

Recent Tensions in Developed Countries

Lecture Summary

- Dimensions of the globalization “backlash”
 - Something familiar:
 - Does trade with labor-abundant developing countries cause income inequality in developed countries?
 - Theory (Stolper-Samuelson) says “yes”
 - Evidence says “a little”
 - Something new:
 - Does globalization weaken environmental standards by causing a regulatory “race to the bottom?”
 - Does the WTO undermine national sovereignty?

Does trade with labor-abundant countries like China cause income inequality in the U.S.?

- Since 1973, low-skilled wages in the U.S. have fallen sharply while wages for the high-skilled have increased (Figure 1).
- In Europe, by contrast, low-skilled workers have experienced high and persistent unemployment
- Both trends are evidence of increasing inequality, and both coincide with increasing “globalization” (Figures 2-5)
- But is globalization the culprit?
- Trade theory suggests a positive answer...let’s begin by considering endowments...(Figure 6)

U.S. Exports and Imports are consistent with Heckscher-Ohlin

- U.S. is abundant in skilled labor
 - Net exporter of aircraft, precision instruments, chemicals, management and consulting services
- U.S. is abundant in arable land
 - Net exporter of temperate zone agricultural products (wheat, corn, soybeans, etc.)
- U.S. scarce in unskilled labor
 - Imports shoes, clothing, etc. from places like China and India

So, are your wages set in Beijing?

- In the 1980s and 1990s, the demand for less-skilled workers fell in advanced countries
- In the U.S., this showed up primarily in falling real wages for the less-educated
- In 1991, the bilateral U.S. merchandise trade deficit with China was second only to its deficit with Japan
- Hence, there is a rough concordance of falling demand for less-skilled workers with increased imports of manufacturing goods from developing countries
- Is this Factor-Price-Equalization (FPE) at work?
 - Issue: Whether in a global economy the wages or employment of low-skill workers in advanced countries are determined by global supply of less-skilled labor, rather than by domestic labor market conditions

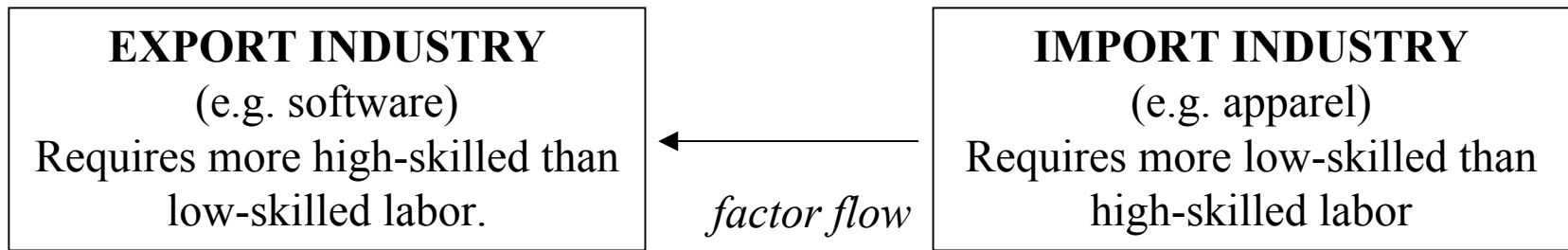
Evidence on FPE

- At first glance, FPE seems compelling:
 - If the North imports clothing and toys produced by low-paid Chinese workers, surely low-skilled northerners, who produce these goods at wages 10 times those of the Chinese, will face a difficult time in the labor market
- Empirical evidence suggests that domestic causes matter more. Freeman's scorecard:
 - Globalization matters, but it is neither all that matters nor the primary cause of the observed changes
 - Most estimates suggest that globalization (trade, FDI, immigration) “explains” between 5% and 30% of income inequality in the U.S.
 - Technological upgrading of the economy accounts for most of the fall in demand for low-skilled workers

Distributional effects of North-South Trade

(Stolper-Samuelson Redux)

- Assume only two U.S. industries (EXPORT and IMPORT) and only two factors of production (HIGH-SKILLED LABOR and LOW-SKILLED LABOR)
- Assume perfect inter-industry mobility of factors of production (factors can move costlessly between the two industries).
- Then see what happens when we go from autarchy to free trade...



With free trade, the PRICE of software RISES, enhancing profits for firms in this industry. To expand output, export firms draw in factors from the import industry. The export industry needs more high-skilled than low-skilled labor.

With free trade, the PRICE of apparel FALLS, decreasing profits for firms in this industry. Import firms contract production and lay off workers. The industry sheds more low-skilled than high-skilled labor.

- In the overall (two industry) economy, free trade produces a SHORTAGE of high-skilled labor and a SURPLUS of low-skilled labor. The shortage of high-skilled labor is due to the fact that the export industry needs more high-skilled workers than the import industry is able to provide. The surplus of low-skilled labor results from the fact that the import industry sheds more low-skilled workers than can be employed in the export industry.
- STOLPER-SAMSUELSON THEOREM: Free trade benefits the locally abundant factor of production (e.g., high-skilled labor in the U.S.) regardless of industry, and harms the locally scarce factor (low-skilled labor in the U.S.) regardless of industry.

Environment, Labor Rights, and Globalization

- Summary of the “new” globalization tensions
 1. Trade and the environment
 - Does trade make environmental problems worse?
 - Do the global rules of the trading system, specifically the WTO, prevent governments from pursuing stronger environmental policies?
 2. Trade and the protection of worker rights
 - The U.S. is at the forefront of a movement to establish global labor standards (e.g., right to organize, bargain collectively, freedom from forced labor, discrimination, and exploitative child labor).
 - LDCs (and most economists) see this as protectionism in disguise

Does trade make environmental problems worse?

- Tension: globalization permits production to be shifted to countries that have lax environmental standards, engendering a “race to the bottom” in environmental standards
 - Research on relocation of production in response to differences in environmental standards finds that effects are trivially small (other things like wages and transportation costs matter much more)
 - e.g. costs to firms of meeting environmental regulations are small (< 1 % of sales revenue), even in the most stringent countries
 - Bottom line: environmental regulations don’t have much impact on trade and location decisions. Otherwise, we would see a mass migration of production from the U.S. to high pollution LDCs

Is the WTO Anti-Environment?

- Do WTO rules prevent governments from pursuing strong environmental policies?
 - Main preoccupation of the WTO is with liberalizing trade, but rules make specific mention of environmental concerns (next slide)
- Tension: signing parties in 1994 conceded that environmental concerns might justify trade barriers, but were suspicious that such concerns could be an excuse for protectionism

WTO's Environmental Exceptions

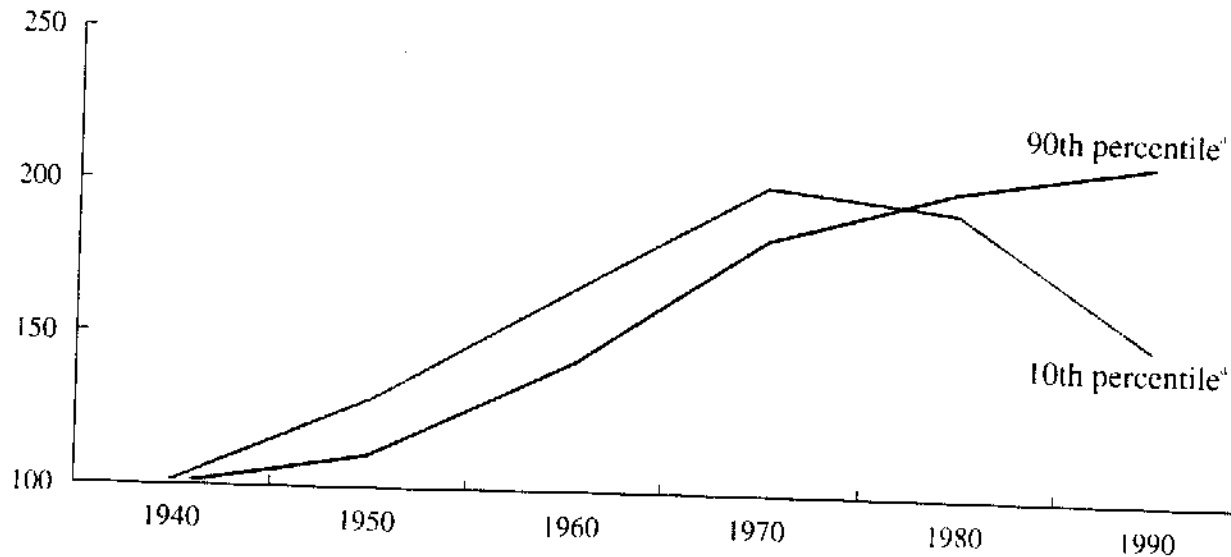
- Countries *can* impose product standards or other limits on consumption to protect the country's health, safety, or environment
 - But policy must apply to all consumption, not just to imports
 - And policies that impose product standards must have a scientific basis
- These two requirements ensure that governments don't "invent" standards, directed at imports, for protectionist purposes

Environmental Exceptions, cont.

- WTO does not permit a country to limit imports based on *production methods* used by firms in other countries
- This angers environmentalists since production methods in foreign countries do cause environmental damage:
 - purse-seine fishing for tuna, which kills dolphins
 - shrimp nets that kill turtles
- Tension: WTO seems to override national sovereignty on environmental issues
 - WTO rulings are very sensitive to this concern.
 - Won't allow trade barriers, but recommends alternatives (e.g, labeling goods produced with enviro-friendly methods; promoting better technologies (e.g., TEDs)

Figure 1: Income Inequality in the U.S.

Figure 4.8 □ Indexed Weekly Wages of White Males, 1940-1990 (1940 = 100)



^aPercentiles refer to percentiles of the wage distribution where workers in the 99th percentile have the highest earnings.

Source: Elaine Buckberg and Alun Thomas, "Wage Dispersion and Job Growth in the United States," *Finance and Development* (June 1995), p. 17; data from C. Huhn, "Wage Inequality and Industrial Change," National Bureau of Economic Research Working Paper No. 4684, March 1994.

Figure 2: U. S. Imports from Developing Countries

Year	% of all US imports	In US\$ millions
1992	30.56%	162,787
1993	30.92%	179,458
1994	31.37%	208,069
1995	32.51%	241,699
1996	34.65%	275,593
1997	35.74%	310,790
1998	35.52%	323,907
1999	36.10%	369,920
2000	38.11%	463,790
2001	38.70%	441,968

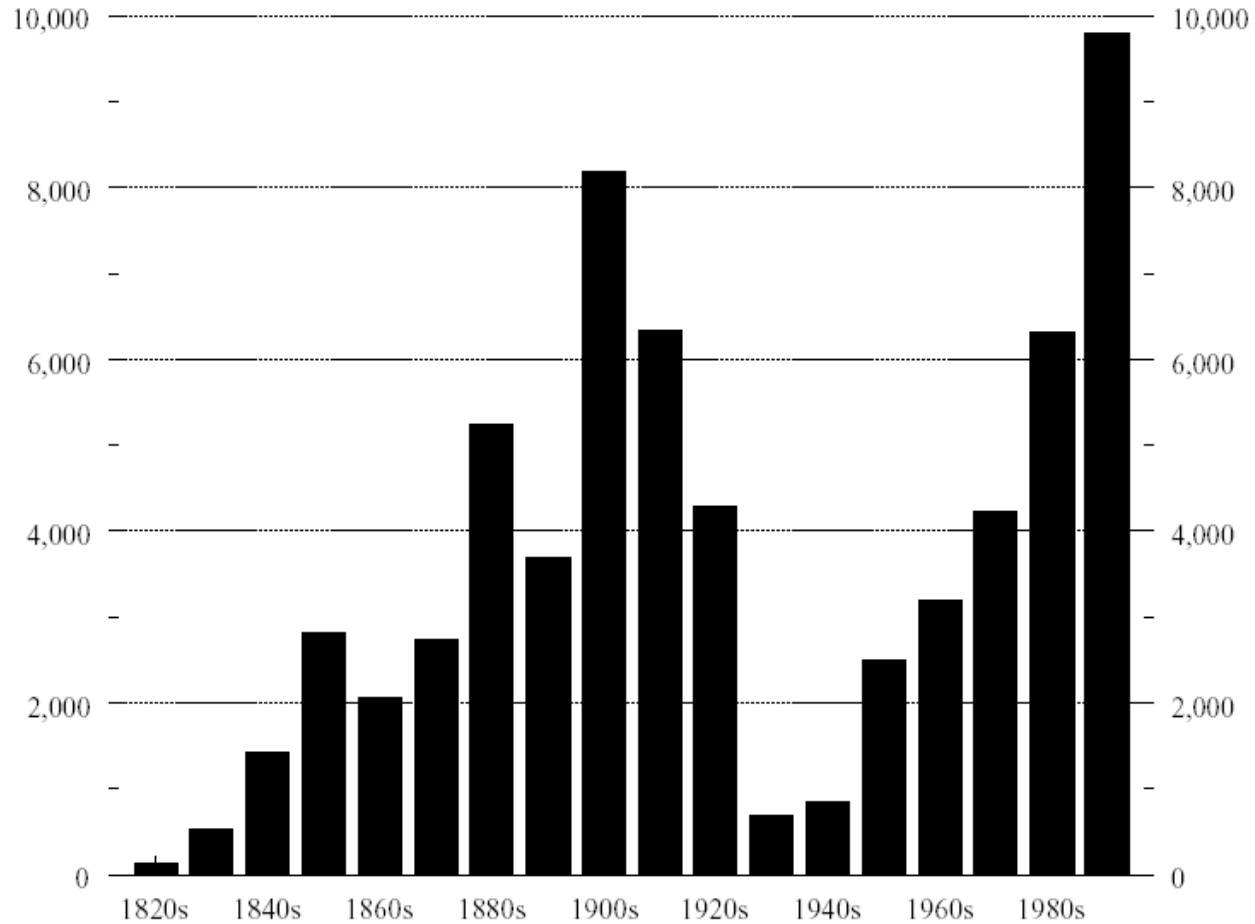
As a baseline, consider that in 1970, only 14% of US imports came from developing countries.

Figure 3: Top 10 Developing Country Sources of U.S. Imports, 2000

Country	Value (\$ US Billions)					Percent Change
	1996	1997	1998	1999	2000	1999-2000
1. Mexico	74.2	85	93	109	134.7	24
2. China	51.2	62	70.8	81.5	99.6	22
3. Taiwan	29.8	32.5	33	35.1	40.4	15
4. Korea	22.5	22.9	23.7	31.2	39.8	28
5. Malaysia	17.8	17.9	18.8	21.4	25.4	19
6. Singapore	20.2	20	18.2	18.1	19.1	6
7. Venezuela	12.4	12.6	8.9	10.4	17.4	68
8. Thailand	11.3	12.5	13.4	14.3	16.3	14
9. Saudi Arabia	10.0	9.5	7.1	7.9	14.3	82
10. Philippines	8.2	10.4	11.9	12.4	13.9	13

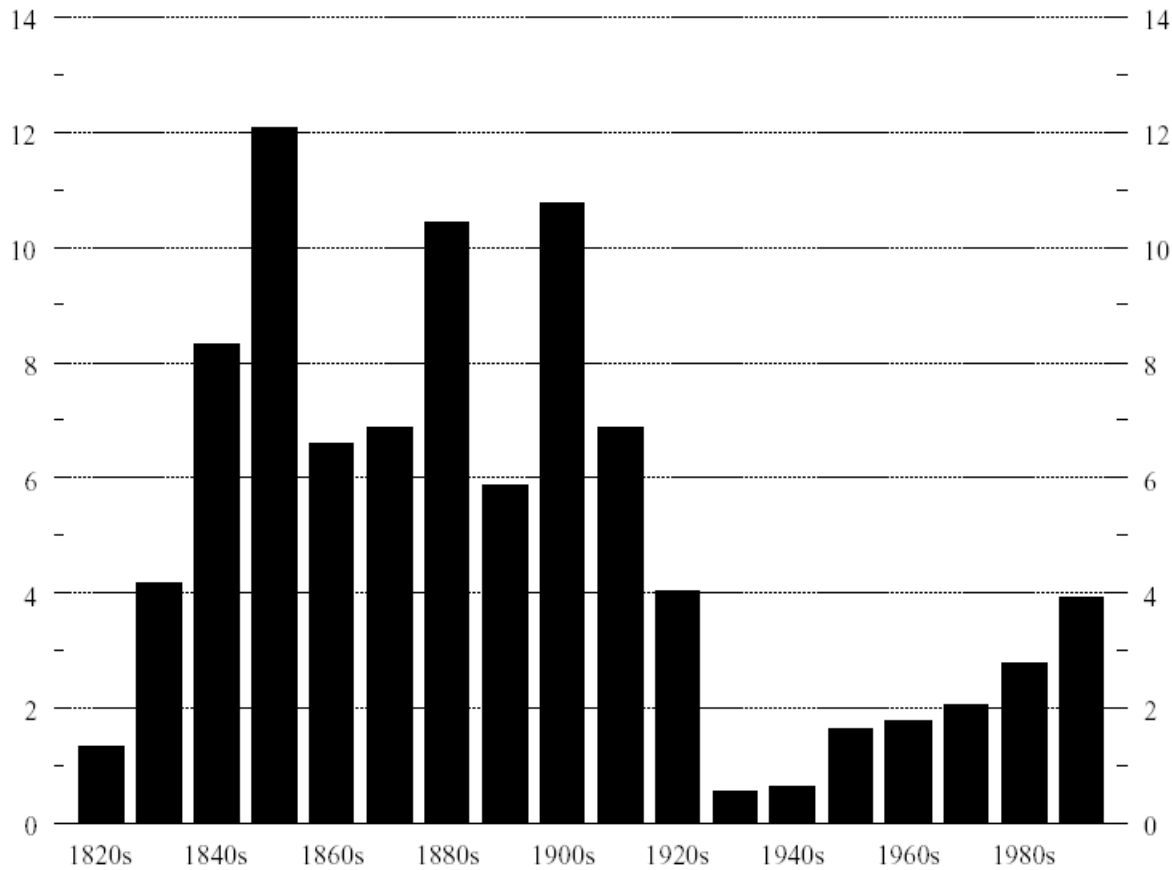
SOURCE: USITC

Figure 4: US Immigration (thousands per decade)



Source: U.S. Department of Commerce, Bureau of the Census.

Figure 5: US Immigration (percent of resident population)



Source: U.S. Department of Commerce, Bureau of the Census.

Figure 6: Estimates of Relative Factor Endowments, mid 1990s

	Physical Capital	Highly Skilled Labor	Medium Skilled Labor	Unskilled Labor	Arable Land
U.S.	25.8%	28.5%	13.6%	0.5%	24.1%
Japan	15%	10.4%	7.2%	0.3%	0.5%
Developing Countries	17.6%	16.6%	54.4%	97.8%	51.0%

Expressed as a percentage of world resources.

Figure 7: Turtle Excluder Device (TED)



TEDs are metal grids inserted into the funnel shaped shrimp nets. As the nets are dragged along the bottom, shrimp and other small animals pass through the TED and into the net. Sea turtles, sharks, and fish too large to get through the panel are deflected out an escape hatch. They are cheap: \$50-\$350.