

Measuring the value of goods and services traded in markets



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- In valuing market goods/services we subtract the cost of providing the good/service

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 - Consumers each have a **marginal willingness to pay (MWTP)**
 - If you have a lot of something your MWTP is less than if you only have a little of something
 - MWTP is determined by preferences and ability to pay

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Sketching out individual demand

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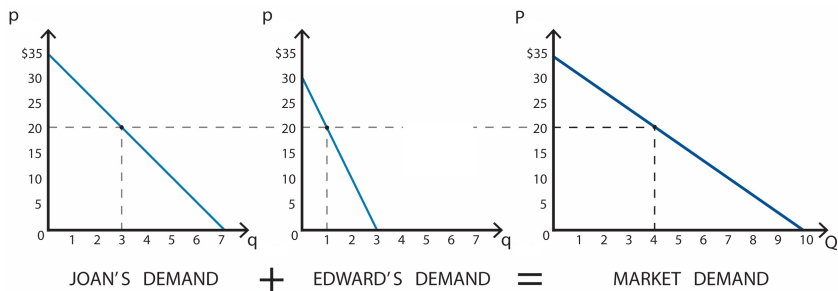
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- Given that you have consumed 5 pounds of shrimp this month, what's the maximum price you would be willing to pay for another pound?

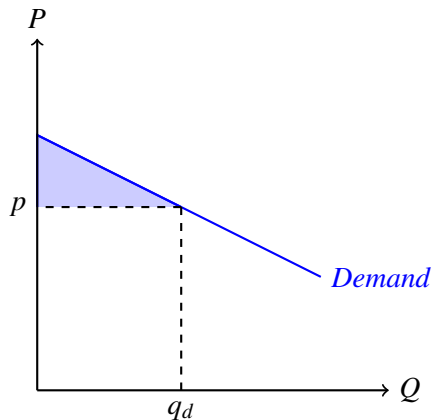
Consumers and market demand

The market demand curve aggregates the quantity demanded by all consumers in the market for each price



Consumers and market demand

- People get a “surplus” whenever they pay less for something than they would be willing to pay
- For consumers this surplus is called **consumer surplus**



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 - The MWTA is equal to the variable cost associated with producing one more unit of the good

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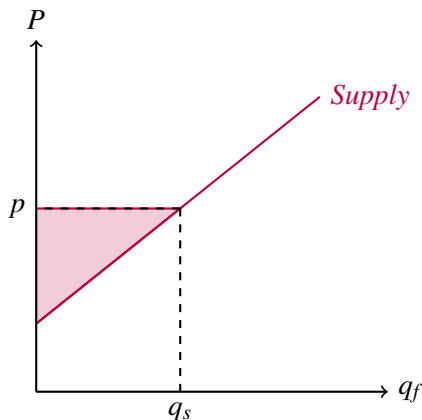
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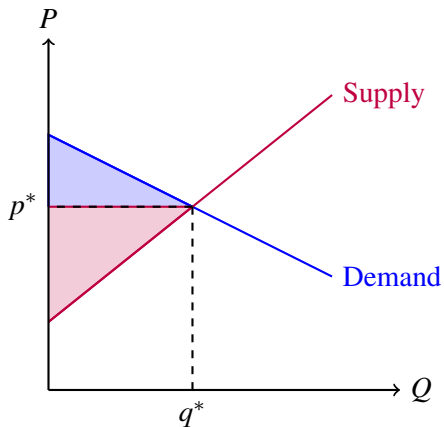
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- Given that you have produced 7 tons of shrimp this month, what's the minimum price you would be willing to accept for another ton?

Producers and market supply

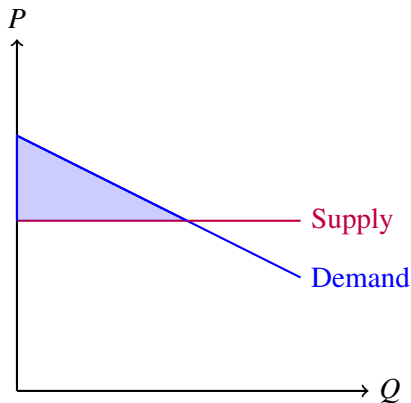
- The market supply curve aggregates the quantity supplied by all firms in the market for each price.
- **Producer surplus** is the total revenue from selling q units less the total willingness to accept.



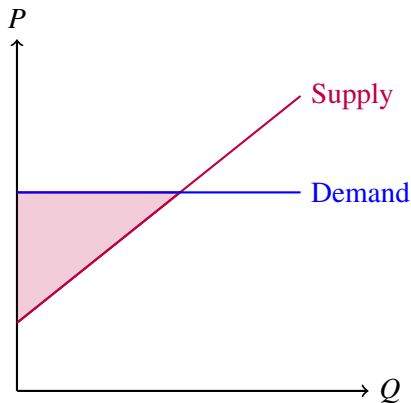
Market outcomes



Market supply and demand



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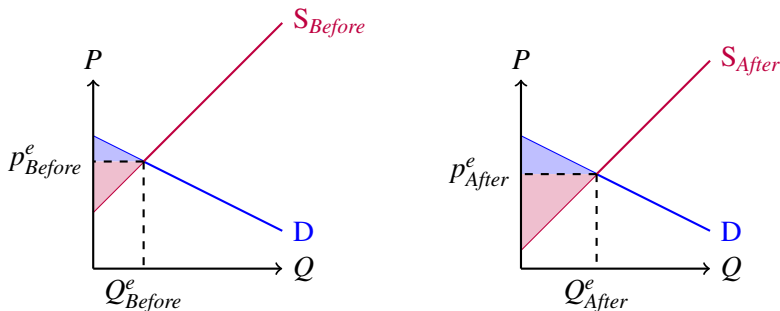


Figure: Before eradication (left) after eradication (right)

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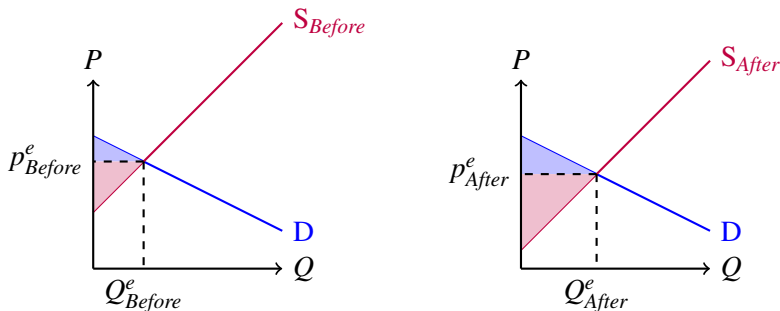


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$$\text{Value of the cleanup} = (CS_{After} + PS_{After}) - (CS_{Before} + PS_{Before})$$

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- Data on things other than price that affects the quantity supplied (weather)

Benefits & limitations

- Uses standard surplus measurements
- Use information on actual choices (RP)
- Data on prices and quantities are typically readily available
- Empirically estimating demand and supply curves is challenging
- Market failures mean the true value of a resource will not be captured in CS+PS (i.e. external benefits or costs will be ignored)

Recap: valuing goods with market prices

Conservation Strategy Fund YouTube

