

Who are the
WTO?

The Dolphin Fiasco

- Dolphins often swim below the schools of tuna
- As a result, they are often caught in the tuna net and drown.



Photo by Flip Nicklin/Minden Pictures for National Geographic.

- US Marine Mammal Protection Act (1972) banned imports of tuna from countries that cannot demonstrate that they are 'dolphin-safe.'
- US banned imports of tuna from Mexico, Venezuela, and Vanuatu
- Also banned: Imports from countries that buy from those countries:
 - Costa Rica, Italy, Japan, and Spain, France, the Netherlands Antilles, and the UK

- 1991: Mexico complained to GATT dispute panel.
- Panel ruled that the US ban was incompatible with US obligations under the GATT treaty.
- Environmentalists were furious.
- US Senator Sherrod Brown (2004): *“the trade rules simply would not let the United States do the right thing for the environment”*
- Event fueled much anti-globalization

A Contrary Example: Chilean Grapes.

- Chile is a major supplier of grapes to the US.
- March 1989: Anonymous calls to US embassy in Santiago warn of cyanide-contaminated grapes on their way to the US from Chile.
- US officials quietly check 10% of all grape shipments from Chile.
- (Total shipments: 600,000 boxes per day.)

- March 12, 1989: Two grapes are found with what look like puncture marks.
- Tests: Traces of cyanide. (Not enough to kill anyone.)
- March 13, 1989: US officials proclaim ban on *all* Chilean grape exports to the US.

- This was the peak of the export season: 45% of the crop had already left Chile.
- Ban lasts 4 days.
- Ban is estimated to have caused \$400 million of harm to the Chilean economy.

- Wall Street Journal: evidence points toward US origin of contamination.
- Chilean Chamber of Deputies report argues contamination occurred in US FDA lab (!).
- Many attempts by Chilean government to get some compensation; no luck.

- Chilean government argues that in this case:
- *“A weak claim of a health or environmental issue has been used in a reckless and unwarranted way to disrupt international trade.”*

Issues

- How did these tensions arise?
- How did the WTO wind up in the middle of such disputes?

- the arguments for the necessity of multilateral cooperation on trade policy that give rise to the WTO in the first place?
- The point is that any country's trade policy confers a *terms-of-trade externality* on other countries.
- For example: a terms-of-trade loss imposed on trade partners equal in size to the terms-of-trade benefit enjoyed by the tariff using country.

- If each country sets its own tariffs independently of all others, the resulting outcome will be inefficient
- good reason for countries to try to coordinate trade policies through negotiation
- Hence, the WTO.

A simple model

- Suppose we have two countries: US and Japan.
- Two goods: Apples and Tuna.
- Japan has a comparative advantage in tuna.
- The market for apples is identical, with the roles of the countries reversed.
 - US has comparative advantage in apples

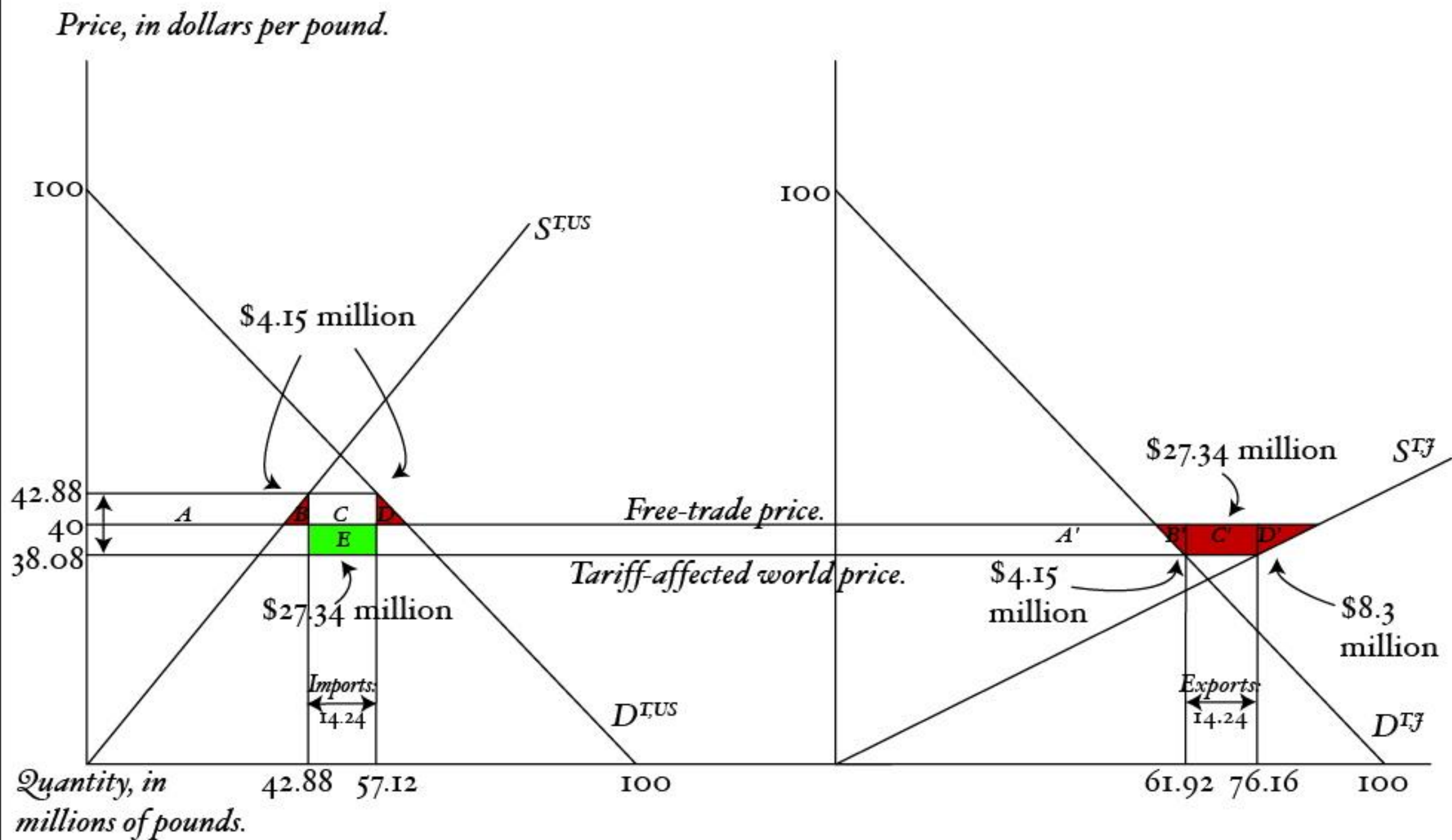
Market for tuna

- Suppose that each demand curve is $D^T = 100 - P^T$
- Supply in the US $S^{US} = P^T$
- Supply in Japan $S^J = 2P^T$

- Suppose the US imposes the optimal tariff on tuna
 - This amounts to \$4.80/kg.
- At the same time, Japan imposes the optimal tariff on apples.
 - Also \$4.80/kg.
- Often called a *trade war*.

In class exercise 1

- Market for tuna: calculate the change in welfare for each country due to the tariff on tuna.



In class exercise 2

- Next, Market for apples: calculate the change in welfare for each country due to the tariff on apples.
- And, finally, what is the total change in welfare for each country?

- Each country's green terms-of-trade benefit (E) is equal to the other country's red terms-of-trade loss (C').
- Add up the social welfare effects in tuna with those in apples and the E 's and (C')'s all cancel out:
 - Only losses remain
 - Each country loses $B+D+B'+D'$
- "Prisoner's dilemma" problem in trade policy.

- IMPORTANT:
- Because of the terms-of-trade externality, world social welfare is higher under free trade than under the tariffs, and both countries can be made better off by negotiating to free trade!

- This is the general idea of the General Agreement on Tariffs and Trade (GATT).
- Agreement to bring trade barriers down to benefit every country.
- First agreement: 1948.
- Several subsequent 'rounds' renegotiated it, deepening and broadening the liberalization.

- World Trade Organization (WTO):
Organization formed between governments in 1995 to help formalize GATT rounds and manage disputes.
- A current round begun in Doha in 2001
- Appears to be bogged down in stalemate...

Key GATT Principles:

- *Article I: Most-favored-nation status (MFN).*
- This is a non-discrimination principle that says any concession offered to one GATT country must be offered to all of them.
- In other words, all members are 'most favored nations.'
- But what it really means is that no member is favored.

- It is not clear whether the original negotiators deliberately chose the most confusing language possible
- or it just turned out that way

Key GATT Principles:

- *Article III: National treatment.*
- This says that once a product is inside the country, it must be treated the same regardless of where it was made.
- E.g., Japan can't have a different set of safety standards for Germany-made and Japan-made child carseats.

Many Exemptions

- *Article XXIV: Preferential trade agreements.*
- Two or more members can agree to eliminate mutual trade barriers, as, e.g., in a free-trade agreement.
- Example: EU

- *Article VI: Anti-dumping and countervailing duties.*
- 'Dumping' is exporting a product either at below cost or below the price at which it is sold domestically.
- For many economists it's not clear why this is supposed to be a problem...
- Article VI allows countries to charge a special tariff if it finds a trading partner has been dumping
- A country can charge countervailing tariff if its trading partners is subsidizing its exports

Antidumping duties

- First surged in 1970s, in the US, the EU, Canada and Australia
- In 1990s countries like India, Argentina, South Africa started to use them
- 2000: “new users” accounted for 44% of antidumping cases

Countervailing duties

- The US: 1980-2004 imposed duties over foreign firms 1,070 times!

- *Article XIX: the “Escape Clause.”*
- Allows a country to raise tariffs temporarily to protect an industry that has received ‘material injury’ due to an import surge.
 - Safeguards
 - Steel tariffs in the US in 2002
 - Tariffs against Chinese tires in 2009

- *Article XX:* Exceptions for the protection of life, health, or natural resources, and for similar motives.

Conclusion so far:

- International trade policy setting exhibits a serious prisoner's dilemma property:
- Trade protection confers a negative externality on trade partners.
- The GATT/WTO have evolved to deal with this issue.
- *PROBLEM*: In an integrated world economy, any policy can act as a trade policy.

Introducing environmental issues

- As we noted, in the 1990's the US became concerned that tuna purchased from Japan was not dolphin-safe.
- Think of this as creating a social cost to buying the Japanese tuna.
- For simplicity, if any Japanese tuna is consumed in the US, then US social welfare incurs a cost H .

- At the same time, the Japanese government has claimed that US apples are unsafe for export to Japan: Insect problems.
- Think of this as a social cost to buying US apples in Japan.
- For simplicity, if any US apples are consumed in Japan, then Japanese social welfare incurs a cost H .

- Suppose that the only way to avoid the environmental harm is to ban imports
- So the cost to the US of mitigating the harm of dolphin-unsafe tunas is to give up gains from trade with Japan

In class exercise

- What is the effect of tuna import ban on the US welfare?
- What is the effect of tuna import ban on Japan's welfare?

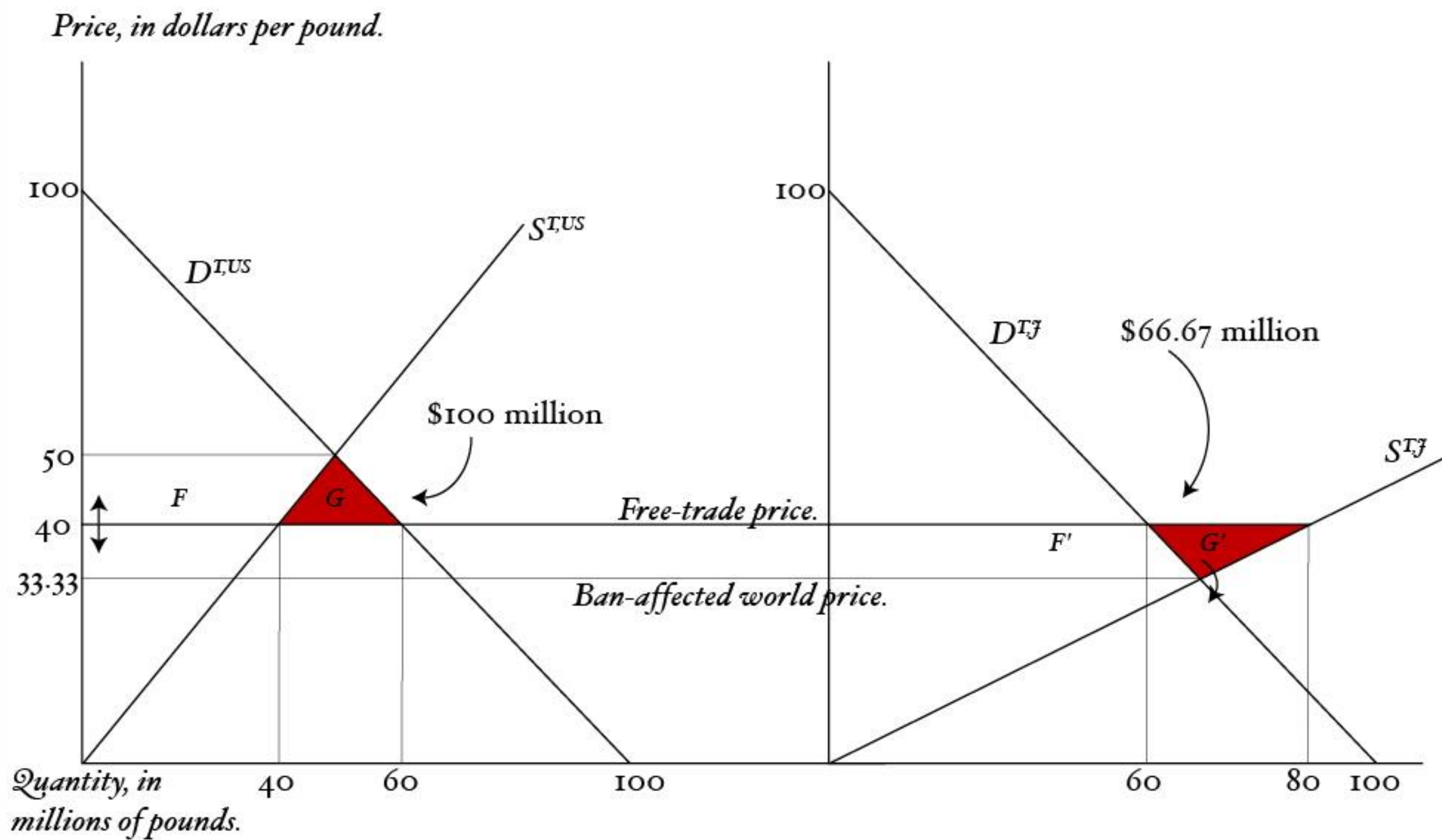


Figure 8.2: Economic effects of a tuna import ban.

- Suppose $H < \$100$ million
- Neither government will ban imports
- Environmental harm will be tolerated for the sake of economic exchange

- In this situation, the US will ban Japanese tuna if gains from trade are smaller than H ,
- and Japan will ban US apples if its gains from trade are smaller than H .
- But *again* -- there is an externality.

- Suppose $H = \$140$ million
- Equilibrium policy is to ban imports
- note that each country also imposes a trade cost on the other country
- US imposes \$ 67 million economic loss on Japan by banning tuna imports
- Japan imposes a \$67 million economic loss on the US by banning apple imports

In class exercise

- Calculate the change in welfare due to tuna and apples import bans in each country

- compared to free trade, each country's net welfare effect is equal to
- $\$140 - \$100 - \$67$
- $-\$27$ million
- Again we have a Prisoner's dilemma: Both governments act rationally, but without coordinating their actions – and both wind up worse off!

The Sham Problem

- We have assumed that the governments are sincerely attempting to correct a legitimate environmental problem
- In practice governments often accuse each other of using a *fictitious* environmental problem to justify protection for domestic political purposes
- This is sometimes called 'the sham problem'

- Chilean authorities argued that the cyanide grape scare of 1989 was a sham

Economic analysis of the sham problem

- Suppose that the current governments of the US and Japan are both constrained not to use tariffs in the market for tuna or apples
- both of those governments face political pressures to do something to help their respective import-competing producers.

- Hence, each government is biased towards Producer Surplus
- Suppose that in fact there is no environmental harm, $H=0$
- If the weight on PS is sufficiently high, then government will execute the ban
- Given its own political priorities, each government is acting optimally
- It's an equilibrium

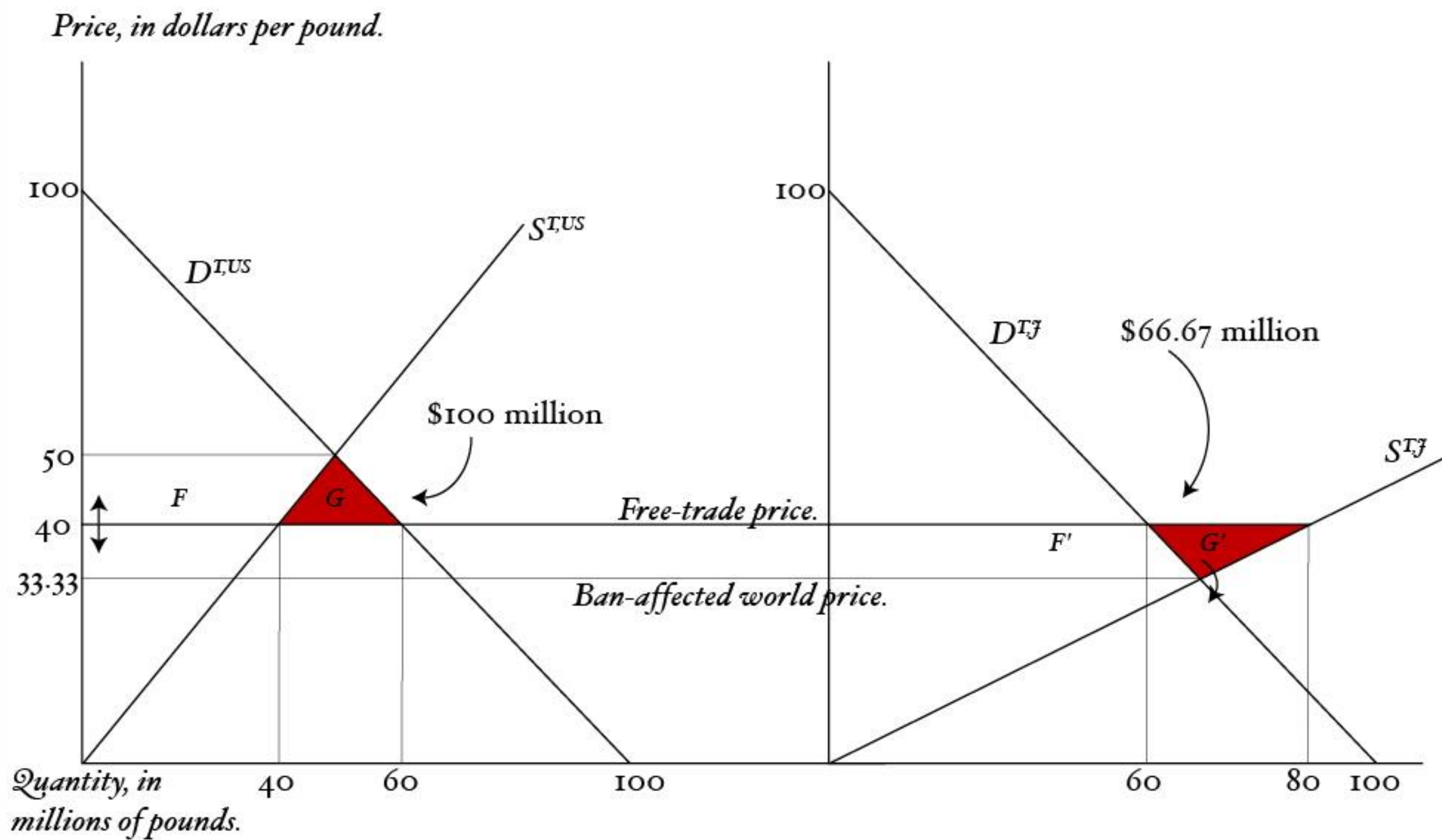


Figure 8.2: Economic effects of a tuna import ban.

- However, once again, there is a terms-of-trade externality to consider.
- Japanese ban on US-grown apples: costs \$489 million to US growers ($F' + G'$)
- the gain to US tuna producers: \$450 million (F)
- Net loss to all US producers: \$39 million
- the US government would prefer free trade!
- Again, a prisoner's dilemma.

To summarize

- even if the environmental measures are purely for domestic political motives, both governments may prefer coordination on environmental policies to non-cooperative environmental policy setting
- **the terms-of-trade externality**

WTO's tightrope walk.

- The WTO (and GATT panels before it) has tried to balance the need to protect the environment against the need to avoid the prisoner's dilemma problem.

Dolphin-Tuna.

- GATT panel ruled (1991) that US law could impose *product regulations* on tuna imports but not *process regulations*.
- Ruled that Article XX could not be used to protect the environment in other countries, just the importing country.
- I.e., ruled against *extraterritoriality*.

Shrimp-Turtle.

- Sea turtles were entrapped by shrimp nets.
- 1989: US banned shrimp caught without Turtle-Excluder Devices (TED's).
- 1997 WTO ruling: Disallowed US ban, but *only* because it was discriminatory: Didn't treat all exporters the same way.
- It allowed process regulations in principle, and extraterritoriality.

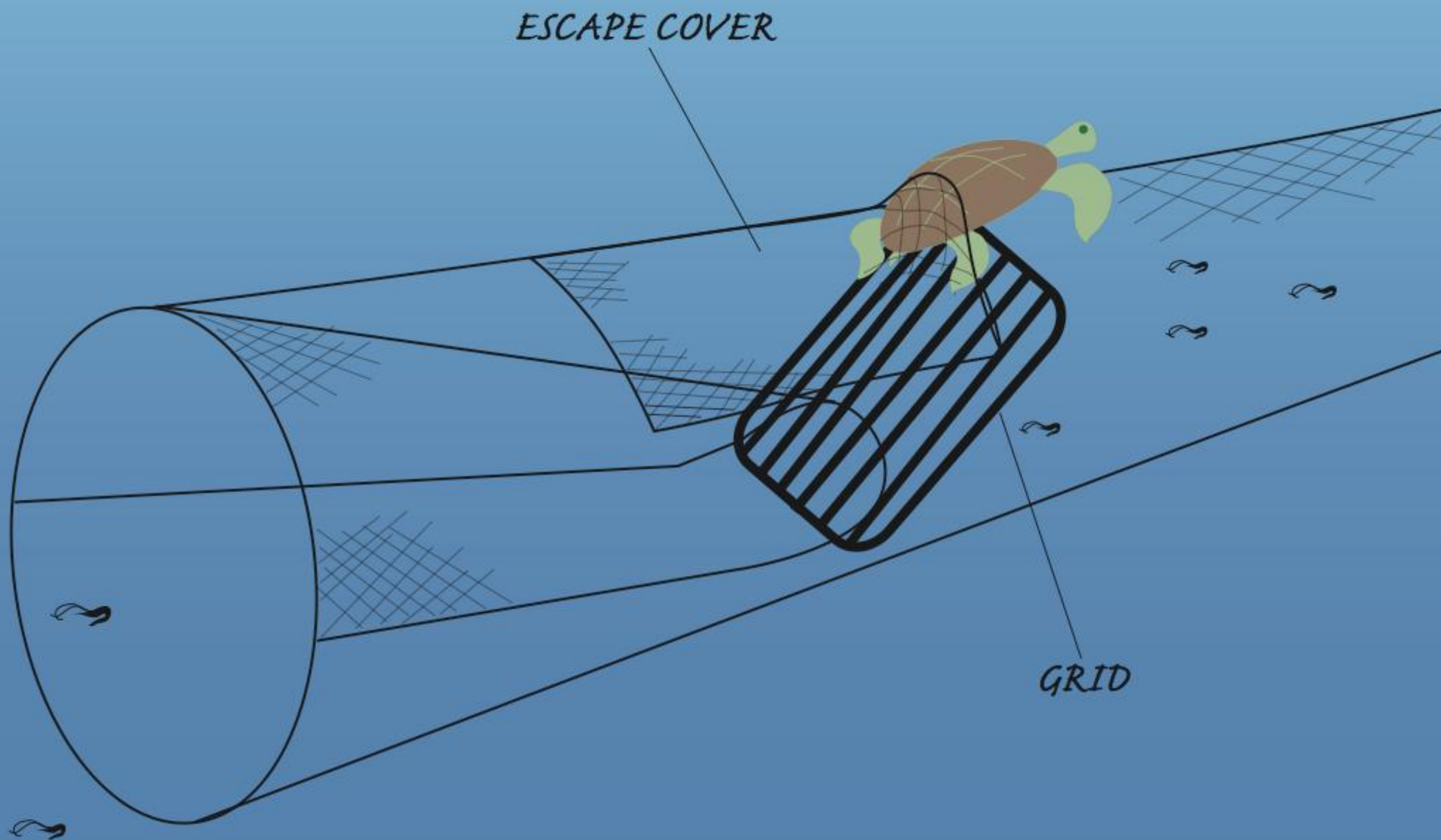




Australian Government

Australian Fisheries Management Authority

TURTLE EXCLUDER DEVICE



- Two main principles have emerged from WTO rulings since the 1990's:
- (i) Health/safety/environmental regulations that affect trade must be based on some sort of hard science.
- (ii) The regulations must be non-discriminatory and must not interrupt trade more than necessary to achieve the health/safety/environmental purpose.