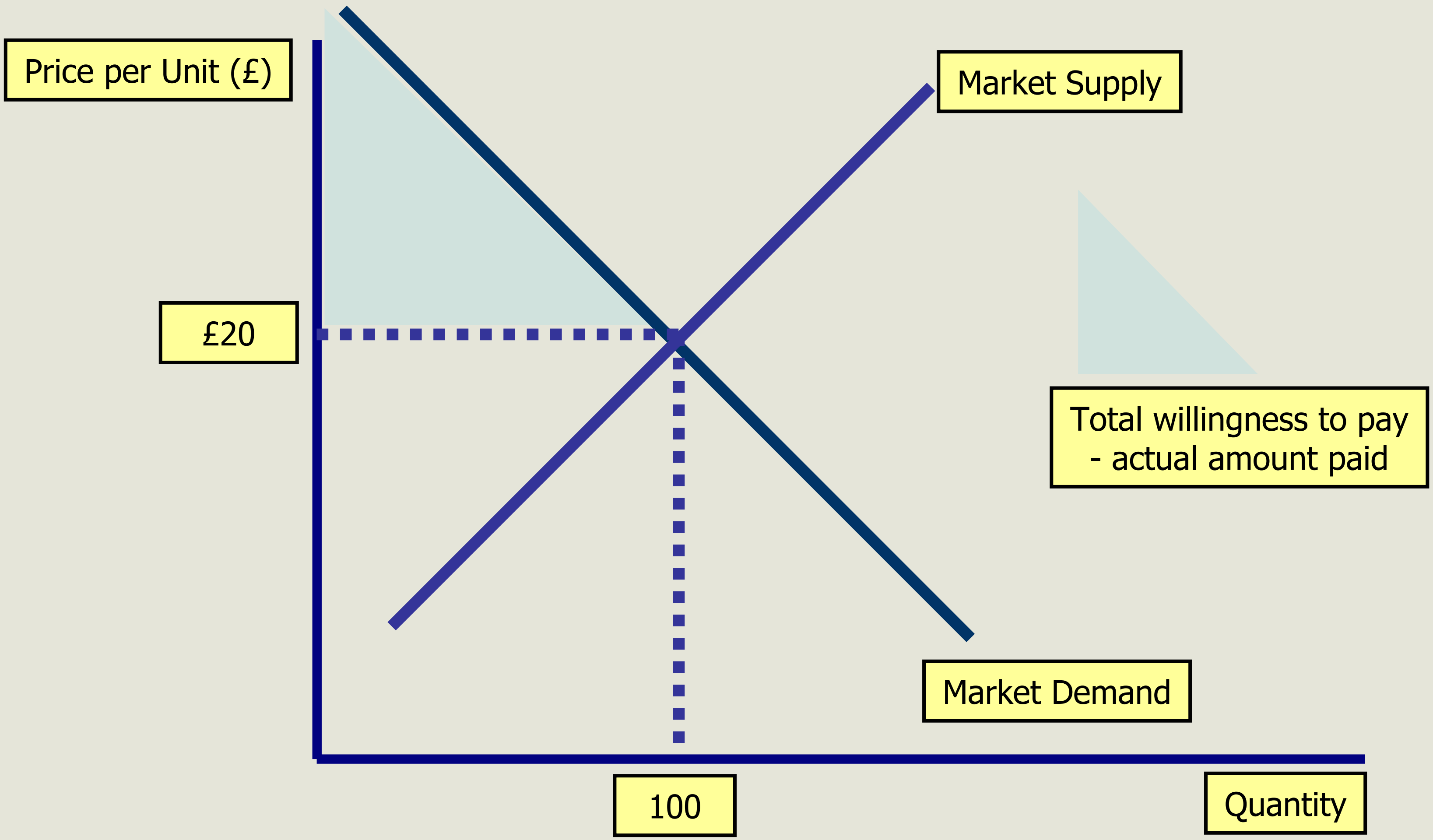
Demand and Consumer Surplus



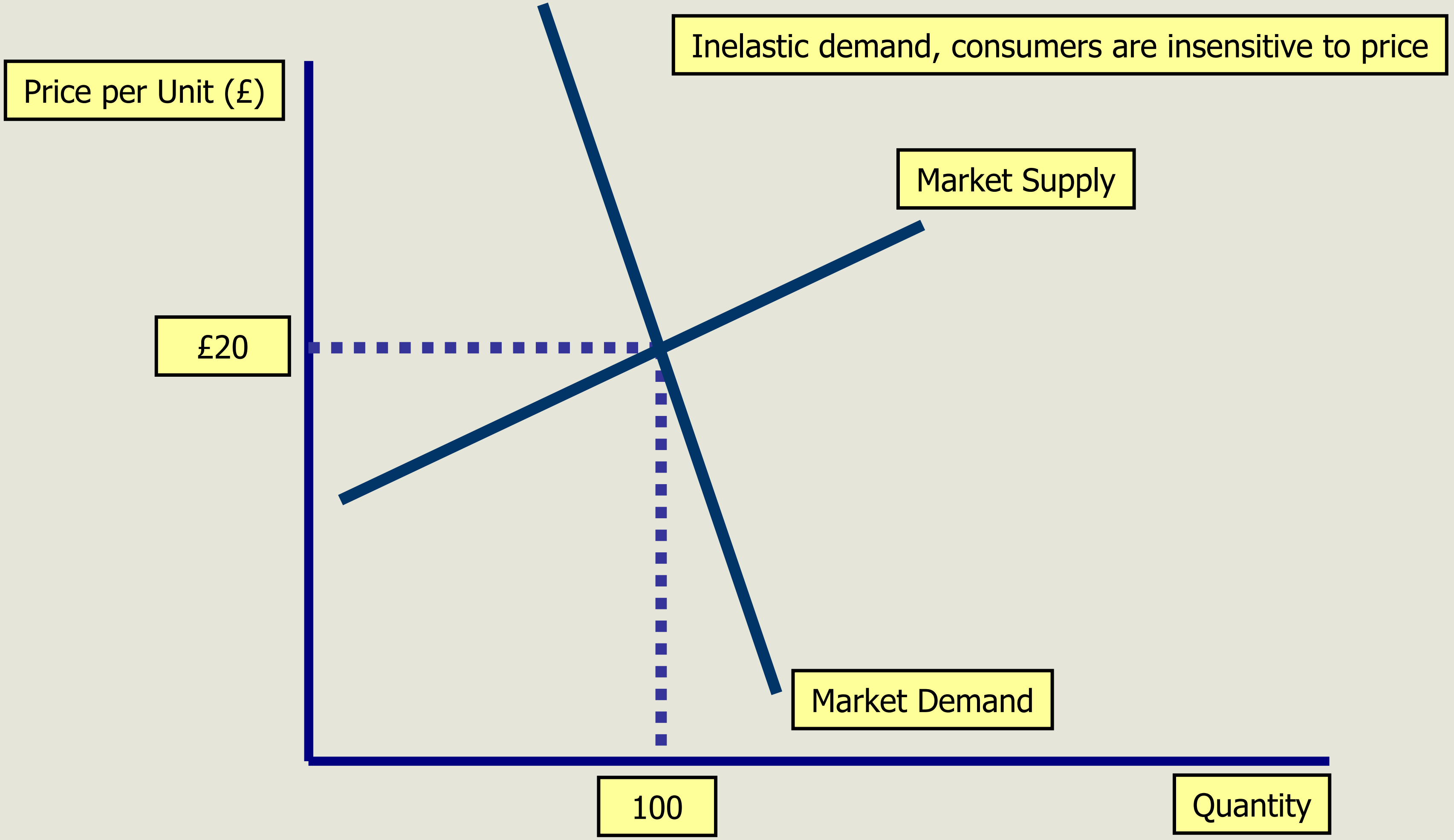
Total Expenditure and Consumer Surplus



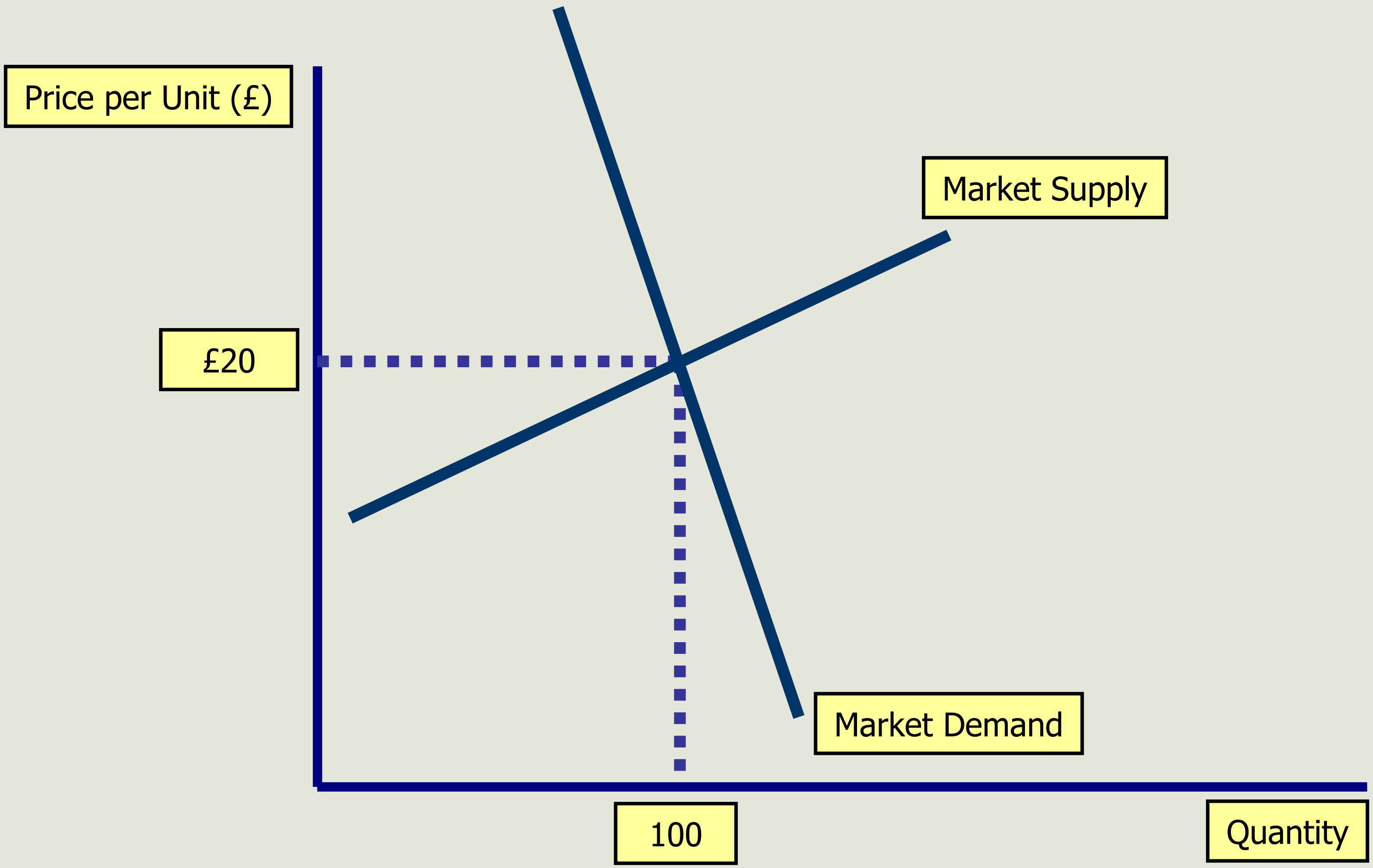
Consumer Surplus at the Equilibrium Price



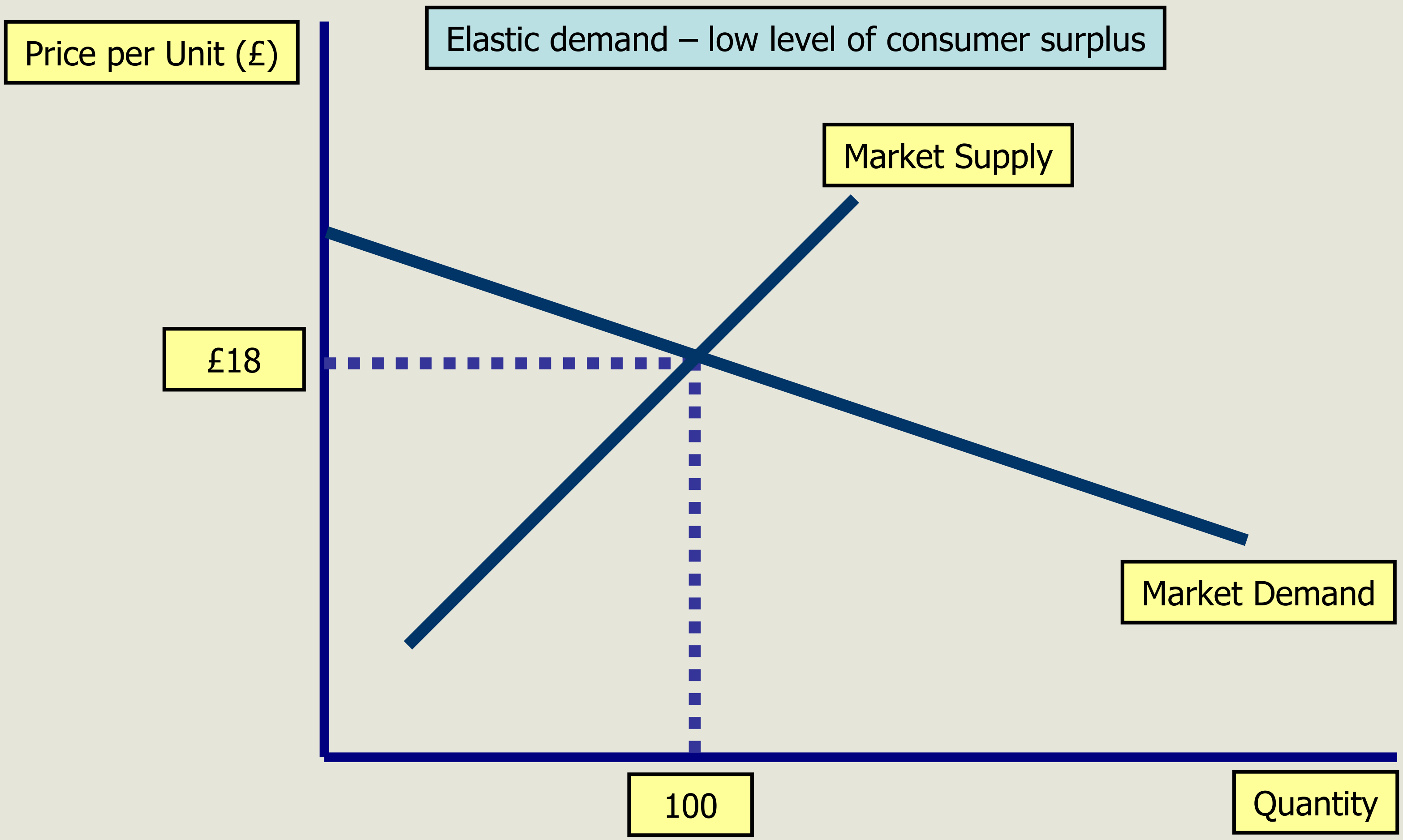
Consumer Surplus and Price Elasticity of Demand



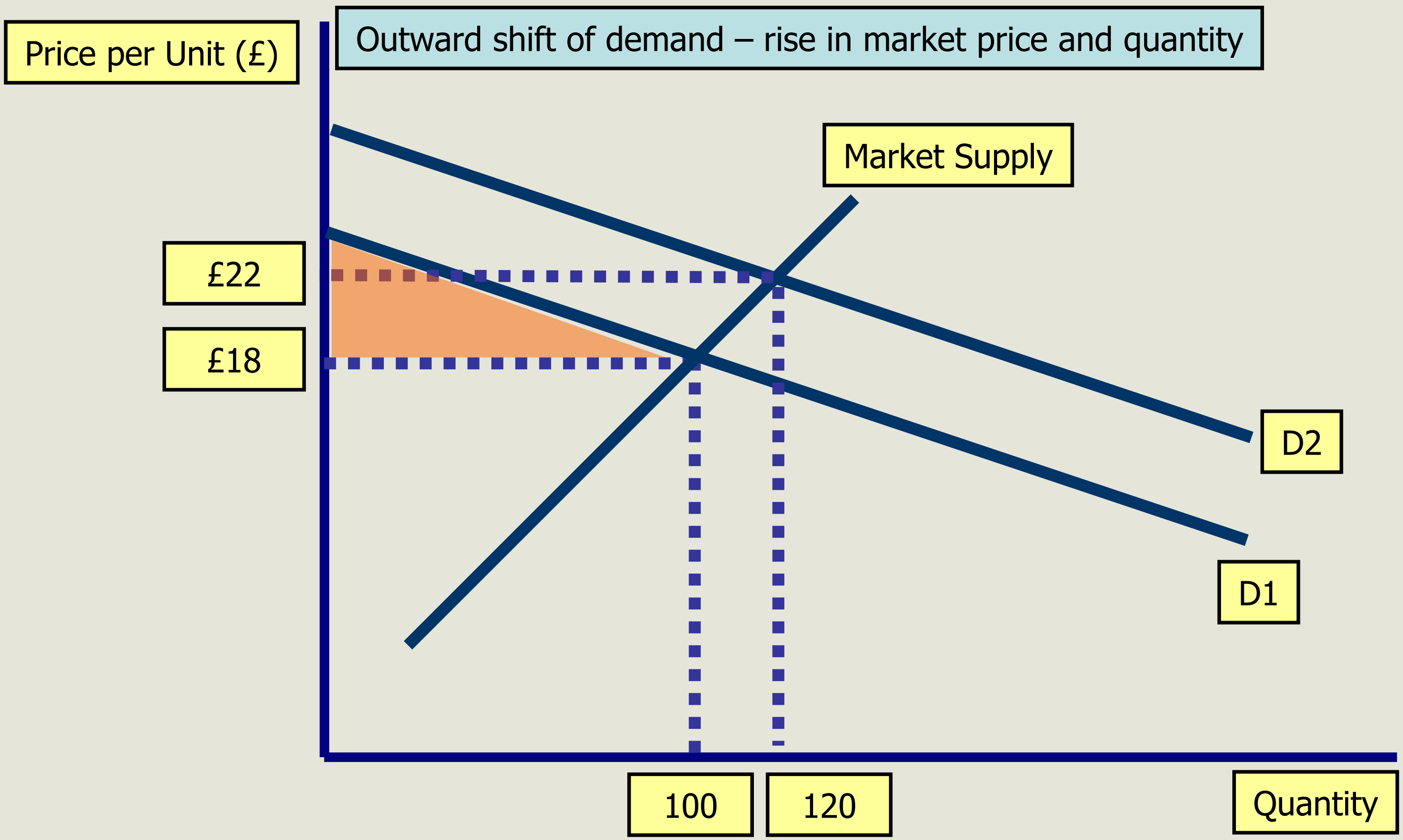
An Inelastic Demand – High Level of Consumer Surplus



Elastic Demand – a Lower Willingness to Pay



An Outward Shift in Consumer Demand



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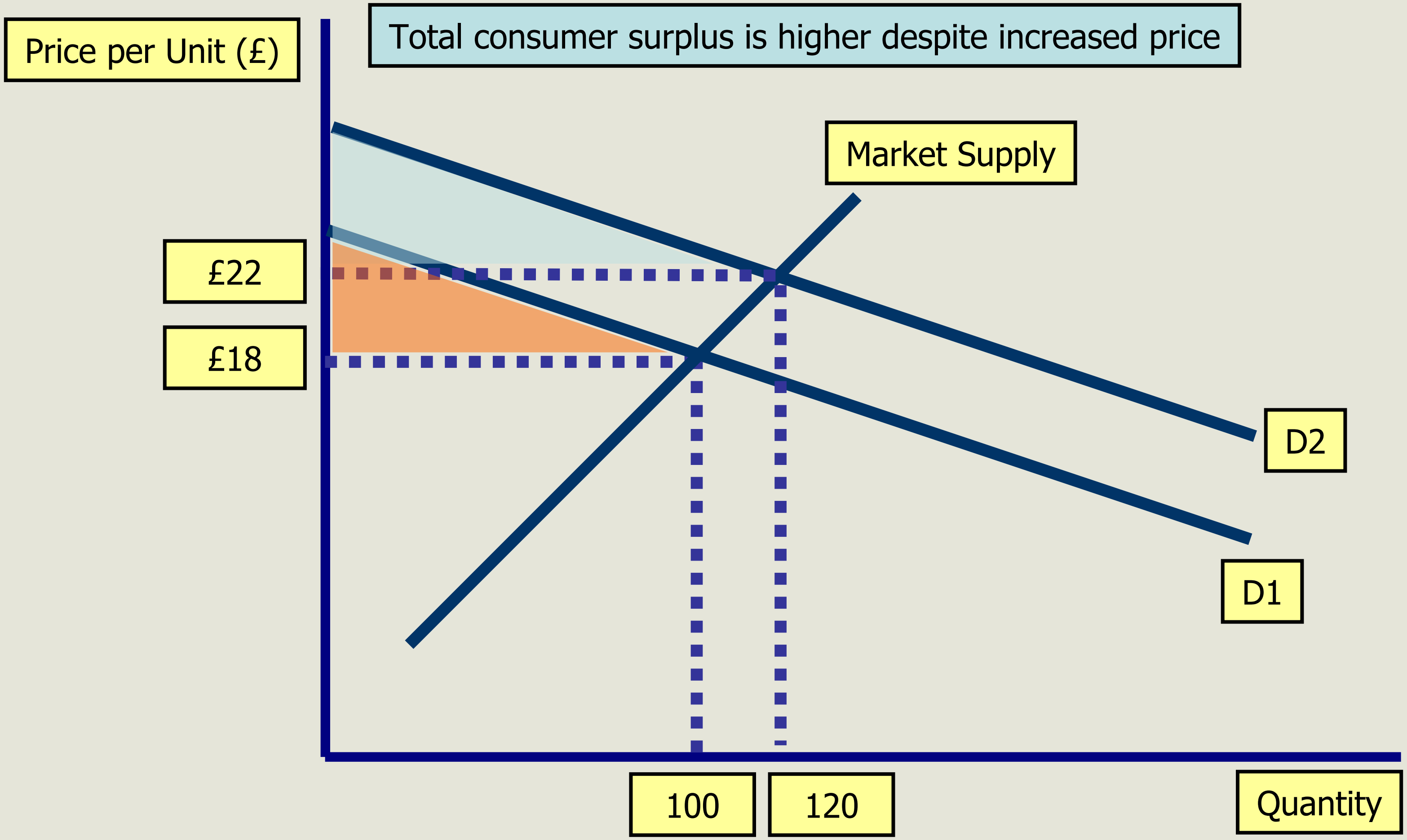
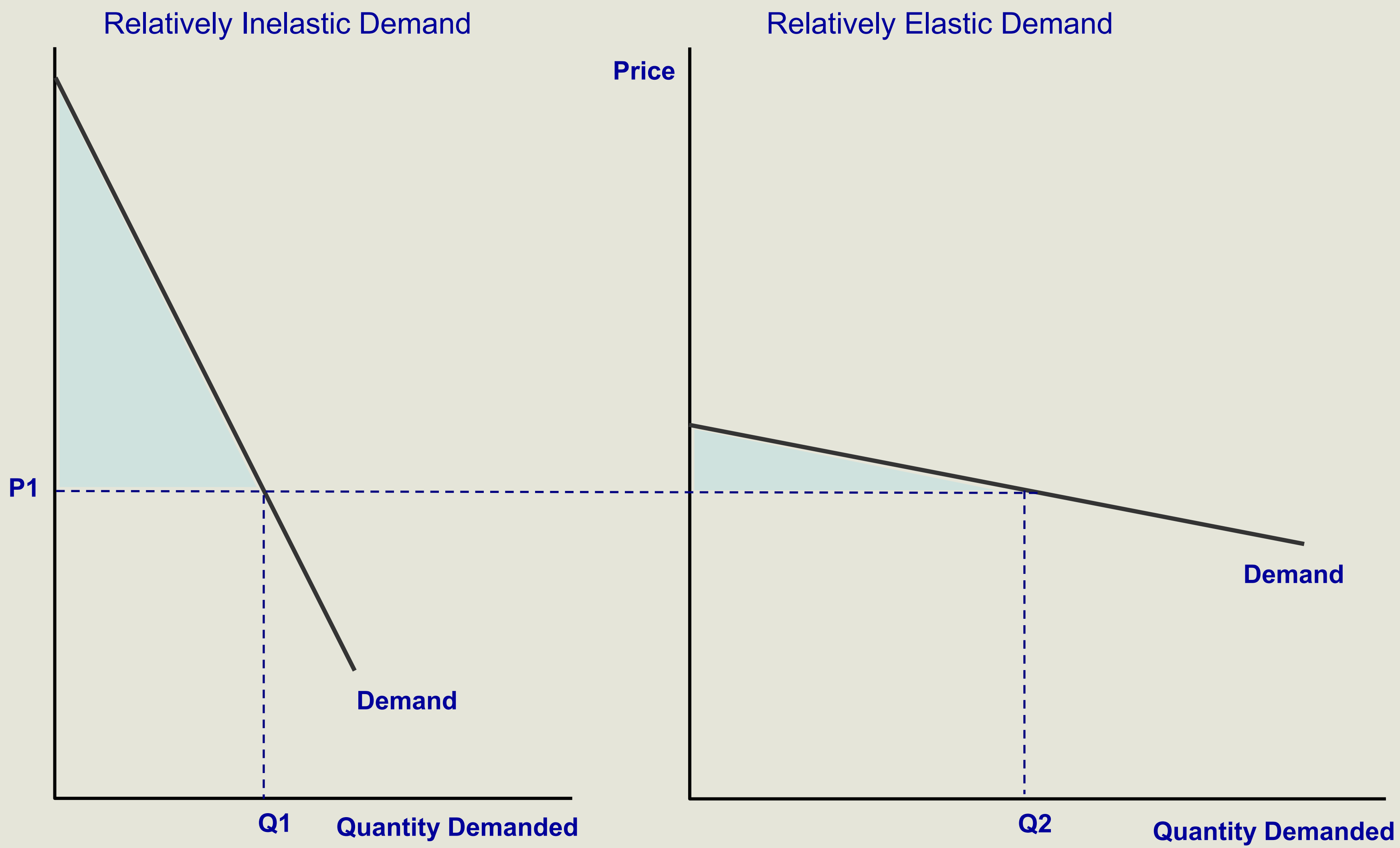


Consumer Surplus

- 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 pay (the market price)
- The level of consumer surplus is shown by the area under the demand curve and above the ruling market price

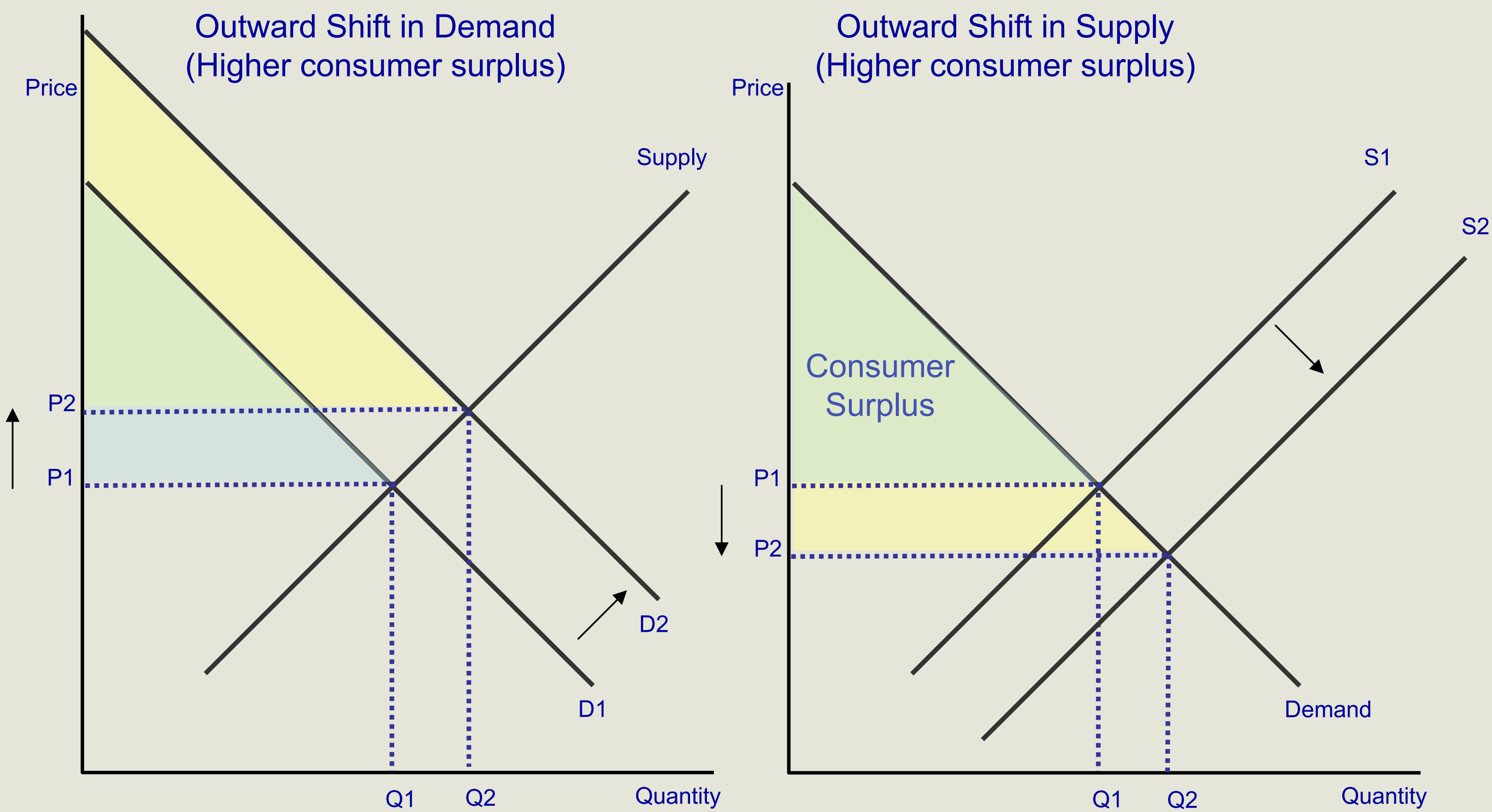
Consumer surplus and elasticity of demand



Consumer surplus and elasticity

- When the demand for a product is perfectly elastic, consumer surplus is zero because the price that people pay matches precisely the price they are willing to pay
- This is most likely to happen in perfectly competitive markets where each individual firm is a ‘price taker’ in their chosen market and must sell as much as it can at the ruling market price
- In contrast, when demand is perfectly inelastic, consumer surplus is infinite. Demand is totally invariant to a price change. Whatever the price, the quantity demanded remains the same

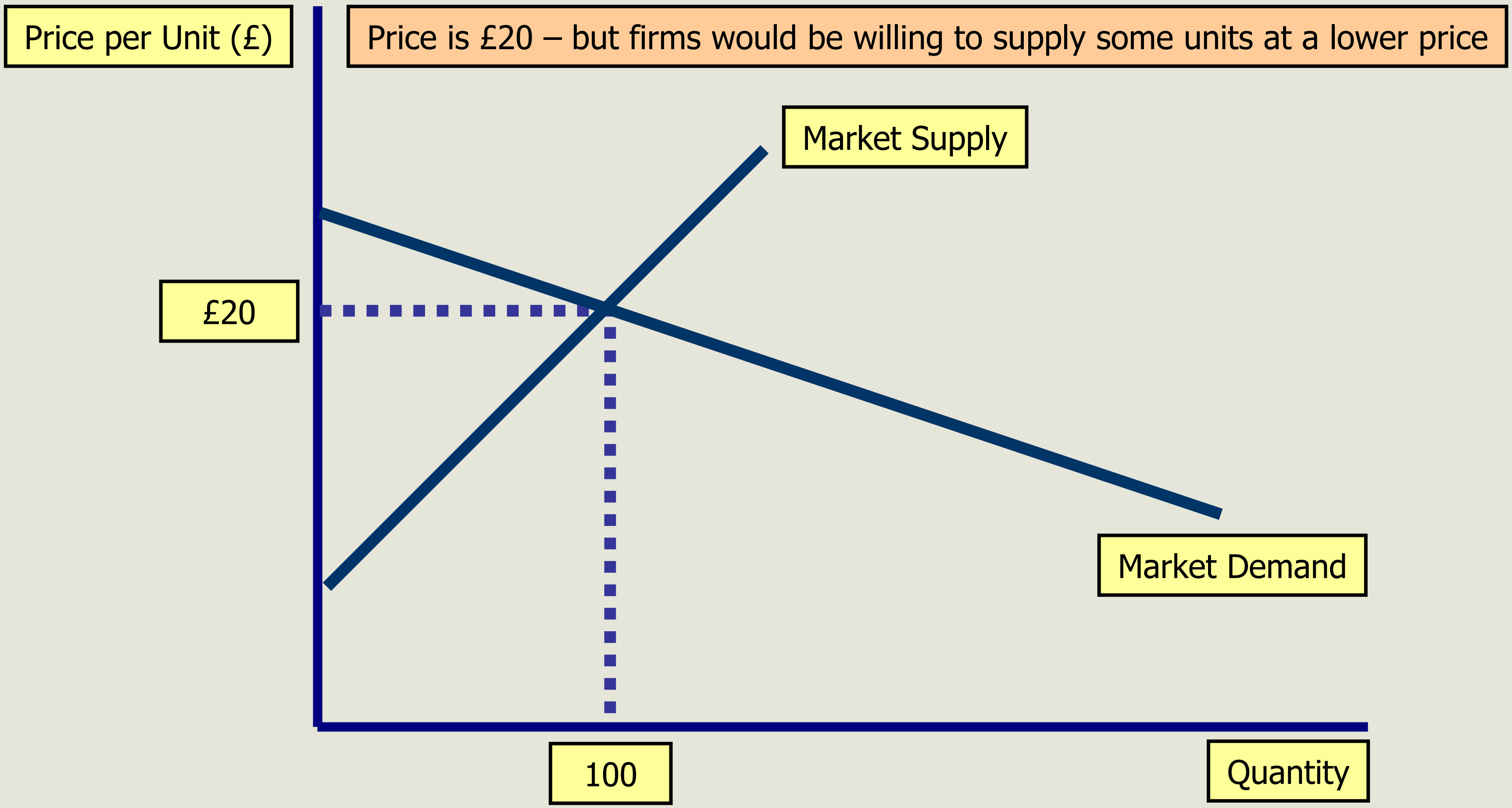
Shifts in demand and consumer surplus



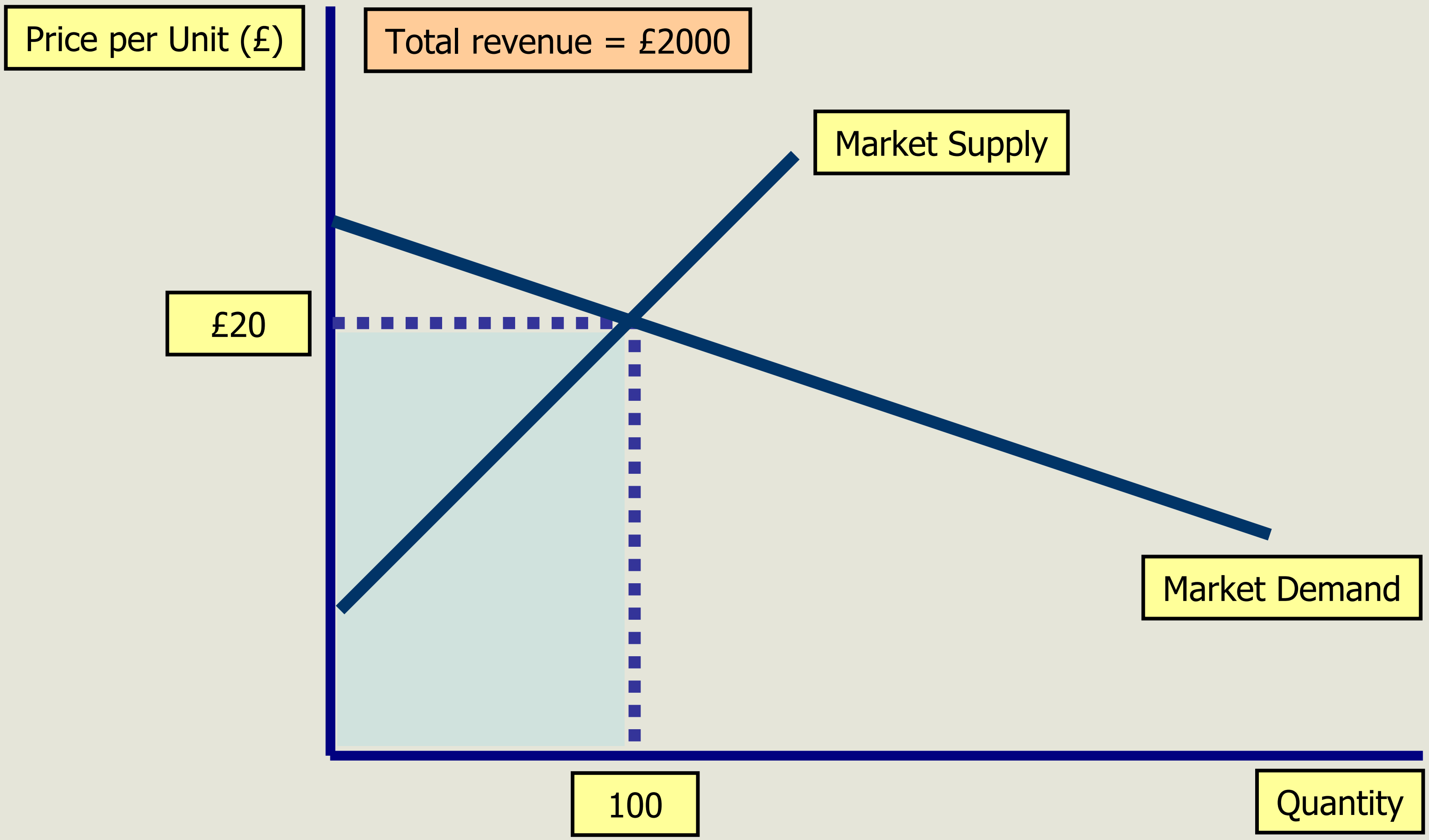
Producer Surplus

- Producer surplus is a measure of producer welfare. It is measured as the difference between what producers are willing and able to supply a good for and the price they actually receive
- The level of producer surplus is shown by the area above the supply curve and below the market price
- The minimum price that the firm requires to supply to the market is shown by where the supply curve cuts the y-axis
- As market price rises, (perhaps due to an increase in demand) so supply expands (we move up the supply curve)

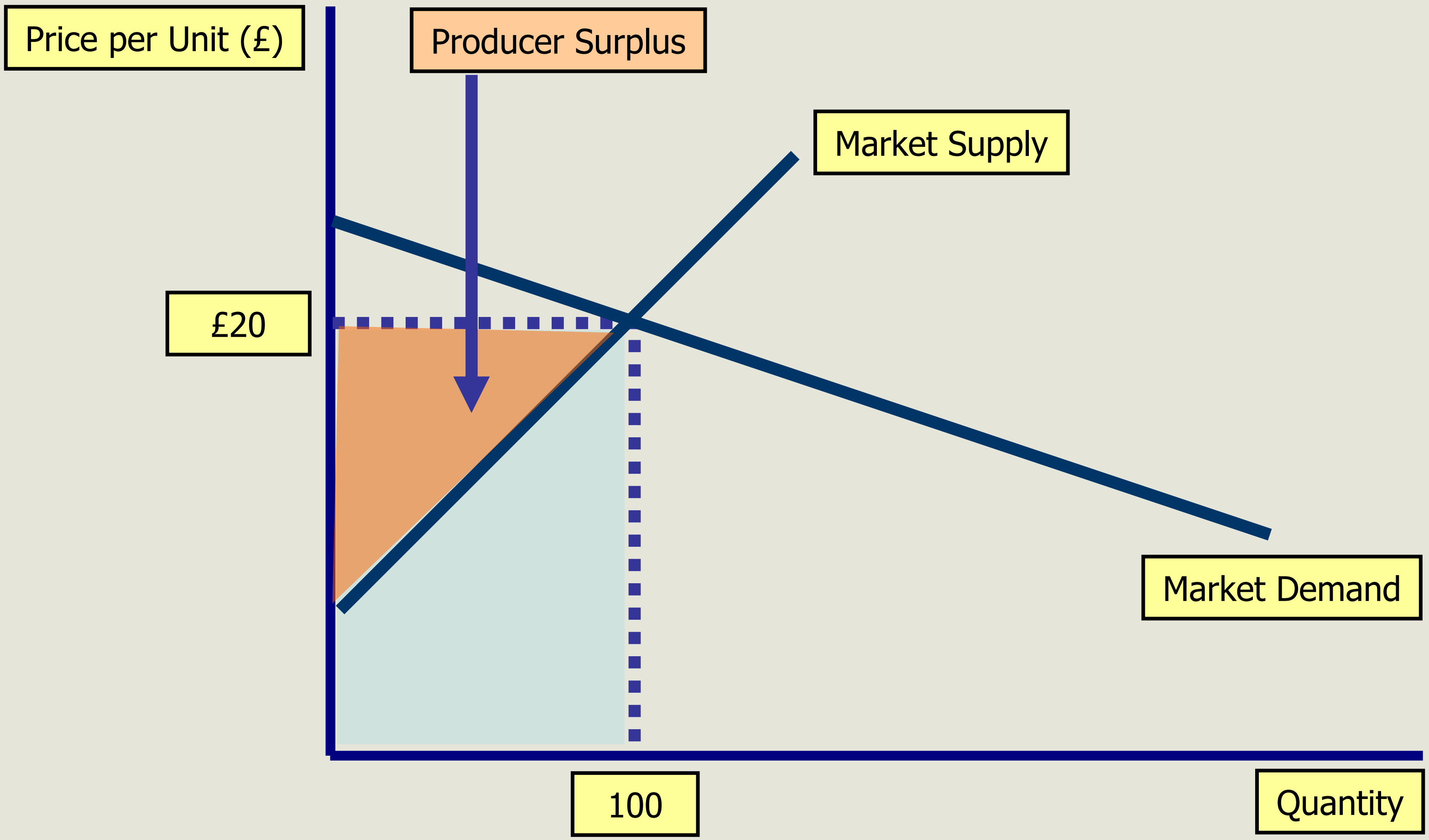
Showing Producer Surplus



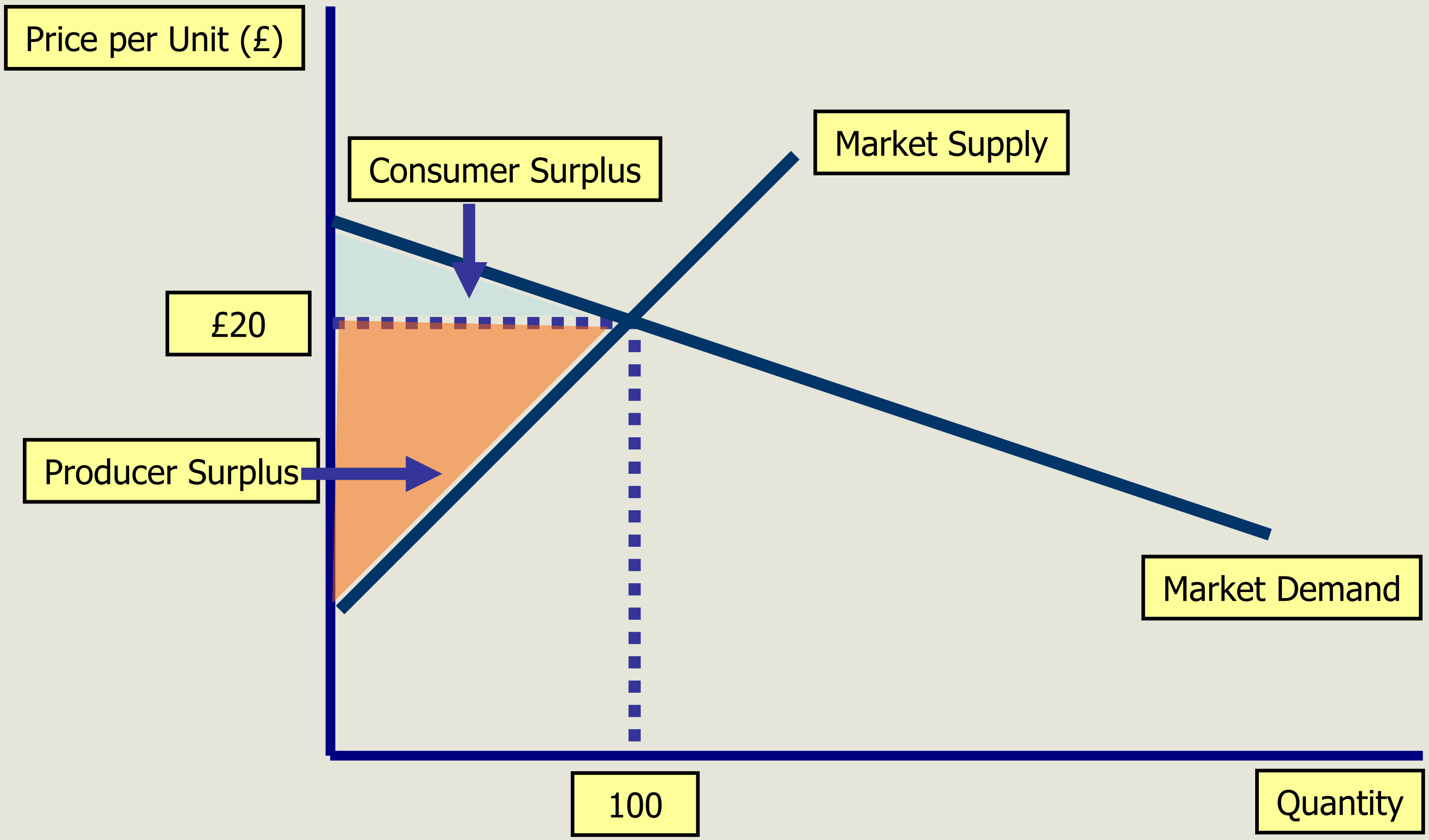
Total Revenue (TR) = Price (P) x Quantity Supplied (Q)



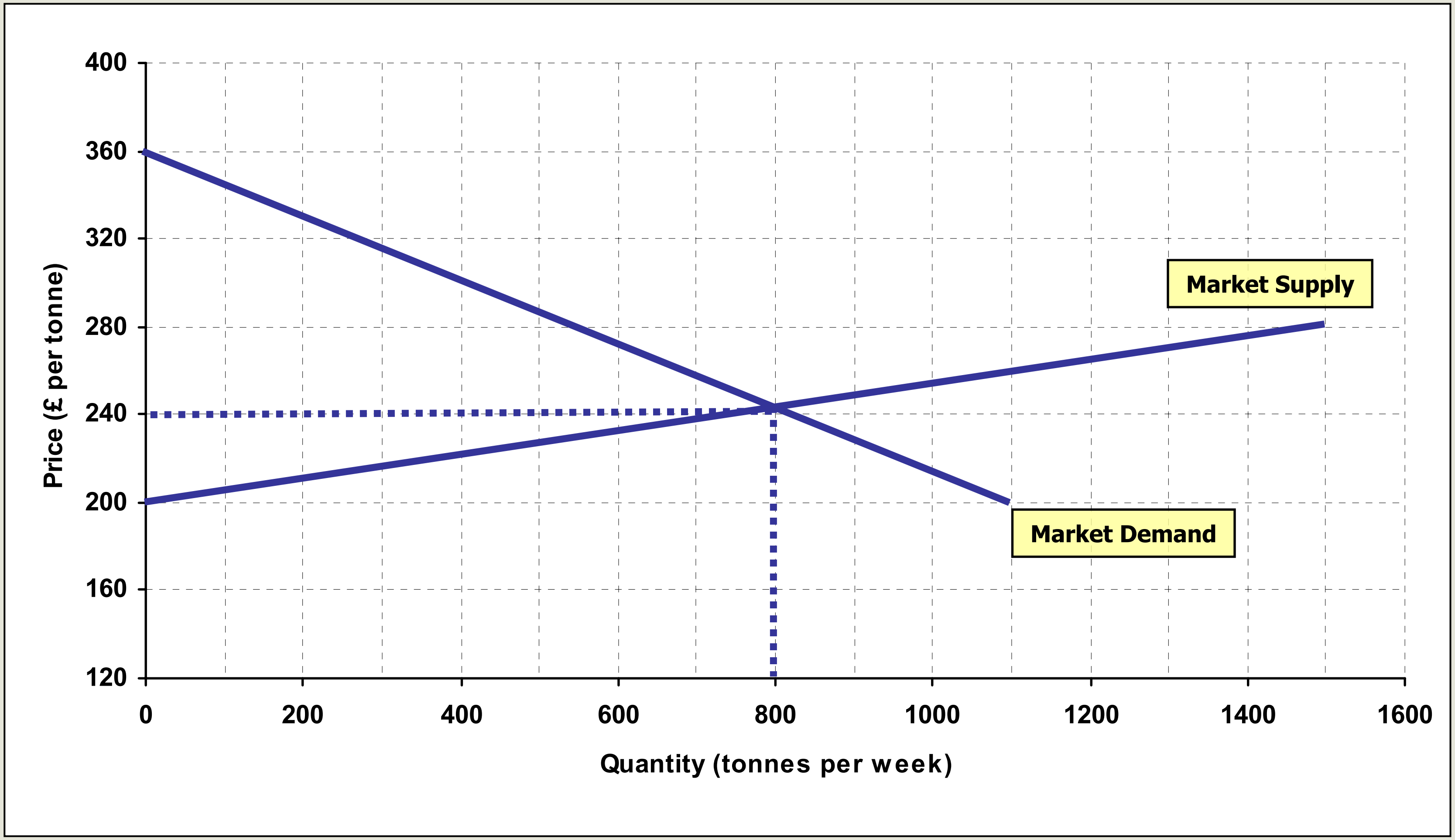
Producer Surplus



Total Economic Welfare (Consumer + Producer Surplus)



Showing Consumer and Producer Surplus



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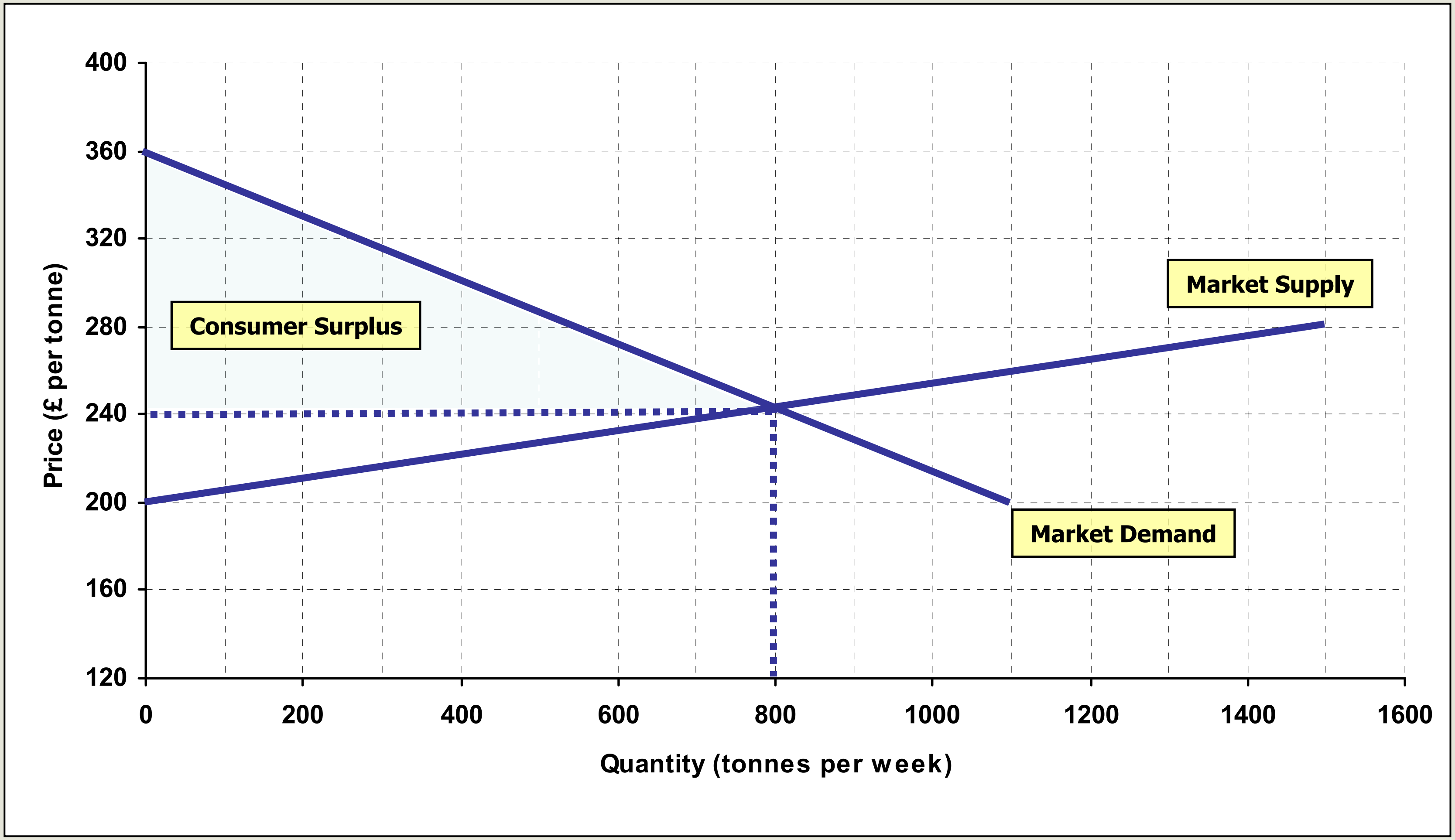

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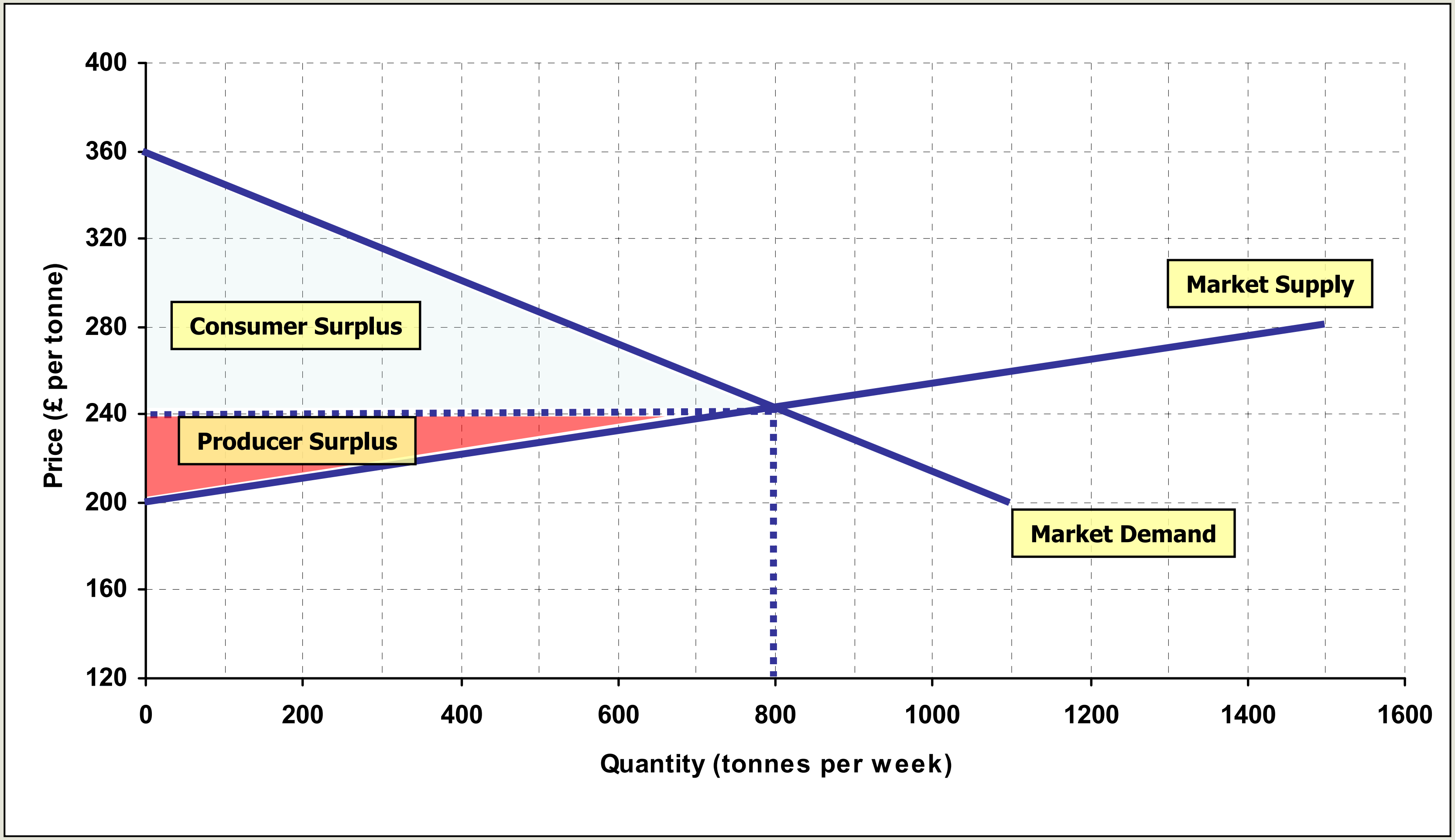
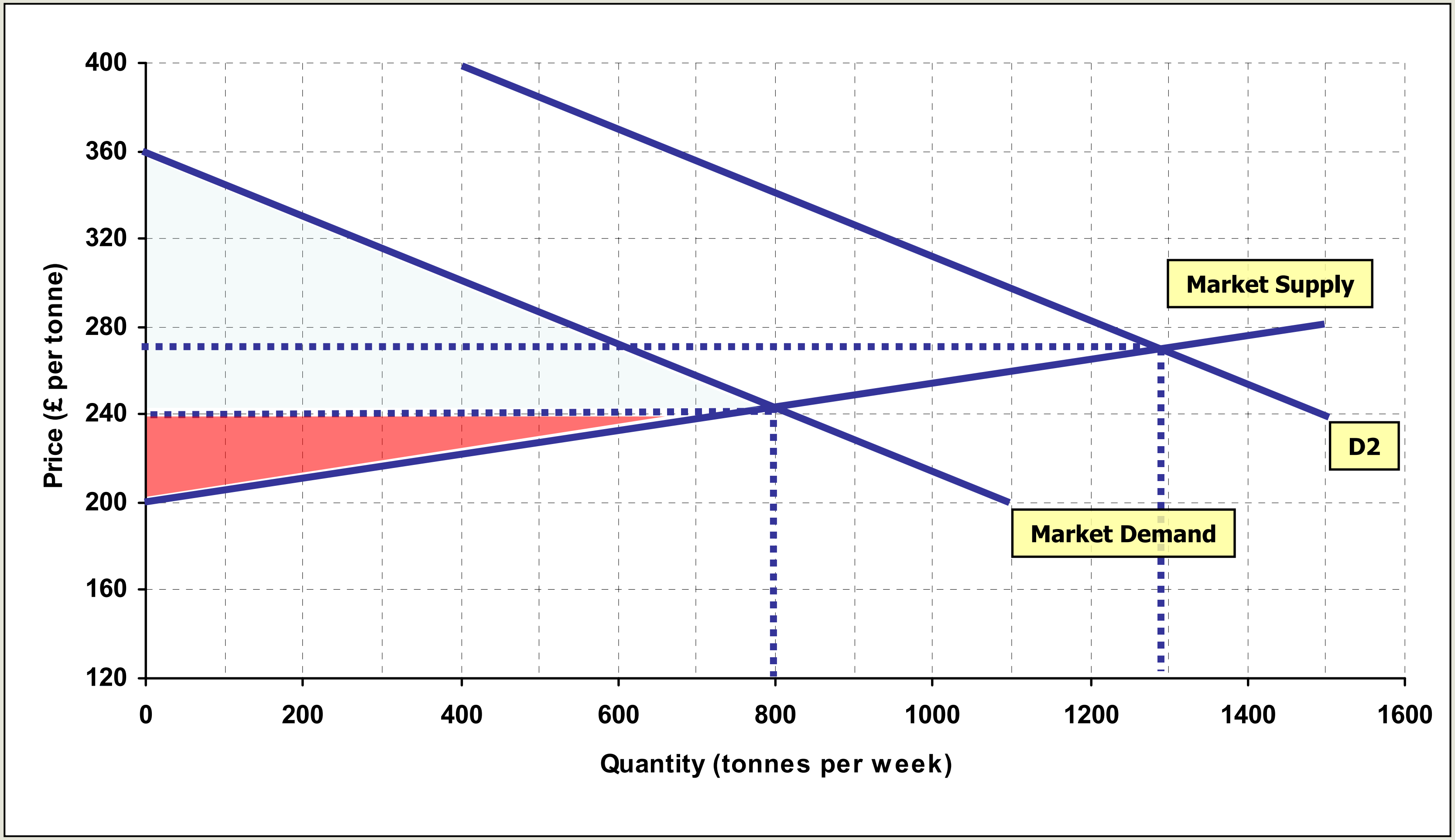


An Increase in Market Demand



Applications of These Concepts (More relevant to A2)

- The economic welfare effects of higher taxes indirect taxes on products such as cigarettes and alcohol
- The economic welfare effects of a firm achieving economies of scale in long-run (leading to lower average costs and an increase in market supply)
- Price and output under monopoly compared the market price and output in the long run under perfect competition
- The economic welfare consequences of price discrimination by a monopoly supplier – where the firm seeks to extract consumer surplus and increase total profits
- The economic welfare consequences of a move towards free international trade between countries