## **Econ 340**

### Lecture 6 **Nontariff Barriers**

## Outline: Nontariff Barriers

- What Are NTBs?
- Quotas
  - Effects Equivalent to Tariffs
    Who Gets the Rents
- Other NTBs
  - Tariff-Rate Quotas
  - Voluntary Export Restraints (VERs) Variable LeviesGovernment Procurement Regulations

  - Customs Procedures Standards
  - Unfair Trade Laws
- Export taxes
- Subsidies

Lecture 6: NTBs

#### 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
  - Voluntary Export Restraints (VERs)
  - Variable Levies
  - Government Procurement Regulations
  - Customs Procedures
  - Standards
  - Unfair Trade Laws
- Export taxes
- Subsidies

Lecture 6: NTBs



Outline: Nontariff Barriers

- · What Are NTBs?
- Quotas
  - Effects Equivalent to Tariffs
  - Who Gets the Rents
- Other NTBs
- Voluntary Export Restraints (VERs)
- Variable LeviesGovernment Procurement Regulations

- Unfair Trade Laws
- Export taxes

Lecture 6: NTBs

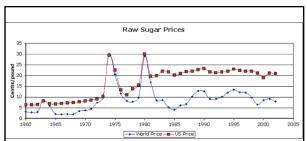
#### Quotas

- · 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..

7



- 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

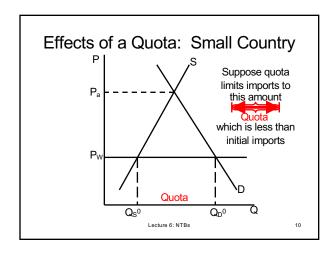
http://public.wsu.edu/~hallagan/EconS327/weeks/week5/Sugar/Sugarquota301.html

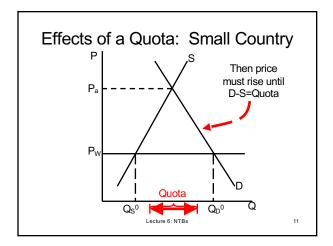
Effects of a Quota: Small Country

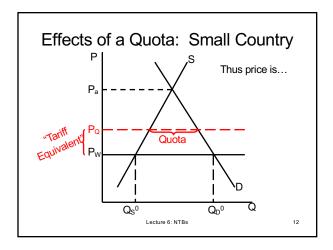
Suppose quota limits imports to this amount

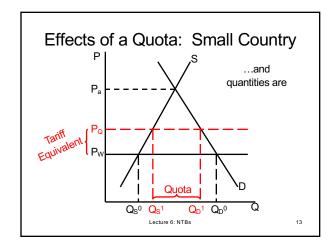
Output

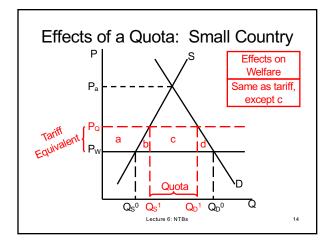
Description of the property of the pro

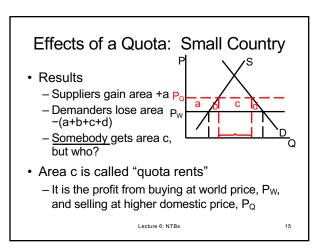












#### Effects of a Quota: Small Country

- 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

Lecture 6: NTBs

## 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-come-1st-served quota
    - · Lobbying legislators to get quota allocations
    - Inefficient production intended to get quota allocations based on market shares

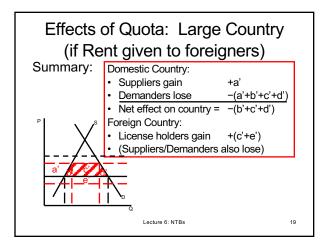
Lecture 6: NTBs

17

#### 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

Lecture 6: NTBs

#### 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

Lecture 6: NTBs

Effects of a Fall in World Price

Partition of the Fall in World Price

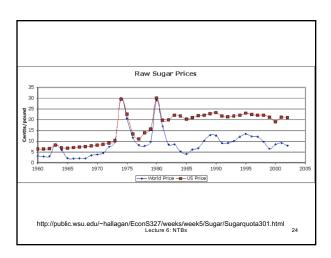
#### Effects of a Fall in World Price

- 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

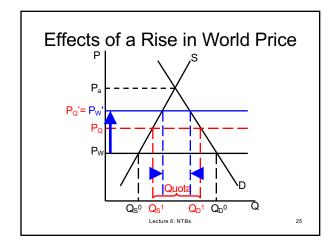
#### Effects of a Rise in World Price

- 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

Lecture 6: NTBs



_			
_			
_			
_			
_			
_			
_			
_			
_			
_			
_			
_			
_			
_			
_			
_			
_			



#### Outline: Nontariff Barriers

- What Are NTBs?
- Quotas
  - Effects Equivalent to Tariffs Who Gets the Rents
- Other NTBs
  - Tariff-Rate Quotas
  - Voluntary Export Restraints (VERs)

  - Variable LeviesGovernment Procurement Regulations
  - Customs Procedures
  - Standards
  - Unfair Trade Laws
  - Export taxes

Lecture 6: NTBs

# 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 Lecture 6: NTBs

Tariff	
$  \setminus   \setminus  $	
H'	Imports
Quota	

9

## Other NTBs: Tariff-Rate Quota (TRQ)

 This is what Trump used against imports of solar panels and washing machines

Lecture 6: NTBs

28

## 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

29

# 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

$\cap$

,			
,			
,			
,			
,			
,			
,			
,			
,			
,			
,			

### Other NTBs: Government **Procurement Regulations**

- Government favors domestic suppliers in buying goods and services
  - Buys only from domestic firms,

- 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

Lecture 6: NTBs

## 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

33	

#### 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

Lecture 6: NTBs

34

# 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

Lecture 6: NTBs

35

#### 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")

Lecture 6: NTBs

,			
,			
,			
,			
,			
,			
,			
,			
,			
,			
,			
,			
,			
,			

#### 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
  - Leading users of AD (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

Lecture 6: NTBs

37

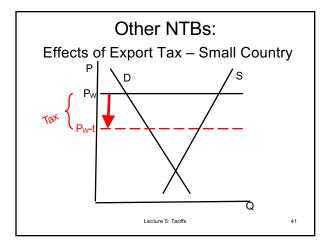
#### 

## 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

Lecture 6: NTBs

40



#### Outline: Nontariff Barriers

- · What Are NTBs?
- Effects Equivalent to Tariffs Who Gets the Rents
- Other NTBs
  - Tariff-Rate Quotas
  - Voluntary Export Restraints (VERs)

  - Variable LeviesGovernment Procurement Regulations
  - Customs Procedures

  - Standards Unfair Trade Laws
- Subsidies

#### **Subsidies**

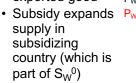
- Government assistance to producers
  - Export subsidy: paid only for exports
  - Domestic subsidy: paid for all production (but still increases exports or reduces imports)
- · Effect on the subsidizing country
  - In competitive industries, country loses
  - Subsidies usually are intended to benefit producers, not country
  - In non-competitive industries, result may be different (recall Boeing-Airbus example)

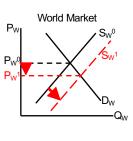
Lecture 6: NTBs

42

# Effects of a Subsidy on Foreign Countries

 Effect, if country is large, is to reduce the world price of the exported good





Lecture 6: NTBs

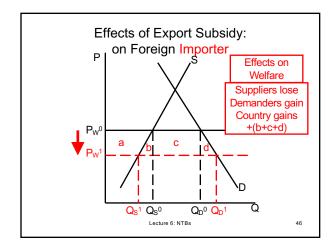
Bs

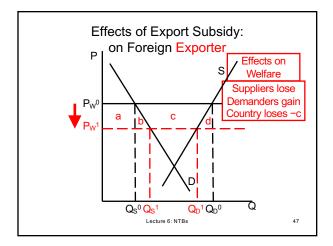
# Effects of a Subsidy on Foreign Countries

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

See this in the following figures...

Lecture 6: NTBs





# Effects of a Subsidy on Foreign Countries

- · In both cases
  - Foreign suppliers lose
  - Foreign demanders gain
  - Net effect on  $\underline{\text{countries}}\,\text{depends}$  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 countriesCotton: Certain African countries

Lecture 6: NTBs

## **Next Time**

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

Lecture 6: NTBs