What Are NTBs?

• What Are They?
  – Any institutional or policy arrangement that interferes with trade, other than tariffs
  – Term NTB is also used more broadly to include policies that artificially expand trade
    • e.g., Export subsidy
  – Sometimes called “Nontariff Measures” (NTMs)
• Main Types of NTB
  – See outline above
Outline: Nontariff Barriers

• What Are NTBs?
  • Quotas
    – Effects Equivalent to Tariffs
    – Who Gets the Rents
  • Other NTBs
    – Tariff-Rate Quotas
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    – Customs Procedures
    – Standards
    – Unfair Trade Laws
    – Export taxes
  • Subsidies

Quotas

• Definition: An import quota is a direct restriction on the quantity of an import
  – E.g., US might limit the imports of steel to some number of tons per year
  – Until Jan 1, 2005, US and EU had elaborate import quotas on many textile and apparel products from developing countries
  – We still have quotas on many agricultural products, e.g., sugar, cheddar cheese, dried milk, etc
Quotas

- Effects of a quota
  - If permitted quantity is above what would be imported anyway, then no effect at all. (True only with perfect competition)
  - Otherwise, quota creates scarcity and raises price
  - Quota raises domestic price above world price
    - For market to clear, domestic price must rise to the point that desired imports equal the quota
    - See this with supply and demand
    - But first note example of US quota on sugar...

- Note that US price stayed mostly above the world price, and was more stable
- But when world price spiked, then US price was
  - just equal to the world price,
  - not above as it would have been with a tariff

http://public.wsu.edu/~hallagan/Econ3327/weeks/week5/Sugar/Sugarquota301.html

Effects of a Quota: Small Country

Suppose quota limits imports to this amount

\[ Q_0 \]
Suppose quota limits imports to this amount which is less than initial imports.

Then price must rise until $D - S = \text{Quota}$.

Thus price is...
Lecture 6: NTBs

Effects of a Quota: Small Country

...and quantities are

P
S
D

Tariff Equivalent

P_W

P_D

Quota

Q_0

Q_1

Q_2

Q_3

Q_4

P

Effects on Welfare
Same as tariff, except c

• Results
  – Suppliers gain area +a
  – Demanders lose area -(a+b+c+d)
  – Somebody gets area c, but who?

• Area c is called “quota rents”
  – It is the profit from buying at world price, P_W, and selling at higher domestic price, P_D
Effects of a Quota: Small Country

- Who gets quota rents?
- Depends on how quota is administered:
  - First-come, first-served: Rents go to whoever gets there before quota is exhausted
  - Sell (or "auction") import licenses: Rents go to government as revenue from sale of licenses
  - Give away import licenses to domestic people or firms: those people or firms then get the rents
  - Give away licenses to foreign firms or governments: foreigners get the rents
- Most common is the last: Give away to foreigners in proportion to their historical exports

Effects of a Quota: Rent Seeking

- "Rent Seeking"
  - Defined as the use of resources in effort to get rents
  - Examples
    - Faster (thus more costly) transport to win race to border for 1st-1st-served quota
    - Lobbying legislators to get quota allocations
    - Inefficient production intended to get quota allocations based on market shares

Effects of a Quota

- Effects of quota compared to tariff
  - Effects on price and quantity at a given time are the same
  - Hence "tariff equivalent"
  - Effect on welfare is different if quota rents are lost to rent seeking and/or accrue to foreigners:
    - In that case, importing country loses more from quota than from equivalent tariff
- What if country is large?
  - Picture is also same as for tariff
  - But if quota rent is lost or goes to foreigners, importing country cannot gain
Effects of Quota: Large Country (if Rent given to foreigners)

**Summary:**
- **Domestic Country:**
  - Suppliers gain: \(+a'\)
  - Demanders lose: \(-a'\)
  - Net effect on country: \(-b'\)
- **Foreign Country:**
  - License holders gain: \(+c'+e'\)
  - (Suppliers/Demanders also lose)

**Effects of a Quota**

- Other effects of a quota
  - Quality upgrading
    - Limited to a fixed quantity, foreign exporters seek higher value by improving quality and charging higher price
  - Like a tariff, quota may induce foreign firms to produce here
  - Unlike a tariff, the quota becomes more restrictive if foreign supply increases or world price drops

**Effects of a Fall in World Price**
Effects of a Fall in World Price

- Many things do not change:
  - Domestic price
  - Domestic quantity supplied
  - Domestic quantity demanded
  - Quantity of imports (fixed by quota)
- What does change?
  - Tariff equivalent increases
  - Rents from quota increase

Effects of a Rise in World Price

- If the rise is small, this is just the reverse of what happened with a fall in world price
- But if the rise in world price is large enough, then
  - The quota ceases to be binding
  - Tariff equivalent of quota becomes, and stays, zero
  - Domestic price becomes
    - Equal to world price, and
    - Rises with it
- This last is what we saw in the graph of the price of sugar

http://public.wsu.edu/~hallagan/Econ327/weeks/week5/Sugar/Sugarquota301.html
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• Subsidies

Other NTBs: Tariff-Rate Quota (TRQ)

• This is two tariffs, separated by a quota
  – Low (or zero) tariff applies to imports below the quota
  – High tariff applies to imports above the quota
• Used by US on many agricultural products
• Effect is like
  – a low tariff,
  – a quota,
  – or a high tariff, depending on levels of supply and demand
Other NTBs: Tariff-Rate Quota (TRQ)
- This is what Trump used against imports of solar panels and washing machines

Other NTBs: Voluntary Export Restraint (VER)
- Restriction of exports
  - At request of importing country
  - Usually specified as maximum quantity
- This was the major form of protection for the US auto industry in the 1980s: US persuaded Japan to limit exports of cars to US
- Illegal since 1995 under WTO rules
  - But how to enforce
  - There were examples in 2012 that look like VERs
  - Now the US has gotten S. Korea to limit its exports of steel
    - It look like VERs are back, but may not be called that
- Effect is exactly like a quota allocated to foreigners

Other NTBs: Variable Levies
- A tariff that is changed as necessary to keep domestic price at a specified level
- These are used extensively by the European Union as part of its Common Agricultural Policy (CAP)
- Effects are same as a tariff, except for behavior over time
Other NTBs: Government Procurement Regulations

- Government favors domestic suppliers in buying goods and services
  - Buys only from domestic firms, or
  - Buys from domestic firms unless imports are, say, 10% cheaper
- US used to have a “Buy American” law
  - Some say we need it again, but would violate WTO
- Effect is like a tariff, except that loss to demander is now loss to government and thus taxpayer

Other NTBs: Government Procurement Regulations

- “Buy American” was part of the Stimulus Package of the US in 2009
  - Congress would have imposed broad restrictions
  - Obama got them to restrict only when not contrary to US commitments under trade agreements
  - Even so, result was broadly restrictive, because purchasers were not sure of rules, so avoided imports
  - Result was also that other countries included similar provisions in their stimulus packages
  - See reading by Hufbauer and Schott.
- “Buy American” was said in President Trump’s Inauguration Speech, Jan 20, 2017

Other NTBs: Government Procurement Regulations

- Not just in US. There is an increasing use of “Buy Local” requirements by US and other governments
  - See Economist, “Buying local is more expensive than it looks”
  - The share of imports covered by buy-local requirements has increased five-fold since 2009
  - But... they increases costs, just like tariffs, without any tariff revenue
Other NTBs: Customs Procedures

- All countries have customs procedures for maintaining border security and collecting tariffs
- They become NTBs when
  - Excessive difficulty, or red tape, limits imports
  - Rules impose artificially high valuation for *ad valorem* tariffs

Other NTBs: Standards

- All countries also have standards, for
  - Health and safety (e.g., no lead paint)
  - Compatibility (e.g., 110 volt appliances)
- They become NTBs when biased against imports in
  - Substance of the requirement
  - Procedures for certifying compliance

Other NTBs: Unfair Trade Laws

- The (legal) threat and use of
  - Anti-Dumping Duties
  - Countervailing Duties
- We’ll say more about this later, in lecture about U.S. Trade Policies
- These are NTBs if
  - “Unfair trade” is actually normal trade (it usually is)
  - The threat of action discourages trade, even when duties are not levied (the “chilling effect”)
Other NTBs: Unfair Trade Laws

- Use of these laws is increasing rapidly by other countries. See Lindsey and Ikenson
  - In 1990s, antidumping use increased 50% over the ’80s.
  - Developing country AD cases:
    • 7 in 1980-87
    • Over 700 in 1995-2000
    • US (323), EU (143) (out of 976 total)
  - Targets of AD cases (1995-2000, per year):
    • Leading: China (179), Japan (78), US (65)
    • Developed countries 355; Developing countries 656

Other NTBs:

Unfair Trade Laws

- Somewhat more recently:
  - Newly Initiated Antidumping Investigations, 1Q 2007–3Q 2009

Source: Global Antidumping Database.

Other NTBs: Temporary Trade Barriers (AD, CVD, etc.)

Use of Temporary Trade Barriers, 1997-2013
Other NTBs:
Export Taxes

- Simply a tax on exports, analogous to tariff on imports
  - Effects are similar
  - Not common, until recently, because countries think exports are good
  - Became common in mid-2008, as high world prices for agriculture led food exporters to protect their own consumers
  - Also used recently by China on certain minerals used in high-tech devices

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Subsidies

- Government assistance to producers
  - Export subsidy: paid only for exports
  - Domestic subsidy: paid for all production (but still increases exports or reduces imports)

- Effect on the subsidizing country
  - In competitive industries, country loses
  - Subsidies usually are intended to benefit producers, not country
  - In non-competitive industries, result may be different (recall Boeing-Airbus example)

Effects of a Subsidy on Foreign Countries

- Effect, if country is large, is to reduce the world price of the exported good
- Subsidy expands supply in subsidizing country (which is part of $S_{W0}$)

Effects of a Subsidy on Foreign Countries

- Effects on other countries depend on direction of their trade:
  - If they import the good, they gain
  - If they export the good, they lose

See this in the following figures…
Effects of Export Subsidy:

- On Foreign Importer
  - Suppliers lose
  - Demanders gain
  - Country gains \((b+c+d)\)

Effects on Welfare:
- Suppliers lose
- Demanders gain
- Country gains

**Effects of Export Subsidy:**

- On Foreign Exporter
  - Suppliers lose
  - Demanders gain
- Country loses \(-c\)

**Effects of a Subsidy on Foreign Countries**

- In both cases
  - Foreign suppliers lose
  - Foreign demanders gain
- Net effect on countries depends on
  - Whether they are net importers or exporters
  - Thus whether price change is improvement or worsening of their terms of trade

- Optimal policy response for foreign countries
  - Importers: Write “thank-you note” (Krugman)
  - Exporters: Not much they can do
Subsidies: Are They Used?

• YES!!
• US, EU, Japan all have large subsidies on many agricultural products
• These reduce world prices and hurt producers of these products in developing countries
• Examples of US subsidies and whom they hurt:
  – Corn: Mexico
  – Sugar: Caribbean countries
  – Cotton: Certain African countries

Next Time

• Reasons for Protection
  If tariffs are such a bad idea, why are they used?