

## Gains From Trade

Why Trade Works

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### Gains from Trade

- There are several steps required to show how trade is mutually beneficial
- Start from a point of “autarky”
- Trade is based on “arbitrage”

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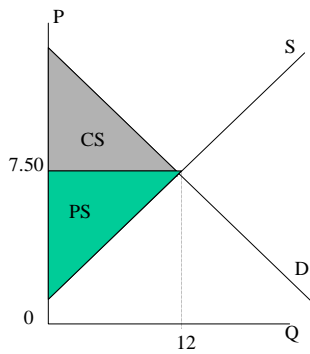
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### Autarky Equilibrium

- Autarky – country is completely closed to trade
- No exports, imports
- Only concerned with domestic demand and supply



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### Trading Situation

- Trade is based on “arbitrage” – the ability to buy in one market and sell in another market for a profit
- Example – 2 countries (US, Canada)
  - Price in the US (in US\$) - \$7.50
  - Price in Canada (in US\$) - \$15.00
- In Which Direction will trade take place?
- What will be the new price in both countries?

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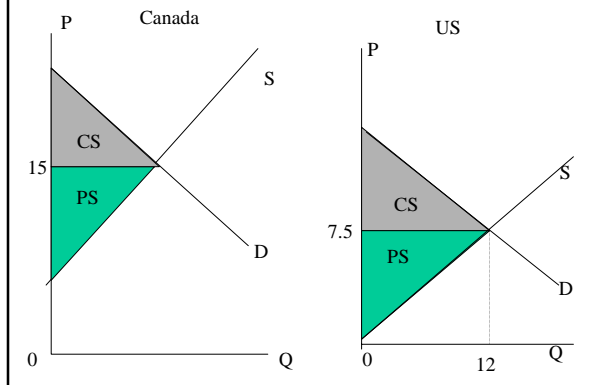
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### Autarky Equilibrium




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### Autarky Equilibrium II

- Arbitrage situation exists, thus there exists an incentive to trade
- Trade should lead to a single “world” price that exists in both countries –why?
- Where will that “world price” be located?
- What determines the “world price”?

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### Excess Supply/Demand

- If we think that the world price ( $P_W$ ) will be between the autarky prices in Canada ( $P_C$ ) and the US ( $P_{US}$ ), this creates excess supply or excess demand in each country.
- In this example,  $P_C > P_W > P_{US}$ 
  - In the US, excess supply is generated that can be exported to Canada
  - In Canada, excess demand is created for goods that can be imported from the US

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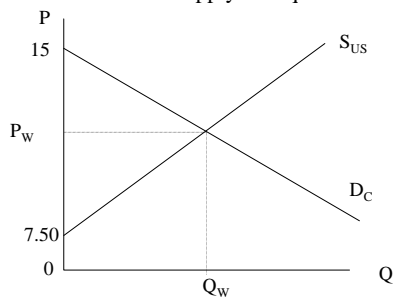
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### Determination of World Price

- $P_W$  is determined at the price where excess demand and excess supply are equal




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### Welfare Effects of Trade

- We can look at the welfare effects of trade in two ways
  - Country as a whole (CS+PS+GR)
  - Individual members of society
    - Consumers (CS)
    - Firms (PS)
    - Government (GR)

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### Effects of Free Trade II

- In our example of trade between the US and Canada, suppose that the world price ( $P_w$ ) = \$11.00.
  - What happens to CS and PS in Canada?
  - What happens to CS and PS in the US?
  - Does Canada gain from this trade?
  - Does the US gain from this trade?

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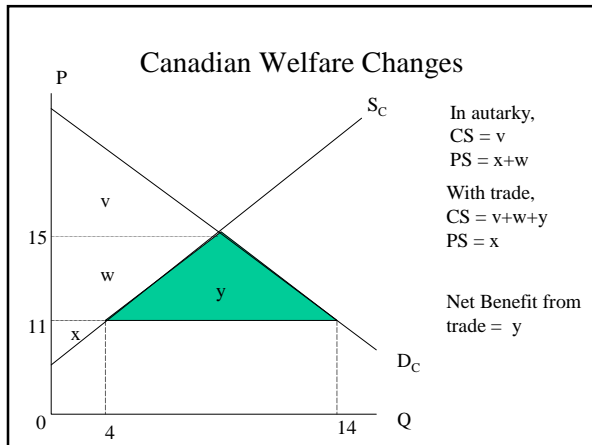
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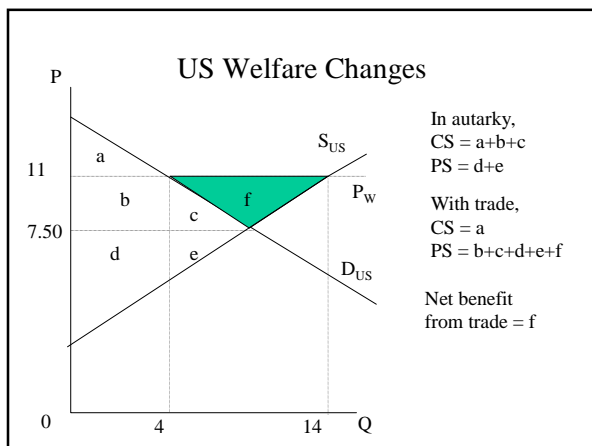
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### Gains From Trade: Conclusion

- Both countries gain - trade is “mutually beneficial”
- “Who” benefits in each country depends upon whether the country imports or exports
- How we measure benefits/costs
  - Consumer/Producer surplus
  - Equal weights to both
  - “One dollar, one-vote” system (Monetization)

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