

Exercise 3. Real-world application of tariff

- ◆ Import tariff: large country case in soybean mkt



2017: China accounted for 60% of US soybean exports

2018: US planted big crop in response to high demand and poor crop in Argentina; US bumper crop as China applies tariff

Source: *Economist*, "Soyabeans: Soy sources", 23 Feb 2019, p. 73.

Import/Export Quotas as a Policy Tool, ... continued

✦ Experiences with import quotas: case of Norway

◆ Total cheese quotas

- 1995: Duty-free 4 500 ton EU quota
 - ◆ 3430 tons licensed thru historical allocation
 - ◆ 340 allocated to processors
 - ◆ 730 tons by application, 1st come, 1st serve
- 2011: 2 700 ton EU quota by auction (25,26 kr/kg bid price in 2016)
- Imports exceeding quota volume subject to 200+% tariffs
- 2021: 75,000 tons produced in Norway (imports \approx 15% of consume)
- <https://www.toll.no/en/corporate/import/free-trade/quotas/>

◆ Voluntary export restraints and orderly marketing arrangements

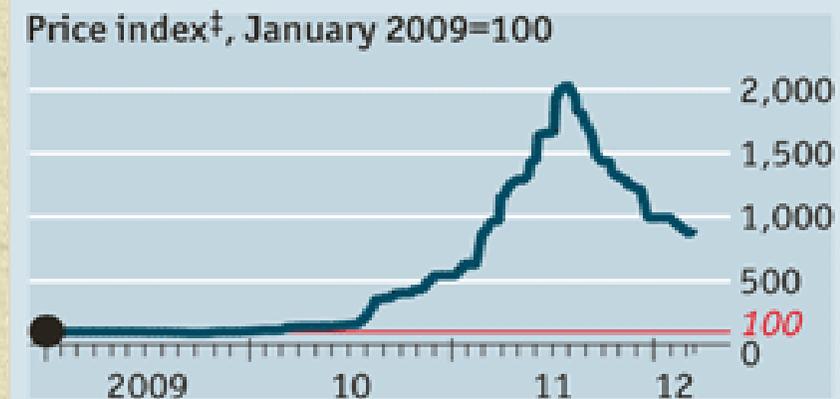
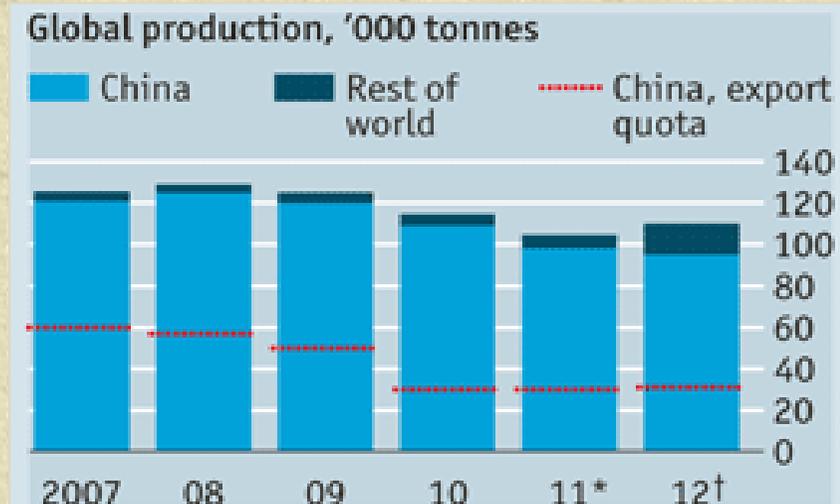
Import/Export Quotas as a Policy Tool, ... continued

Export quota: case of rare earth elements

- Background
 - ◆ Key manufacturing input
 - ◆ China global supplier/exporter

Background information	
Share of world Q, 2000-10	97%
Share of reserves	50%
Avg export vol, 2000-09	47 000 – 50 145 tons
Export quota, 2010	30 000 tons

- What is the policy objective?
 - ◆ Address environmental concern
 - ◆ Improve TOT at expense of others

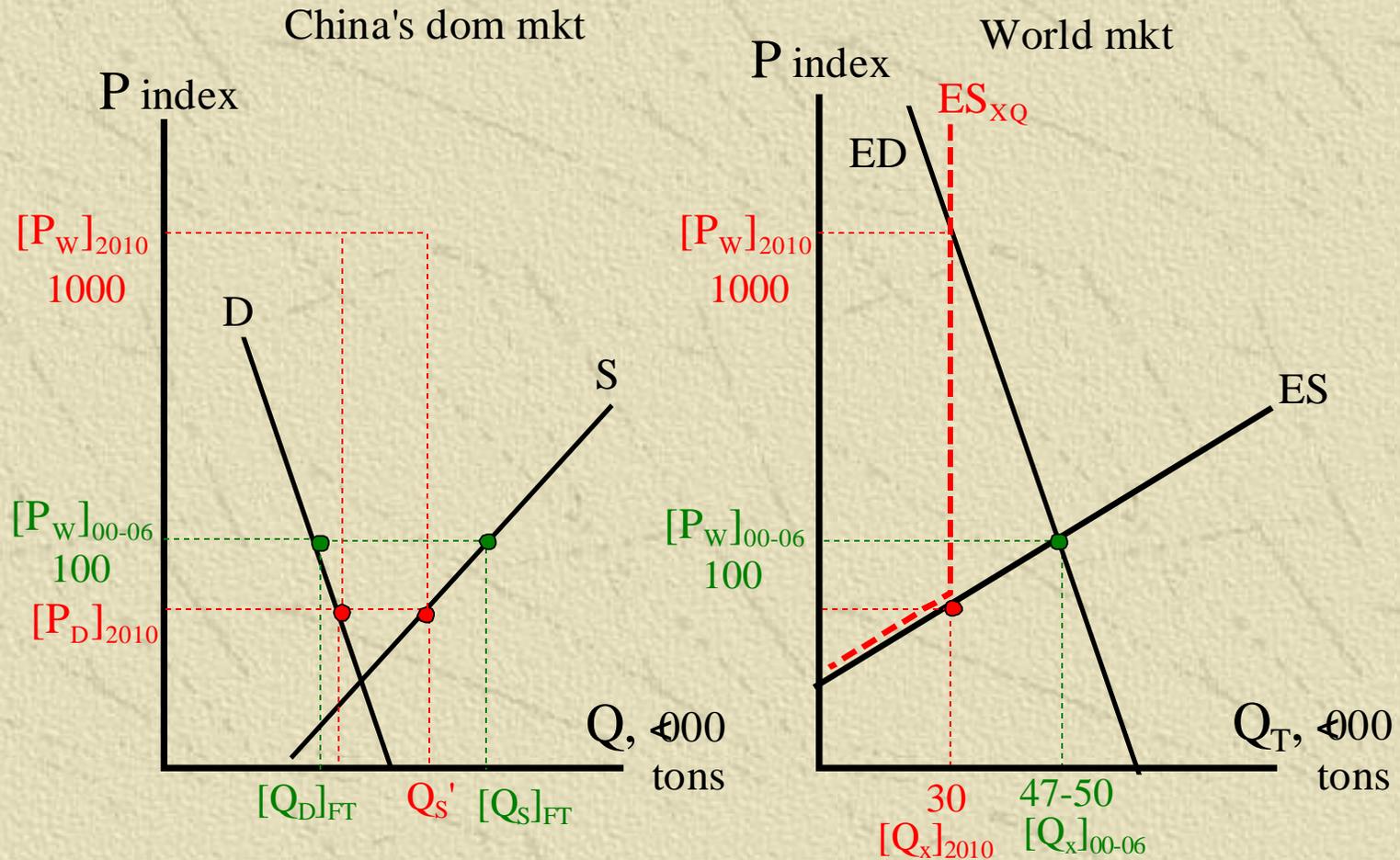


Sources: China's Ministry of Commerce; IMCOA; Kaiser Research Online

*Estimate †Forecast
‡Composite of ten minerals

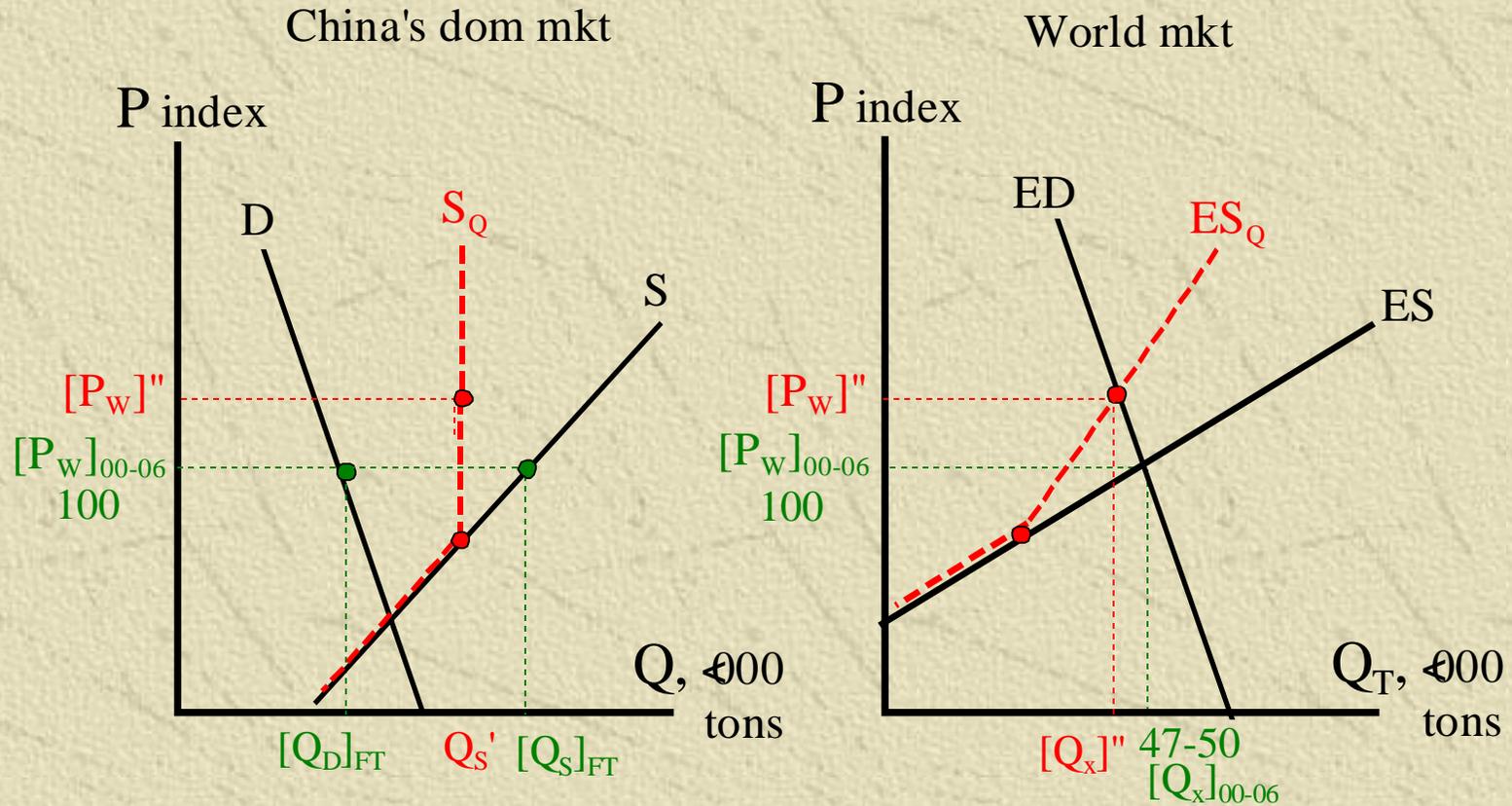
Import/Export Quotas as a Policy Tool, ... continued

- ◆ Is an export quota an appropriate tool to meet an environmental objective?



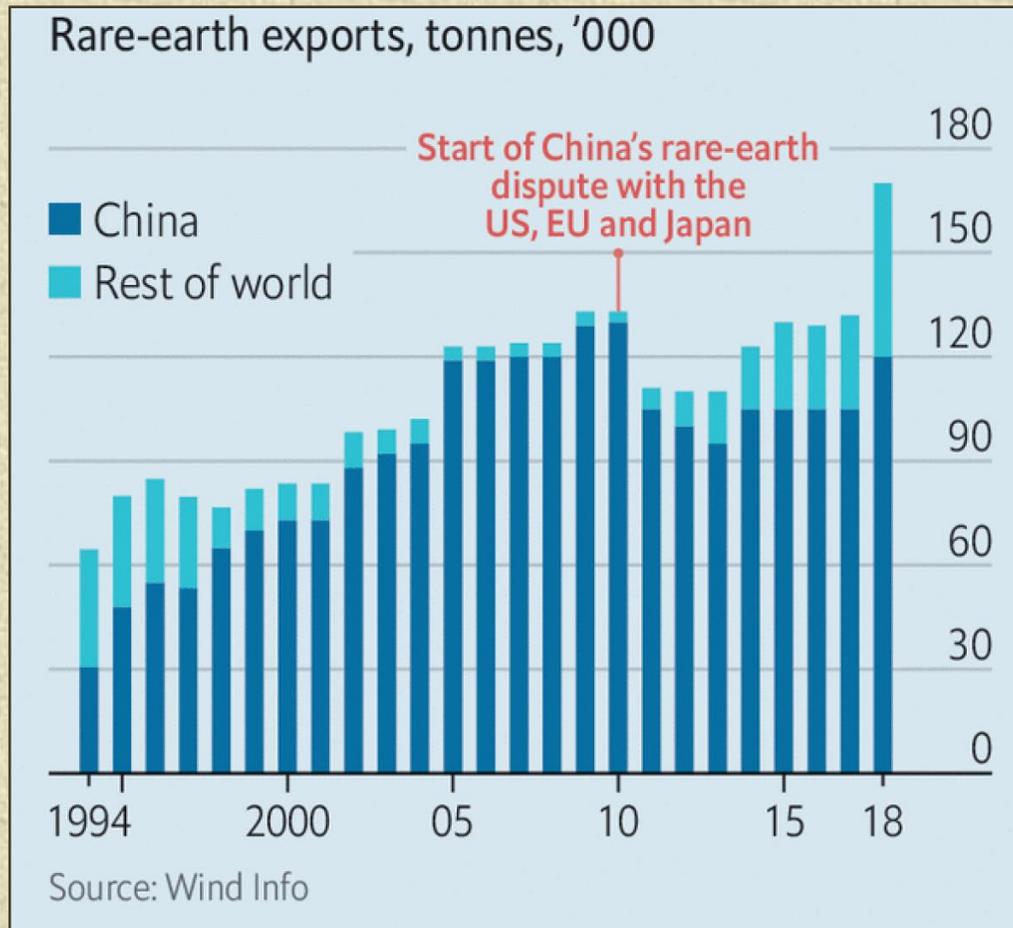
Import/Export Quotas as a Policy Tool, ... continued

- ◆ Is a production quota an appropriate tool to meet an environmental objective?



Import/Export Quotas as a Policy Tool, ... continued

◆ Aftermath of the policy and trade dispute



2010: WTO case found that China's policy was not for protecting environment, but to control raw materials for dominance in value added: turning oxides into metals and metals into products.

Concern with China's dominance of rare earths has led to increased mining in the rest of the world.

Economist, "Rare earths: Magnetic attraction", 15 Jun 2019, p. 47-8.

5. Export Taxes as a Policy Tool

5.1 Basics of an export tax

- ✦ Definition by type
- ✦ Objectives and economics
- ✦ Economic and political issues
 - ◆ WTO rules on exports more weakly enforced than imports
 - ◆ Economic: logic of WTO principles; efficiency
 - ◆ Political: Who taxes exports? Why should WTO care?

5.2 Graphical analysis: economic, trade and welfare

- ✦ Case of Argentina, 2005-08
- ✦ Case of Mozambique, 2001
- ✦ Case of global export taxes, 2007 price spike

Export Taxes as a Policy Tool

✦ Case of Argentina (soybeans, beef)

◆ Export taxes: overall; soybeans

- 2005 overall ag export taxes
 - ◆ 80% of all X earnings
 - ◆ 6% of total revenue – for soy, 23.5% of soy revenue
- 2008: soy tax ↑ to 40%
 - ↑ 95% when $P_W > \$600/\text{ton}$
- 2023: 33% tax on soy

◆ Beef, 2005-06

- 15% tax; near-ban if P_W ↑ too much
- Trading in ag futures stopped
- Farmers strike/block roads
- Domestic P (slaughterhouse):
 - ◆ ↓ P_D to farmers by 30%
 - ◆ ↓ P_D to consumers by 7.5%

In 2006, President reversed policy allowing export volume to ↑ to 65% of 2005 level: ↑ P_D → ↑ X



Economist, “Farming in Argentina: Biting the Hand that Feeds” 26 Oct 2006; and “Argentina: Deadlock”, 31 May 2008, p. 60

Export Taxes as a Policy Tool

✦ Case of Mozambique's cashew nut sector

◆ Background

- 1960s: ½ of world crop production and domestic nut processing
- 1977-92: civil war left sector in ruins
- 1990s: World Bank has gov't cut export tax and remove controls
- 2001: X ban on nuts during harvest; 18-22% X tax; 0% if processed

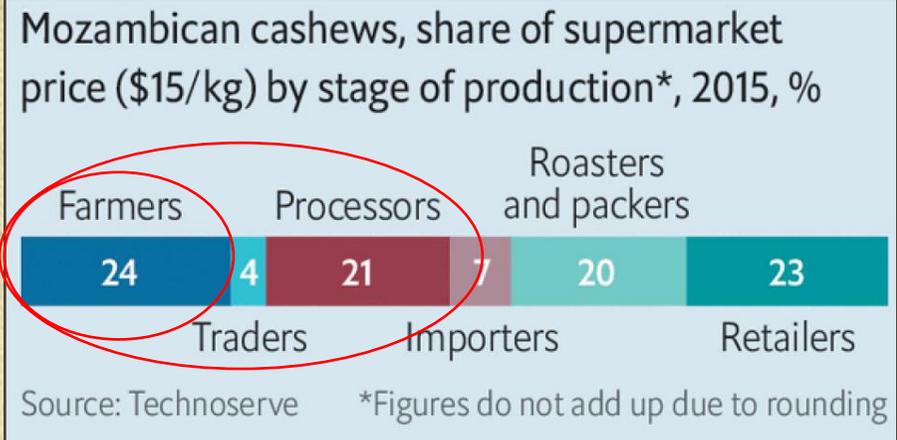
◆ Result:

- Some smuggling: $P_W > P_D$, $P_D \downarrow$ hurts producers, helps processors
- $\downarrow Q_S$, \downarrow quality, \downarrow investment in new trees
- Gov't hurts 1.3m smallholders to \uparrow 17 000 jobs in 16 processing plants

Tax is intended for survival of sector: 50% of share of value not 24%.

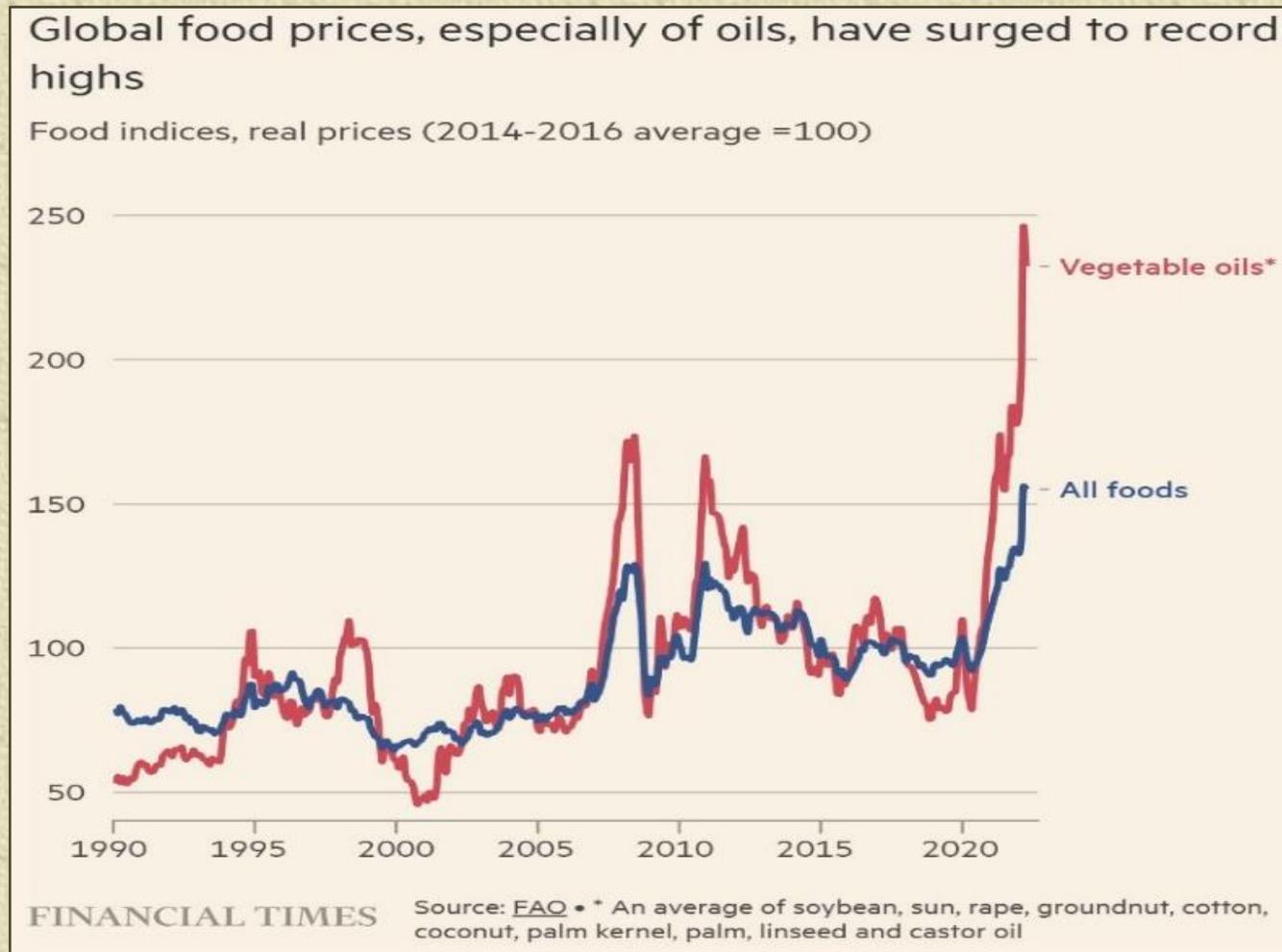
Problem: India is world's biggest consumer/processor. In 2019, India \uparrow tariff to 70% on processed nuts

Source: *Economist*, "Mozambique's nutcrackers: Cashews and cash", 14 Sep 2019, p. 35.



Export Taxes as a Policy Tool

- ◆ Commodity P-shocks: 2007, 2011-13 and 2021-22



2007: panicked by rising food prices 30+ gov'ts from Ukraine to China, introduced export restrictions on farm produce, cutting supply on world markets. Rice was worst hit – only 4% of total crop is traded globally. On news of X bans prices tripled.

Financial Times, “Export bans and protectionist policies worsen disruption in food markets”, 11 May 2022, p. 8.

Economist, “Of Froth and Fundamentals”, 11 Oct 2008. 10

Import/Export Quotas as a Policy Tool, ... continued

✦ Export restriction: case of sanctions on Russia

- ◆ Fallacy of “strategic commodity”
- ◆ Transshipments via central Asia

✦ US export controls - China



6. Trade Subsidies as a Policy Tool

6.1 WTO definition of a subsidy / export subsidy

6.2 Basics of *trade* subsidies

✦ Types: ad valorem or specific

- ✦ Import subsidy not common – food aid instead
- ✦ Export subsidy require rules on their use

✦ Objectives

✦ Economics and political issues

6.3 Modeling: partial eqlbm analysis

Trade Subsidies as a Policy Tool

- ✦ Alternative programs to facilitate or promote exports
 - ✦ Mkt and product promotion
 - ✦ Special economic zones (SEZs)
 - Tax-free imported inputs
 - Reduced tax on profit
 - Other subsidies



Economist, “Special economic zones: Political priority, economic gamble”, 4 Apr 2015, p. 59-60

Trade Subsidies as a Policy Tool

◆ Shanghai SEZ: Shift to services from manufacturing



Six sectors opening for investment in the SFTZ

Industry	Sub-sector
Financial	Banking
	Health insurance
	Leasing
Shipping	Ocean shipping and management
Commercial	Value-added telecom services
	Sales and service of game machines
Professional	Legal services
	Credit investigations
	Travel agencies
	Investment management
	Construction services
Cultural	Entertainment venues
	Social

Source: HSBC

In China, services ↑ to 62% of GDP in 2013 (in Hong Kong it is 90%); Officials are experimenting with deeper reforms in services within a tightly-sealed zone.

Trade Subsidies as a Policy Tool

6.4 WTO rules on subsidies (prohibited for manu goods)

- ✦ Ag export subsidies commitment: bound value and volume, base yr 1986-90
 - ◆ DCs: 36% cut in value, 21% cut in volume over 1995-2000
 - ◆ LDCs: 24% cut in value, 14% cut in volume over 10 yrs
 - ◆ 2020: export subsidies no longer allowed

Trade Subsidies as a Policy Tool

✦ India's sugar (cane) subsidy: domestic vs trade subsidy

◆ Background

- 2018: India became biggest producer
- 2019: record output ($Q_S = 33\text{m tons}$; $Q_D = 26\text{m}$)
 - ◆ Cumulative sugar stockpile: a record 14.5m tons
 - ◆ P_W at lowest in 10 years
- 35-50m farmers on 1-2 hectare plots (7.5% of rural pop of 2 big states)
- Sugar mills employ 600 000 people

◆ Policy

- P_D of cane is a “state-advised price” guaranteeing min P to farmers
- Gov't also sets a min P for mills - consumers / users pay high price
- Aug 2019: mills were paid bonus of 15¢/kg for export (\$877m in total)

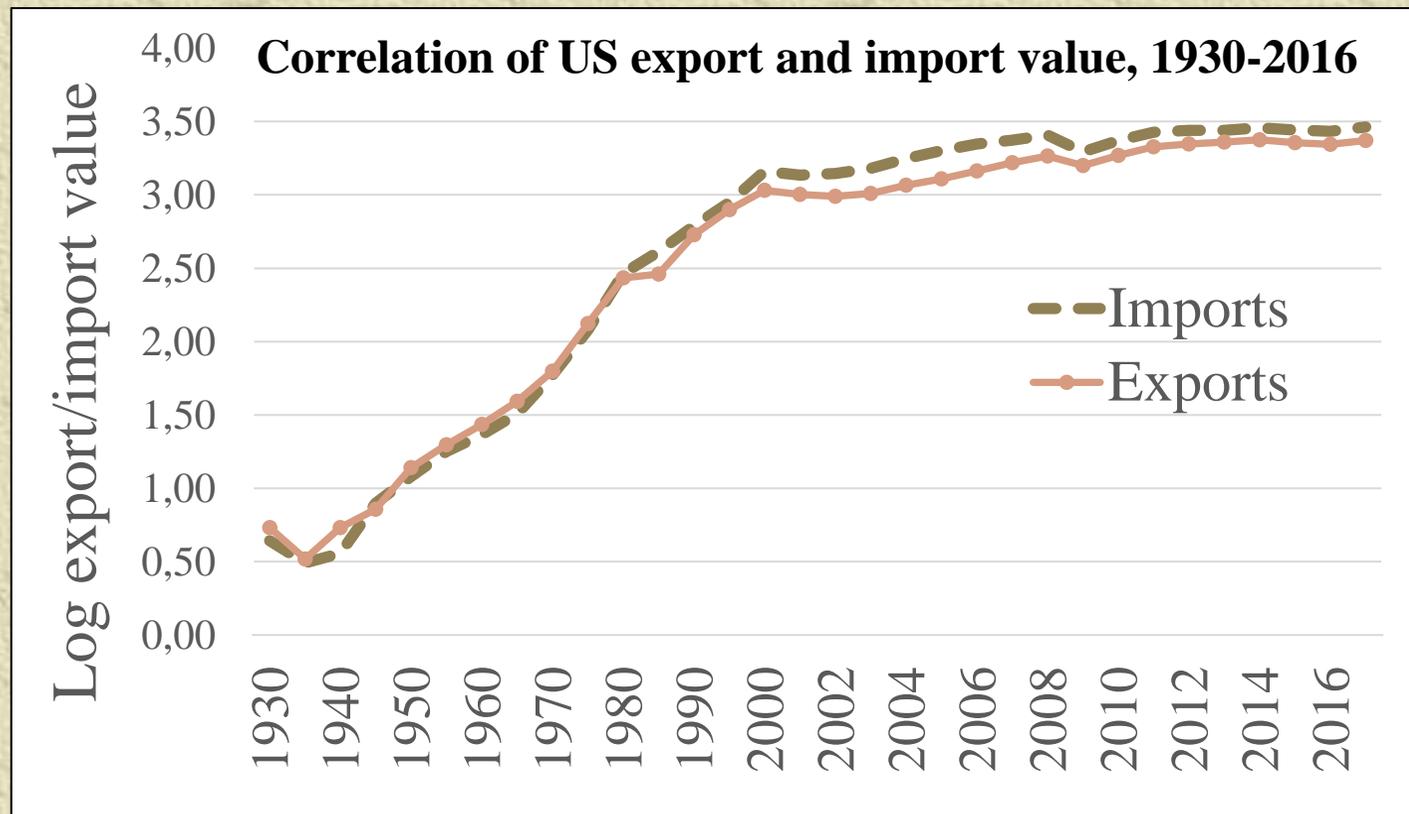
◆ Brazil, Australia and Guatemala file WTO complaint

- $\downarrow P_W$
- Displace exports

Trade policy analysis: concluding comments

6.5 Lerner symmetry: empirical evidence

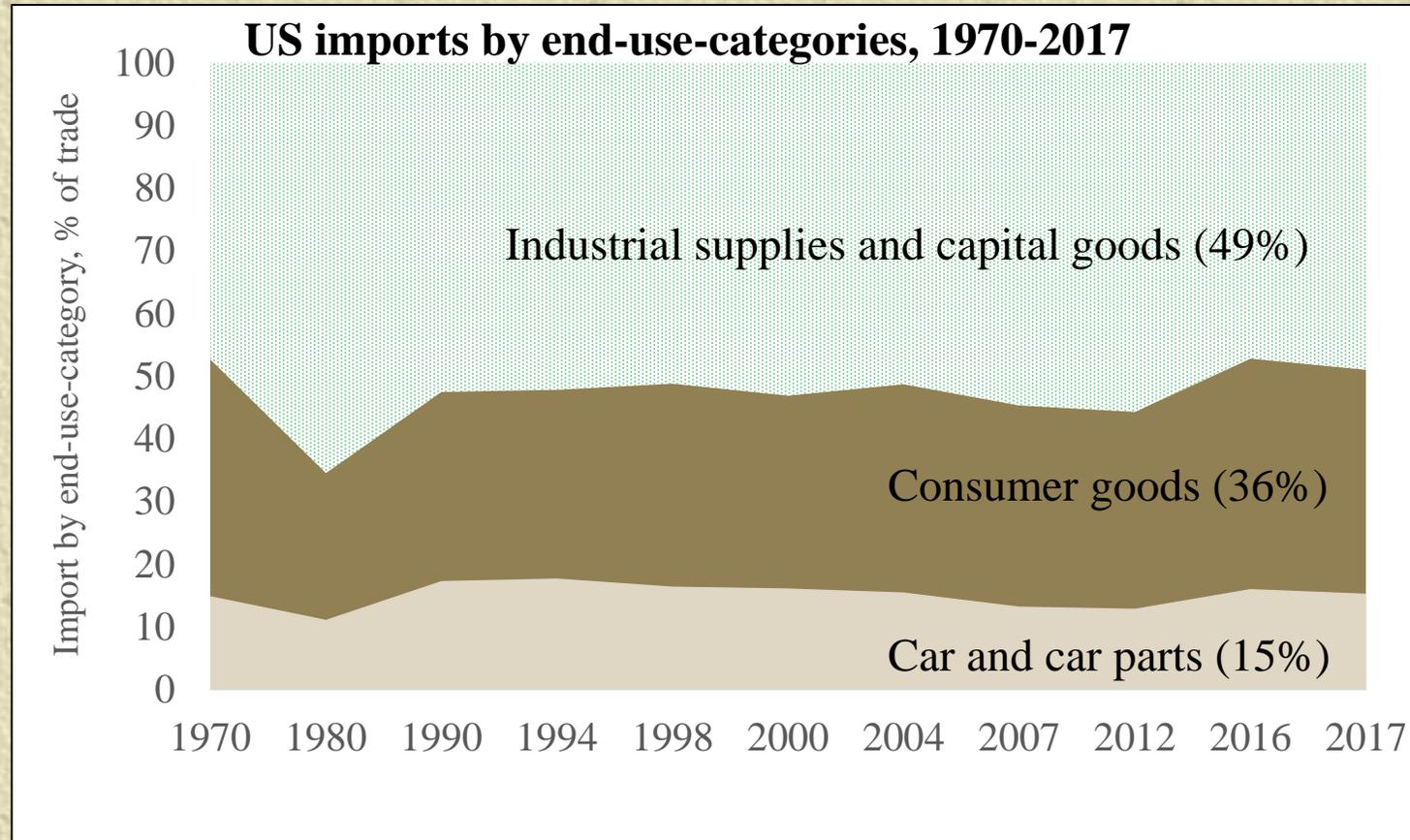
✦ Taxing imports is taxing exports



Source: US Census Bureau, <https://www.census.gov/foreign-trade/statistics/historical/gands.pdf>, accessed Sep 2018.

Trade policy analysis: concluding comments

✦ Businesses are consumers too



Data source: US Dept. of Commerce, *Survey of Current Business*, Mar issues year after date.