Trade Policy

Part 4

Export Subsidies

Next

- Turning to export protection
- How would export subsidies work?
- If the goal is to maximize national social welfare, then export subsidies would always be undesirable!

First, what is an export subsidy?

- An **export subsidy** is a payment to a firm for every unit exported

Protection in Agriculture

- US: pays cotton farmers to grow more cotton and then subsidizes manufacturers to buy the American cotton
- Common Agricultural Policy in EU: pays up to 50 Euros/ton of sugar beets
    - Five times the world market price!
    - makes Europe a leading supplier of sugar, even though other countries have a natural comparative advantage over Europe

Export subsidies in Agriculture

- The major reason that countries subsidize agricultural exports is political
- Who benefits from agr. export subsidies?
- Who loses from agr.export subsidies?

Export Subsidies in Agriculture

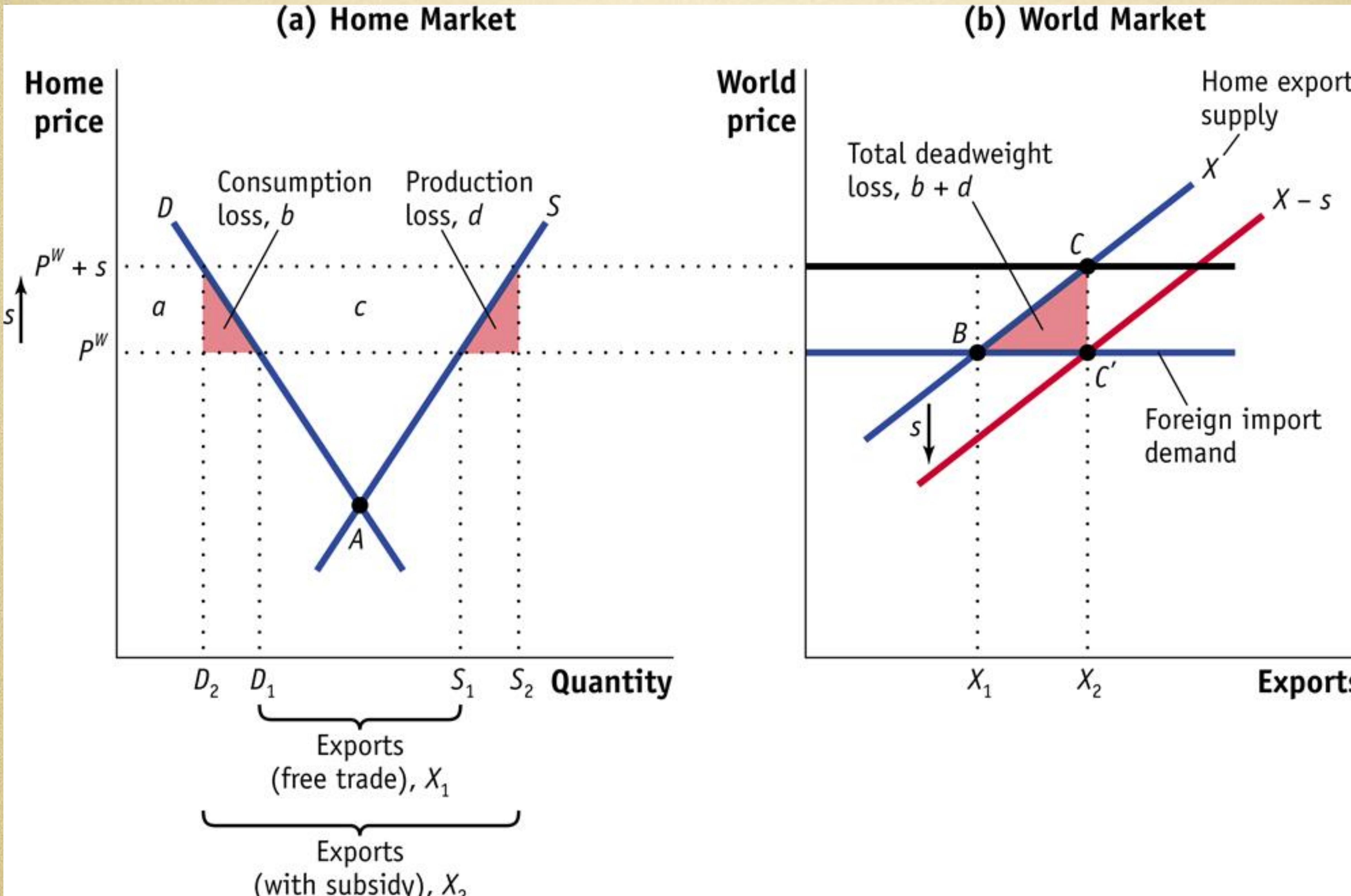
- July 2004
- Several agricultural exporters, led by Brazil, brought a WTO case against sugar subsidies in Europe and cotton subsidies in the U.S.
- The WTO ruled in favor of Brazil

- 2005, Hong Kong declaration
- member countries of the WTO agreed to abolish all export subsidies by the end of 2013
- Not yet ratified by member-countries…
    - Goals rather than outcomes

- 2011-now, Geneva
- In exchange for removal of subsidies, land-poor developing countries are expected to lower their agricultural tariffs
  - Called countervailing tariffs
- Negotiations failed...
- WTO meeting broke up without agreement

Export Subsidies in a Small Country

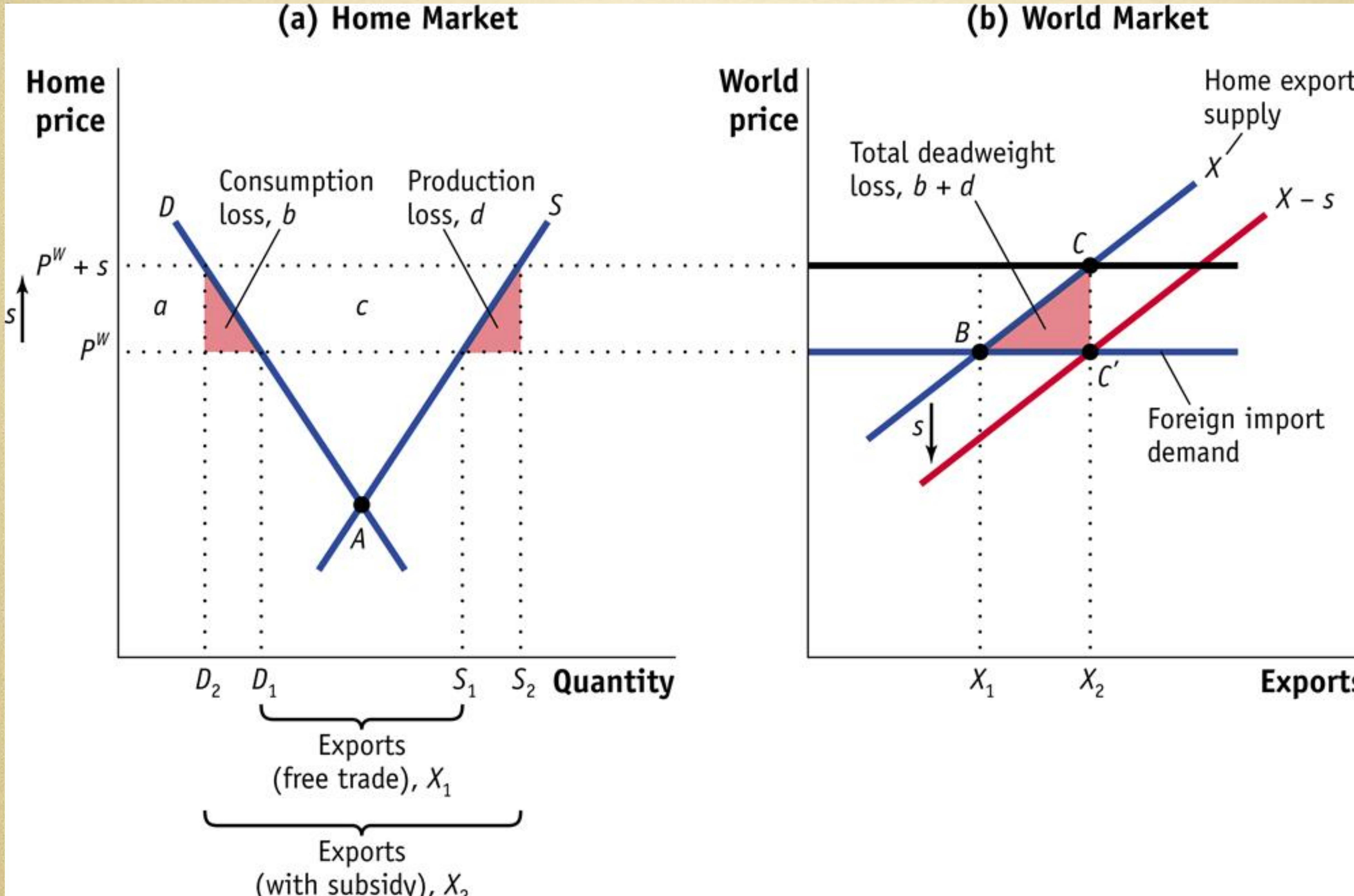
- We start with a small Home country
- Faces a fixed world price for its export



(a) Home Market
Home price
Consumption loss, b
Production loss, d
D
S
P^W + s
s
a
c
P^W
A
D_2
D_1
S_1
S_2
Quantity
Exports (free trade), X_1
Exports (with subsidy), X_2
(b) World Market
World price
Total deadweight loss, b + d
Home export supply
X
X − s
C
B
C′
s
Foreign import demand
X_1
X_2
Exports

- Suppose the government wants to boost domestic exports with a per unit ***subsidy*** s
- Domestic price paid by consumers is also P^W+s
  - If domestic price was lower than P^W+s, the firms would just export their goods instead

- Export subsidies increase both the price and quantity of exports
  - A movement along the domestic export supply curve
  - From the world perspective, the export subsidy results in an increase in export supply
  - export supply curve shifts down by the amount of the subsidy, s



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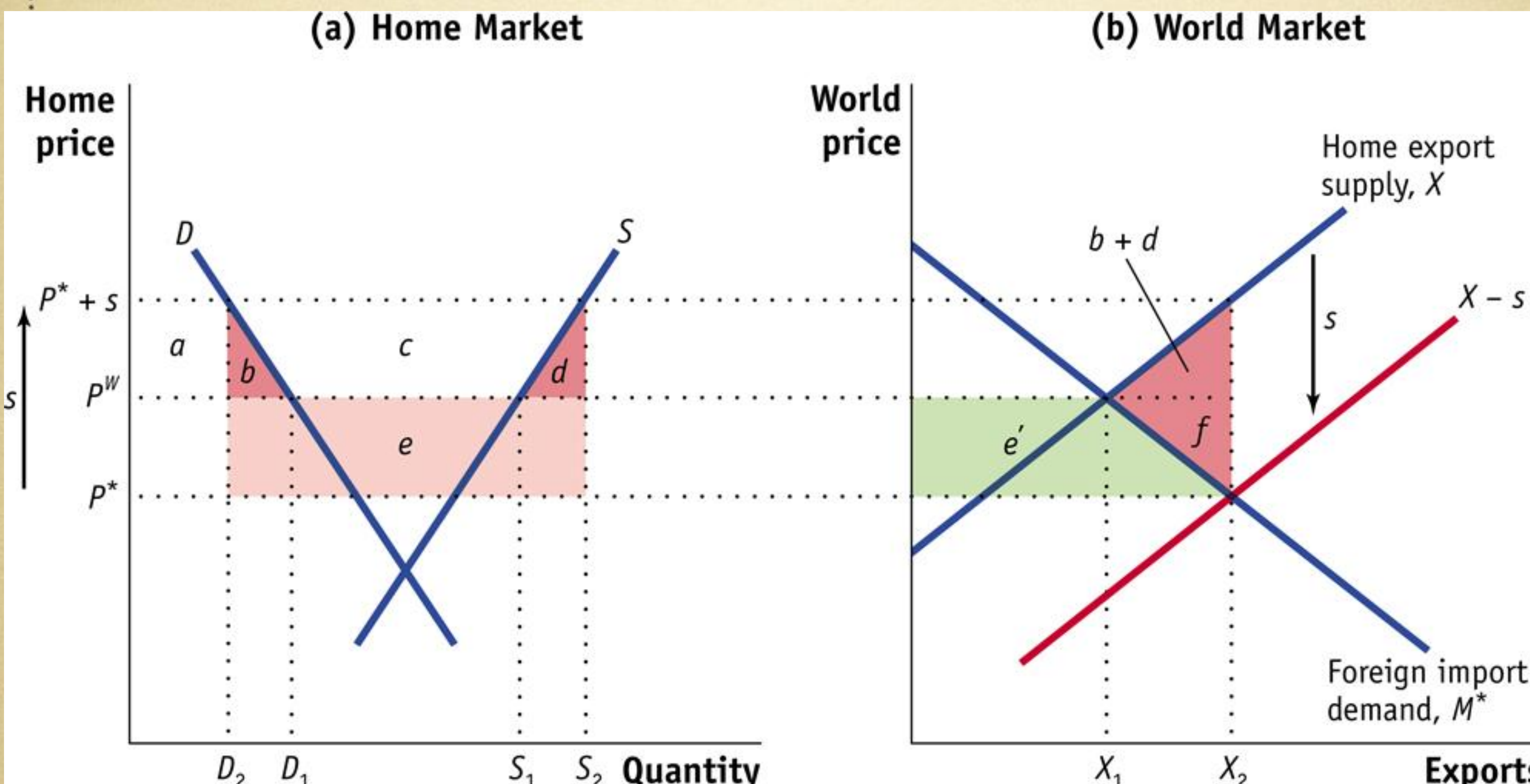
Exports

- Impact of the Subsidy on Home Welfare
  - consumer surplus: -*(a+b)*
  - producer surplus: *(a+b+c)*
  - The export subsidy costs to the government: -*(b+c+d)*
  - This gives a **net welfare loss of –*(b+d)***

Next: Large Country

- Now the Foreign export demand curve is downward sloping
- Hence changes in the amount exported will affect world price



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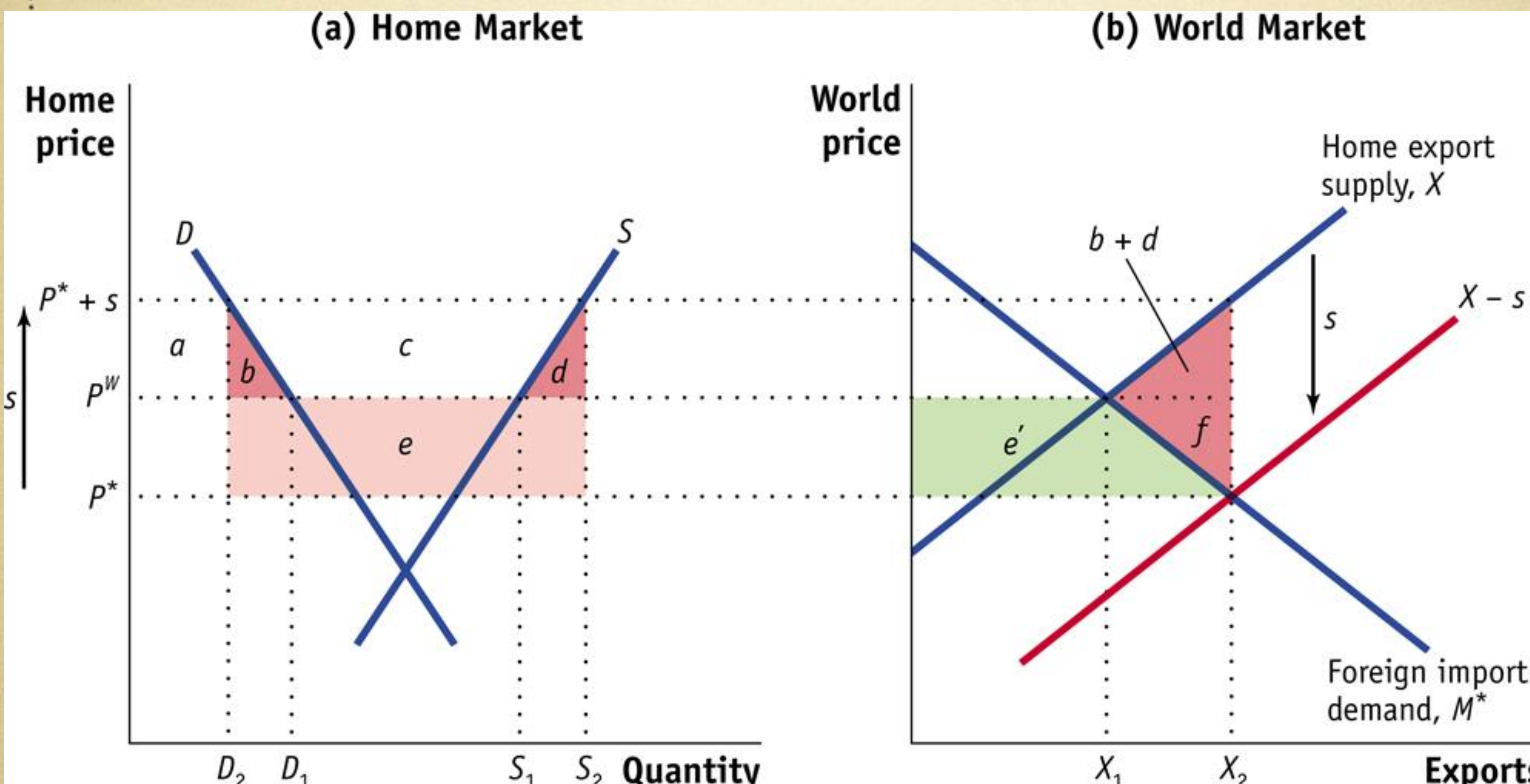
Exports

- Note that the new world price, P*, is less than P^W
- Meaning, Foreign consumers pay a lower price for Home exports
- Home terms of trade deteriorated!
- Since Home terms of trade fall, plus the DWL, the Home country will suffer overall losses!
- Foreign country will gain
  - foreign terms of trade improve



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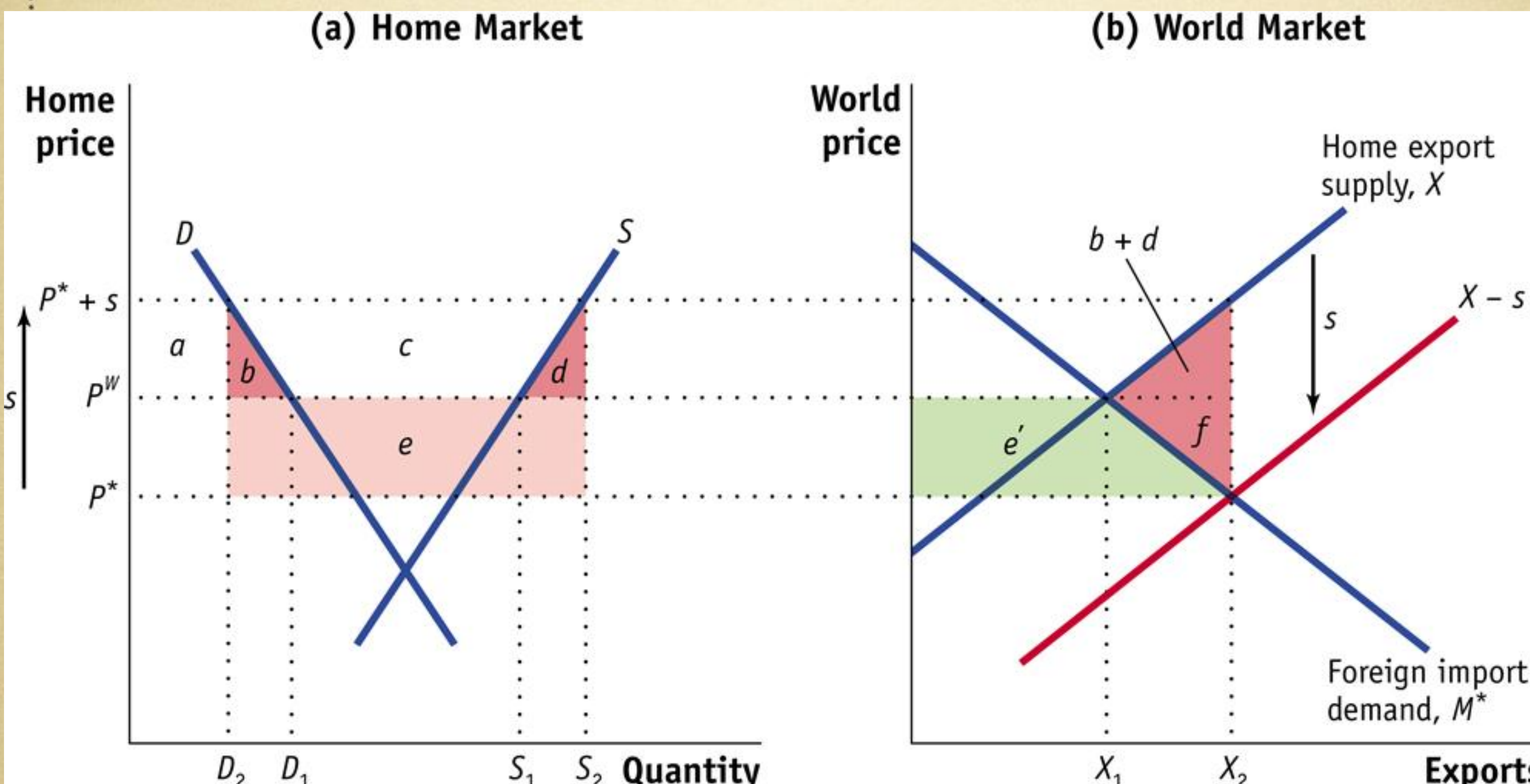
- Effects on Home Welfare
    - consumer surplus: $-(a+b)$
    - producer surplus: $+(a+b+c)$
    - Subsidy cost: $-(b+c+d+e)$
    - This gives a **net welfare loss of $(b+d+e)$**

Important observation

- A large country loses even more from an export subsidy than a small country, due to a reduction in the world price of its exported good!

- While Home definitely loses, Foreign definitely gains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World Welfare

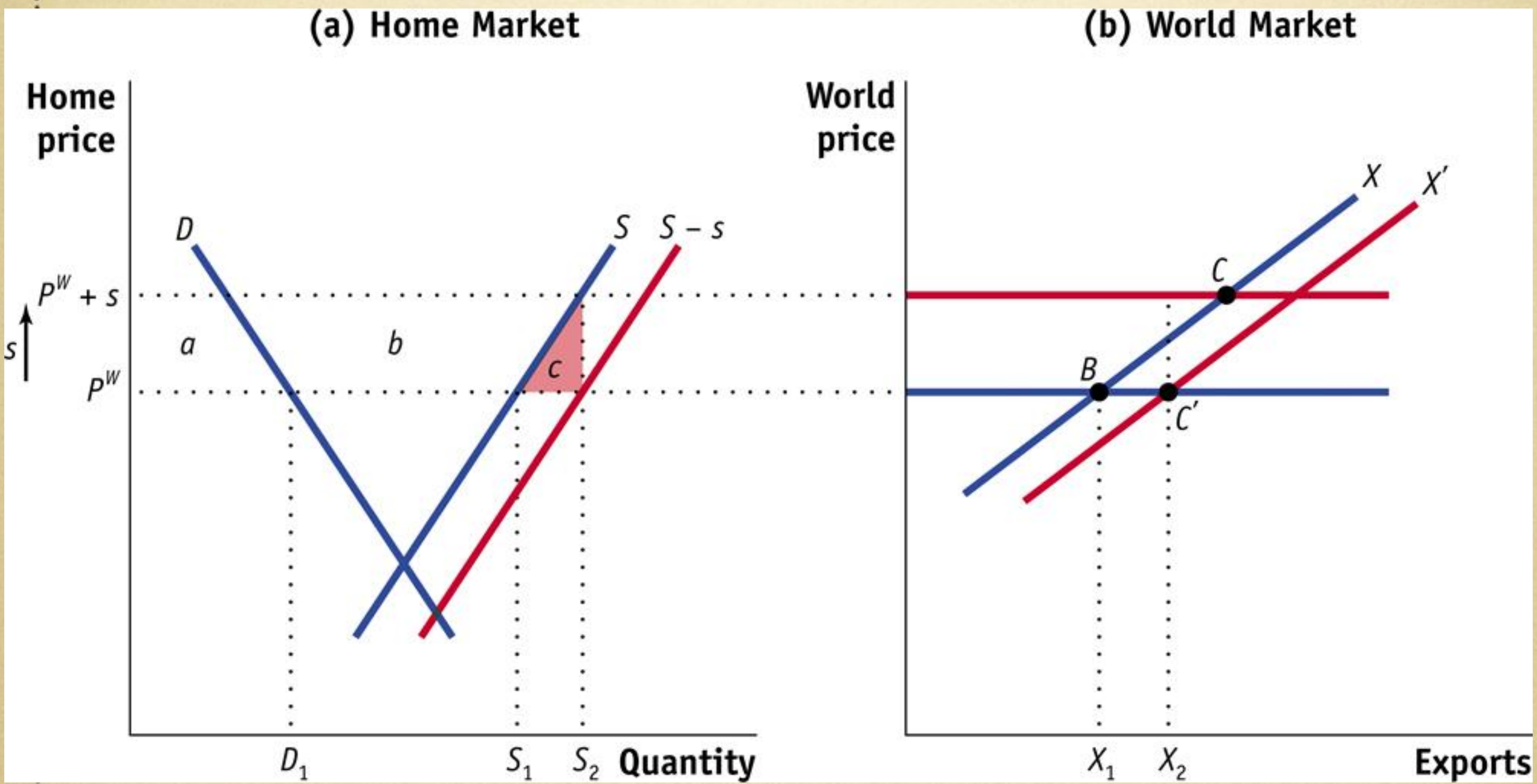
- Foreign gains: $+e'$
- Home loses: $-(b+d+e)$
- Net world loss: $-(b+d+f)$

Next: Production Subsidies

- The agreements reached in Hong Kong distinguish between export subsidies in agriculture and all other forms of domestic support that increase production
- This is because it is expected that these other forms have less impact on exports than do direct subsidies
- we will examine the impact of a ***production subsidy***

- A **production subsidy** is when the government provides a subsidy of *s* dollars for *every unit* that a Home firm produces
    - not just to units exported
- The subsidy can be implemented by:
    - a minimum price to the farmer
    - subsidies to the users of the crop to purchase it

- Production Subsidy in a Small Country
  - fixed world price of P^W
- Subsidy of s increases Home price to producers to P^W+s
- Quantity demanded at home *does not change* since producers still charge the world price at Home
  - This contrasts with an export subsidy



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Effect on Home Welfare

- Producer surplus rises by *(a+b)*
- Government cost of the subsidy is *(a+b+c)*
- Consumer surplus is unaffected
- net effect on Home welfare of *(–c)*

Important observation

- The DWL caused by the production subsidy, *(c)*, is less than that caused by the export subsidy, *(b+d)*
  - *-(c) versis -(b+d)*
- The only deadweight loss is production inefficiency
  - producers produce at higher than marginal cost
  - No consumer distortion!

Targeting Principle

- Production subsidy is a better policy instrument than the export subsidy
- This is an example of the **targeting principle**
- To achieve some objective, it is best to use the policy instrument that achieves the objective most directly