

Globalization

International Trade

The Puzzle

- **All economic analysis concludes that trade is beneficial. Why, then, does every country restrict trade in some way?**
 - **Why, too, have policies toward trade varied so much from country to country and over time?**

Interests, Interactions, and Institutions

- **Trade has distributional consequences and creates different interests. Although every country gains, within each some groups gain and some lose.**
- **Trade policy is a function of the relative weight of the winners and losers in national politics, and the institutions that aggregate their interests.**
- **International institutions facilitate free trade by changing the structure of domestic interests, solving coordination problems, and creating a standard of behavior.**

Law of Comparative Advantage

- **Any single country is best off specializing in that good it is comparatively best at producing and exchanging for those goods it is comparatively less adept at producing.**
 - **Same principle we use in our daily lives.**
 - **Every country has a comparative advantage; does not depend upon absolute productivity but rather on relative productivity.**
 - **Law holds even for one country, regardless of whether other countries reciprocate by opening their economies to trade.**

Illustration of Law of Comparative Advantage

■ Productivity

	Output per Worker per year		Opportunity Cost (Relative Price) in Autarky	
	Computers	Pairs of Shoes	1 Computer	1 pair of shoes
U.S.	50	200	4 pairs of shoes	.25 computers
China	5	175	35 pairs of shoes	.03 computers

Law of Comparative Advantage (continued)

■ Production & Consumption in Autarky

	Computers	Pairs of Shoes
U.S.	30m	80m
China	3m	70m
Total	33m	150m

Assume 1m workers in each country = initially 600K in computers, 400K in shoes.

■ Production w/ International Specialization

	Computers	Pairs of Shoes
U.S.	50m	0
China	0	175m
Total	50m	175m

Assume 1m workers in each country devoted to only comparatively advantaged industry.

Law of Comparative Advantage (continued)

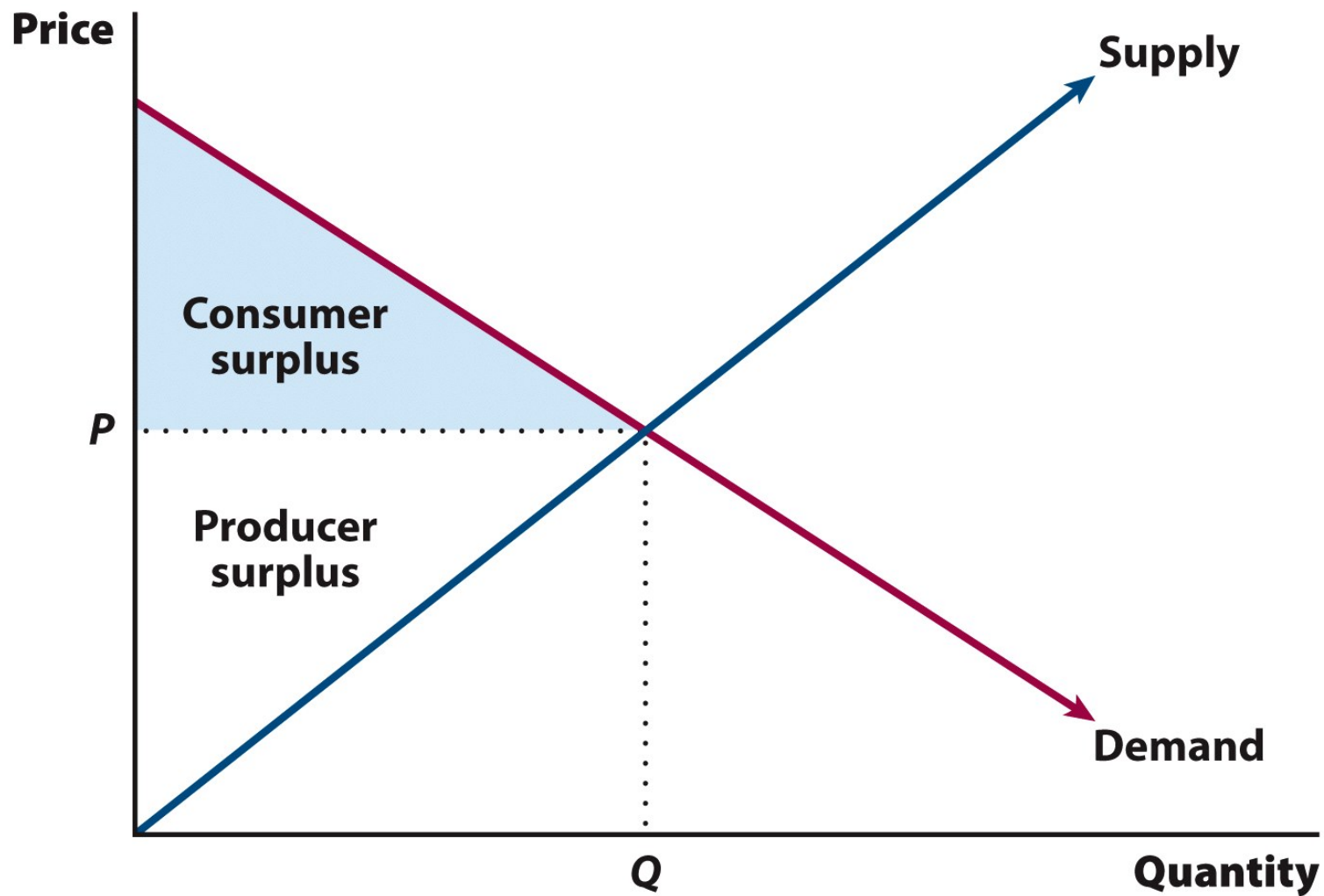
- In autarky, price in U.S. was 1 (computer): 4 (pairs of shoes)
- In autarky, price in China was 1:35
- World price will be between these national prices. Assume 1:10.
- If U.S. exports 10m computers and imports 100m pairs of shoes:

■ Consumption with Trade

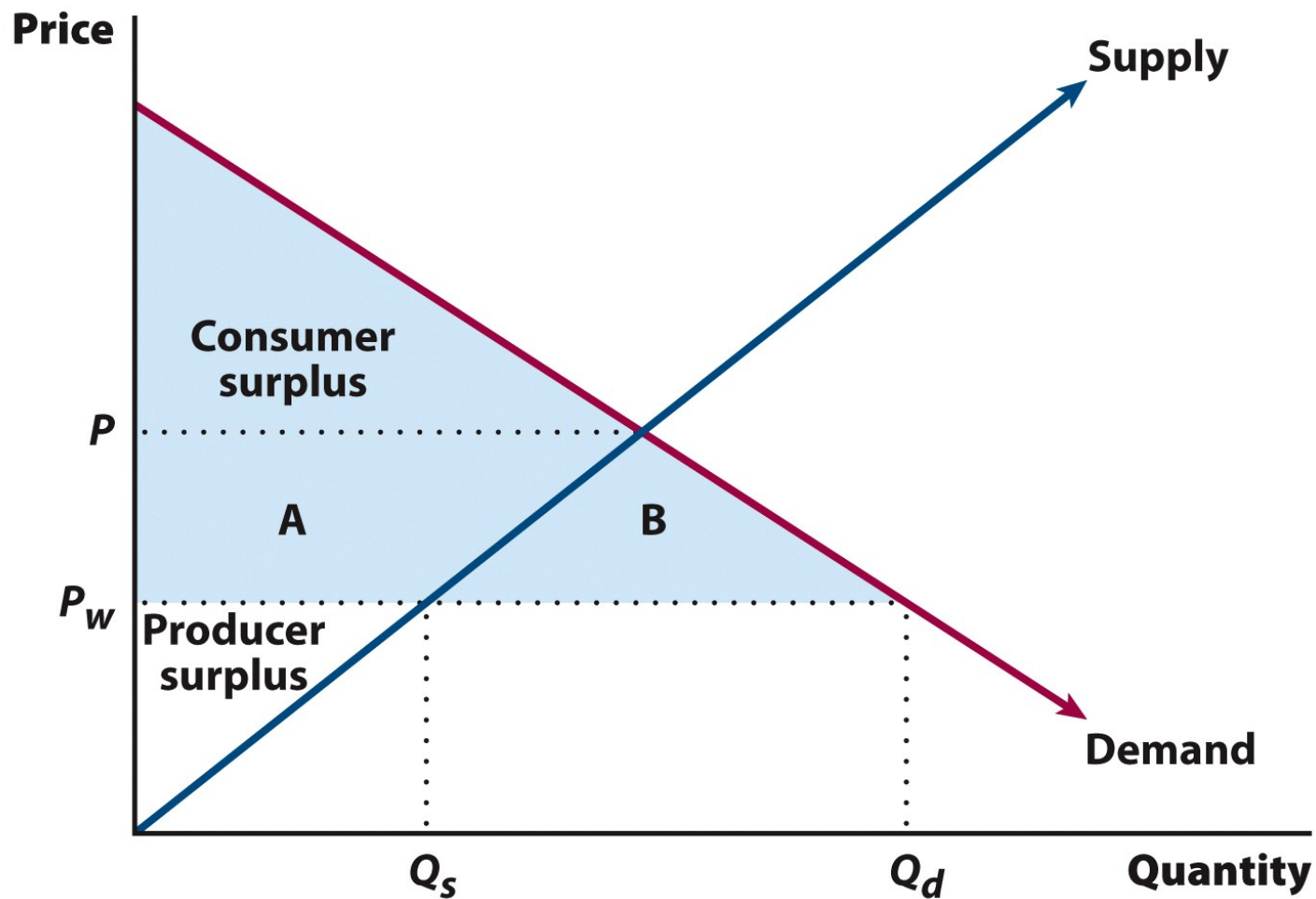
	Computers	Pairs of Shoes
U.S.	40m (+10m)	100m (+20m)
China	10m (+7m)	75m (+5m)
Total	50m	175m

Net gain from autarky
in parentheses.

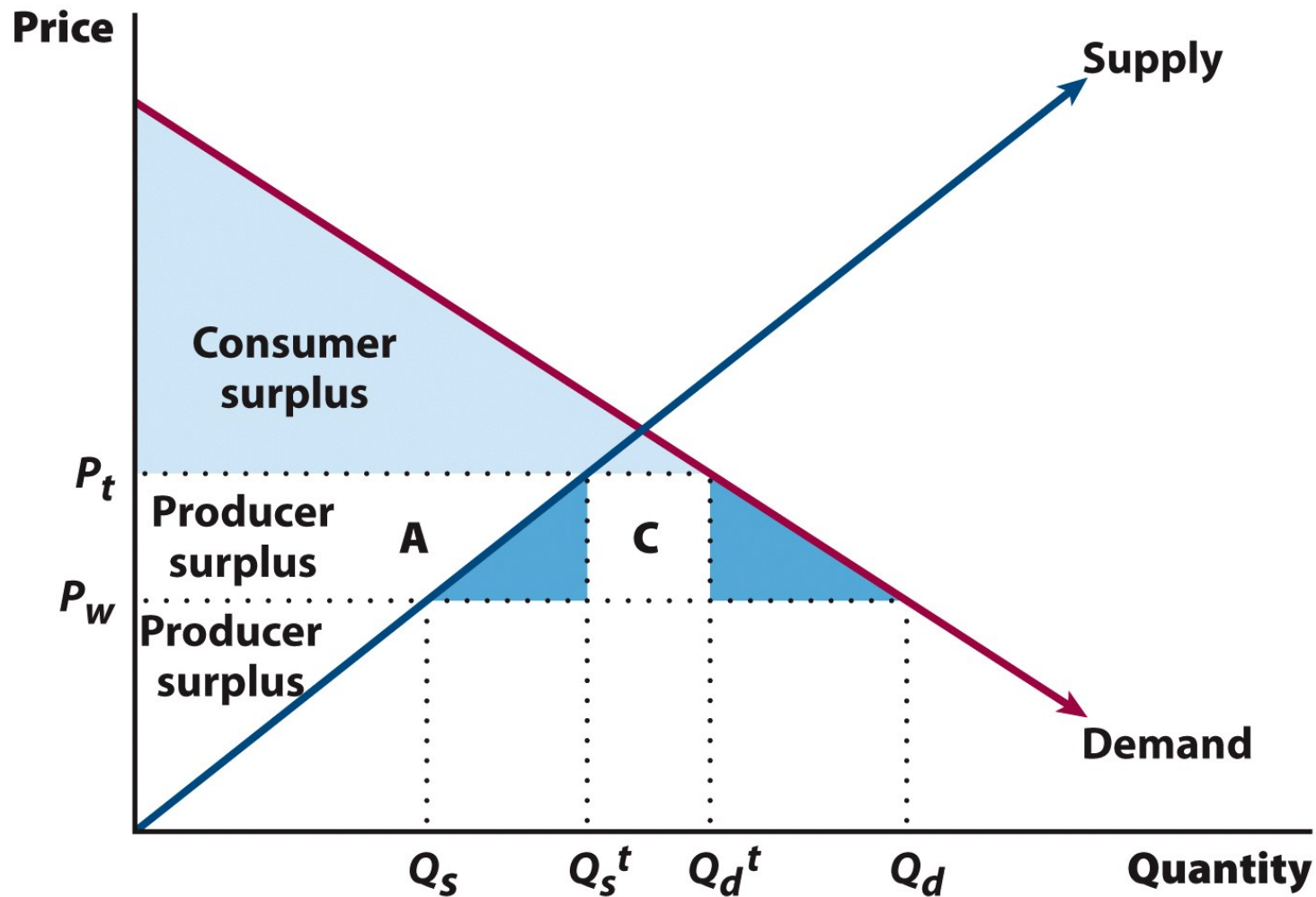
Welfare in Autarky



Welfare Effect with Free Trade



The Effect of a Tariff



The Political Economy of Trade

- **Producers have concentrated interests in protection. Receive significant benefits from protection -- jobs, profits.**
- **Consumers have diffuse interests in free trade -- lower prices. But face a *collective action* problem.**
- **Trade Protection on softwood lumber (in 2002)**
 - **Increased employment in the industry by approximately 226 jobs.**
 - **Increased lumber prices by \$297 million (but only pennies on each board foot purchased).**
 - **For every job saved, consumers spent \$1,285,078 in higher lumber prices.**

U.S. Trade Policy

- **U.S. tariff rates drop dramatically after WWII.**
- **Previously, producers with intense interests and institutions that magnified their influence led to high tariffs.**
- **After 1945, fewer U.S. industries facing import competition. More U.S. industries with a stake in exports.**
- **Policy shifted to President and GATT/WTO.**

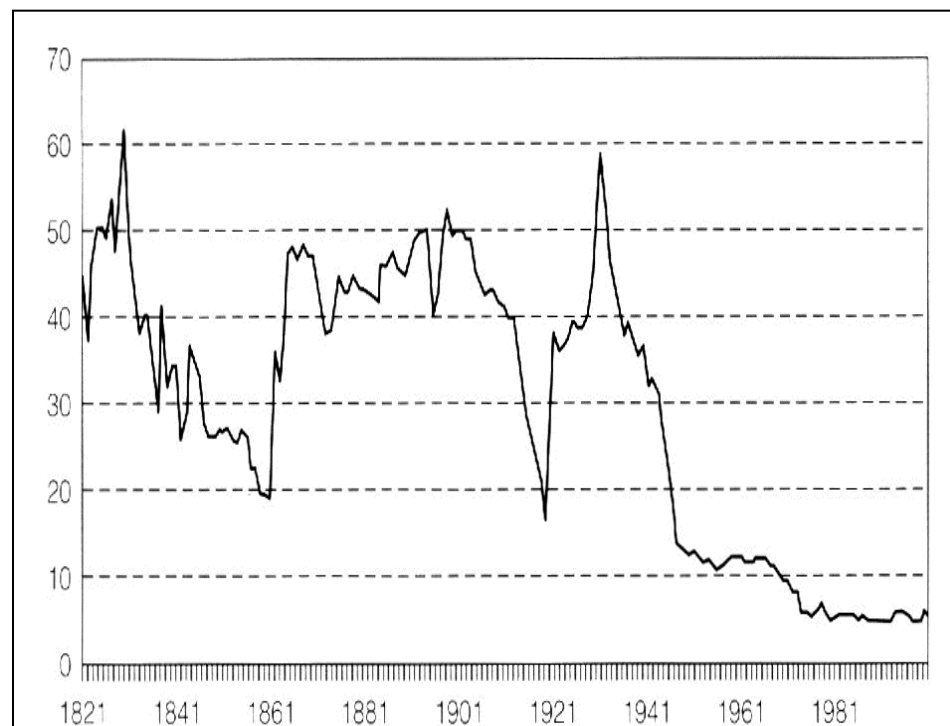


FIGURE 3.1 Average U.S. Tariff Rates on Dutiable Imports, 1821–2000, in Percentages

SOURCE: U.S. Bureau of the Census, *Historical Statistics of the United States* (Washington, D.C.: Government Printing Office, 1975); and U.S. Bureau of the Census, *Statistical Abstract of the United States* (Washington, D.C.: Government Printing Office, various years).

Trade Institutions: GATT/WTO

- **Create Reciprocity: by linking tariff reductions in one country to tariff reductions in others, mobilize exporters to counter-balance importers.**
- **Solve coordination problem (how to liberalize, under which rules, etc.).**
- **Create standards of behavior**
 - **WTO dispute settlement body akin to courts in adjudicating complaints.**
 - **Authorize retaliation.**

Heckscher-Ohlin Theory of International Trade

- **Abundant factors of production (capital, labor, human capital, land) are those inputs that a country possesses in greater proportion than the world average. Scarce factors are those possessed in smaller proportion than the world average.**
- **The U.S. today is relatively abundant in capital and human capital, intermediate in land, and relatively scarce in unskilled labor.**

Patterns of Trade

- **Countries specialize in producing those goods that use their abundant factors of production intensively and exchange for those goods that use their scarce factors of production intensively.**
- **The U.S. specializes in producing goods that require comparatively large amounts of capital and human capital. This is the U.S. “comparative advantage.”**
- **The U.S. then exports capital and human capital intensive goods and imports goods relatively intensive in unskilled labor.**

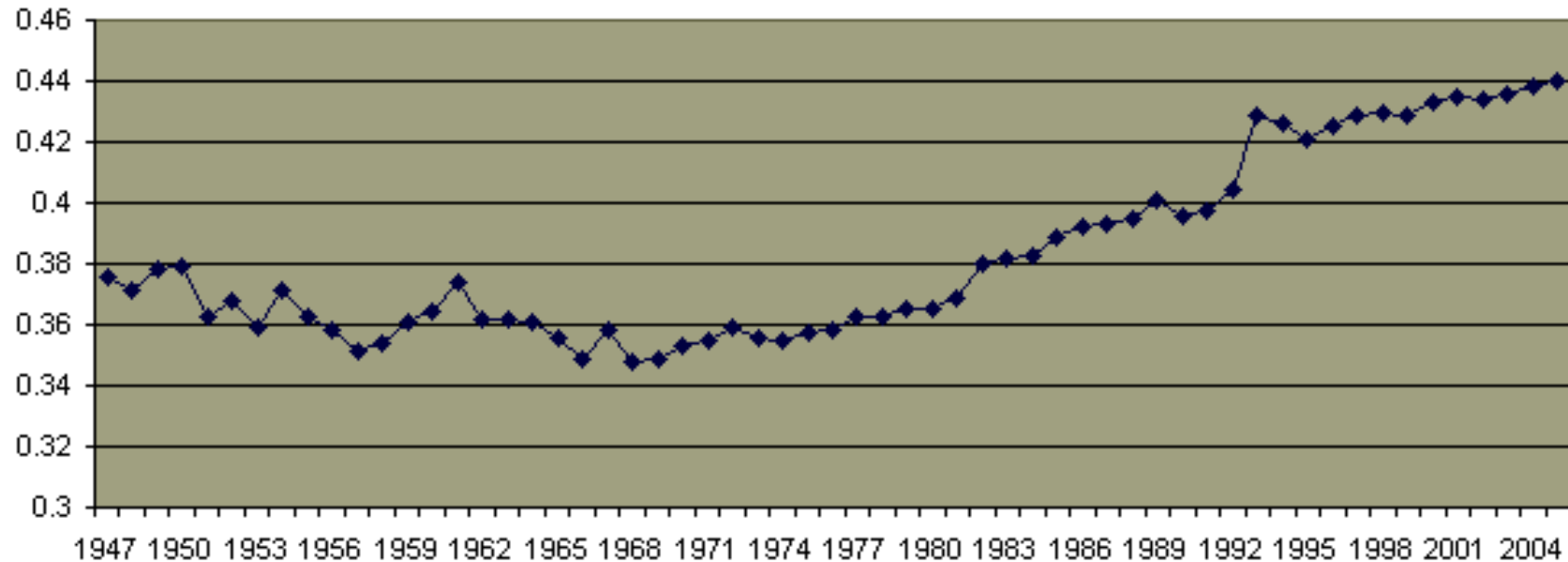
Stolper-Samuelson Theorem, or Who Wins and Loses from Trade?

- **Abundant factors of production and producers who use those factors intensively gain from freer trade; scarce factors of production and producers who use those factors intensively lose from freer trade.**
- **Freer trade reinforces specialization. As production for export expands, demand for the abundant factor rises relative to demand for the scarce factor, increasing relative returns to the abundant factor.**
 - **Expansion of computer industry raises demand for engineers more than it raises demand for unskilled labor.**

Stolper-Samuelson (continued)

- **Freer trade will lead to a contraction of the scarce factor intensive industry.**
 - **Contraction of the labor-intensive shoe industry releases more unskilled workers into the national labor pool than it does engineers. The pool of unskilled workers will now chase comparatively fewer (unskilled) jobs, leading to a decline in relative wages.**
- **Stolper-Samuelson proved that freer trade benefits abundant factors of production, harms scarce factors.**
- **In the U.S. today, the winners from trade are capital and human capital, and the losers are unskilled labor.**

Increasing Income Inequality in the U.S.



Gini Index of Income Distribution, 1947-2004.

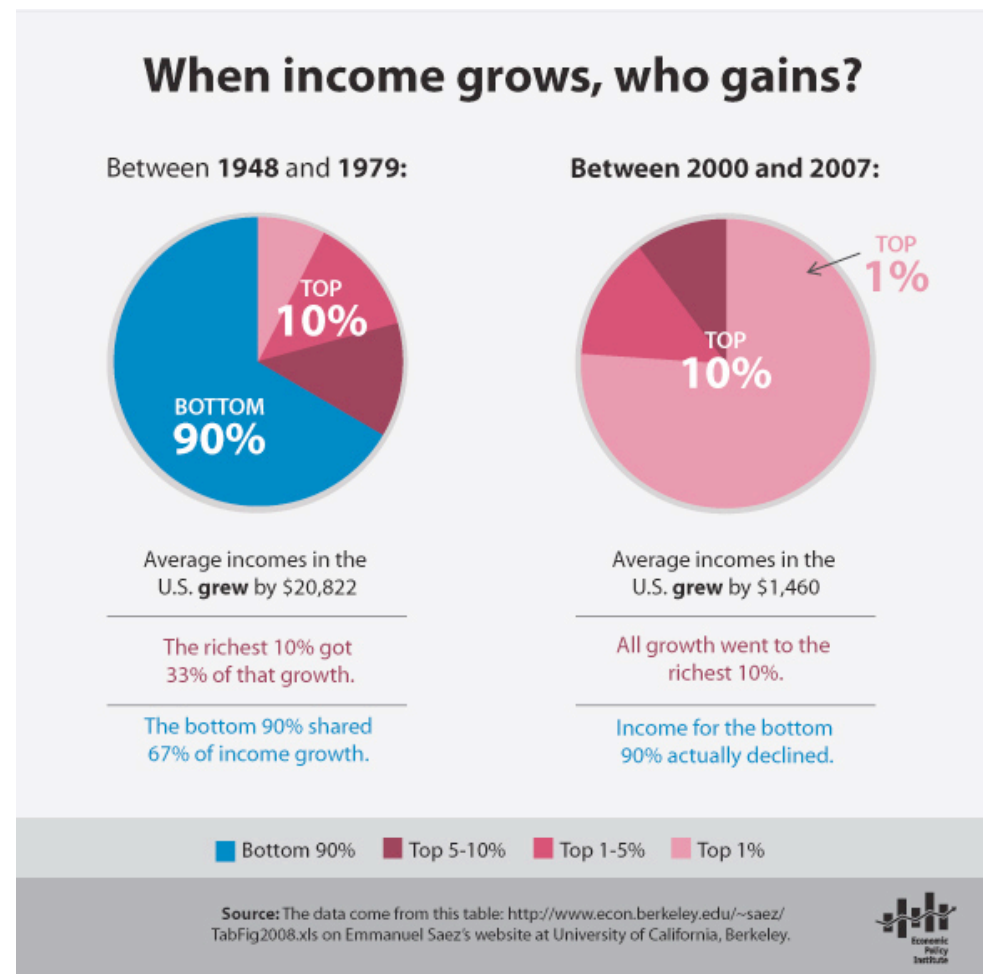
- Gini coefficient (1=perfect inequality, 0=perfect equality).
- Increased by approximately 20 percent since 1947.

Source: U.S. Census Bureau, <http://www.census.gov/hhes/www/income/histinc/f04.html>

Income Growth in the U.S.

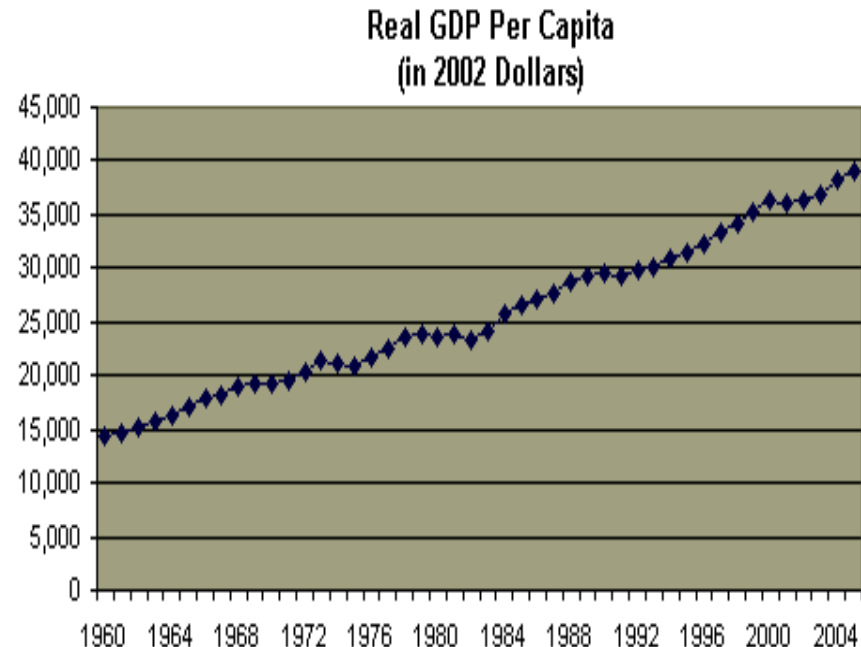
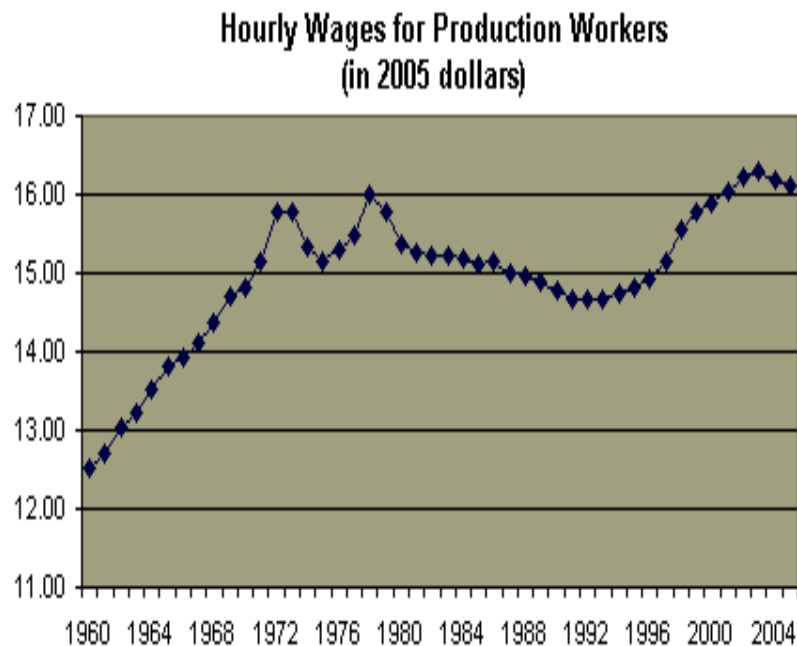
- **Recent income growth concentrated within the top 10% of income earners in the U.S.**

Source: http://www.epi.org/economic_snapshots/entry/income_inequality_it_wasnt_always_this_way/



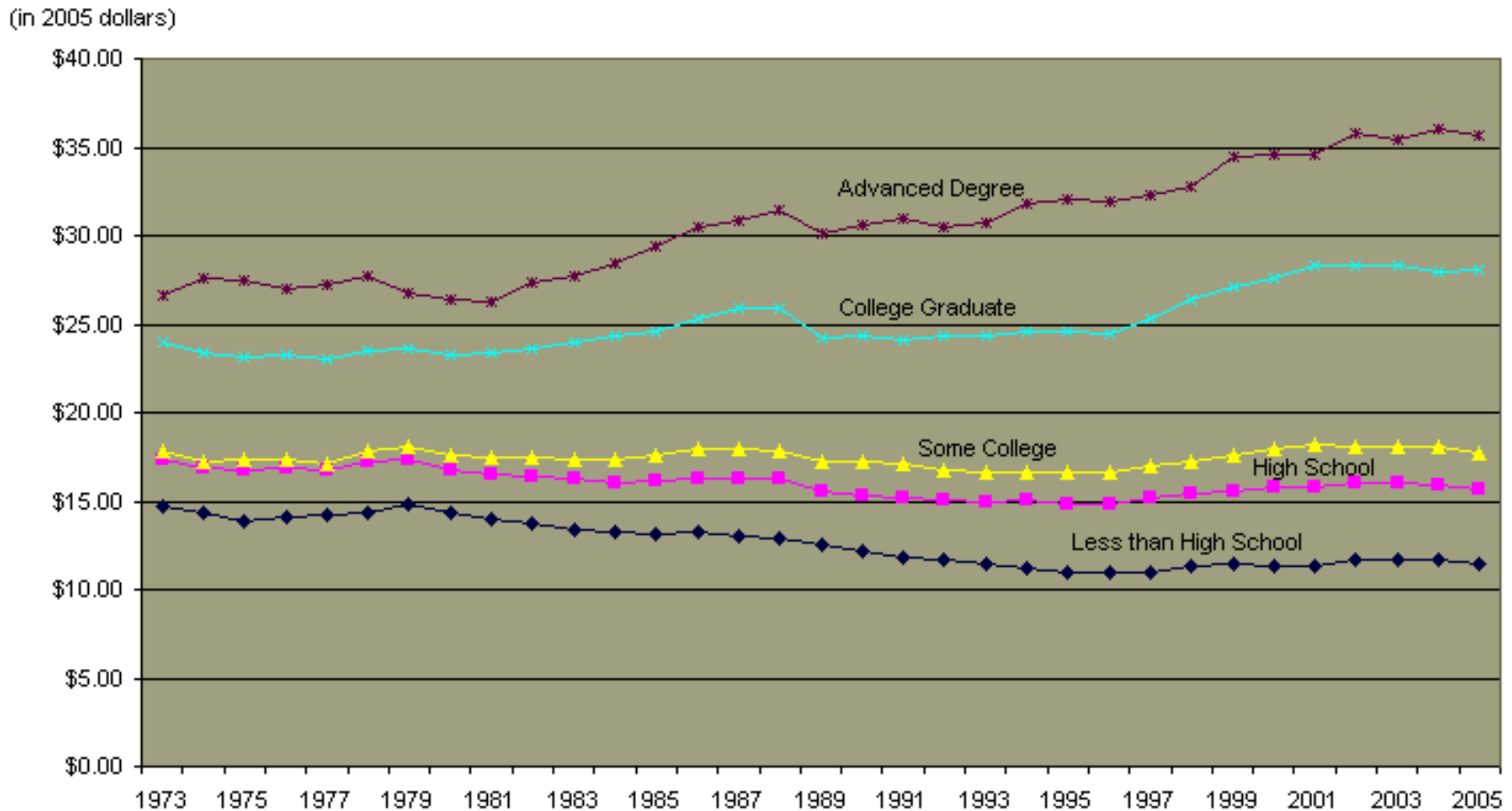
Sources of Inequality

- **Real wages in manufacturing (more labor intensive) stagnant since the early 1970s, while national income per person continues to rise.**



Source: Economic Policy Institute and Bureau of Labor Statistics, http://www.epi.org/content.cfm/datazone_dznational, <http://www.bls.gov/fls/flsgdp.pdf>

Real wages rise with education (human capital) as trade expands.

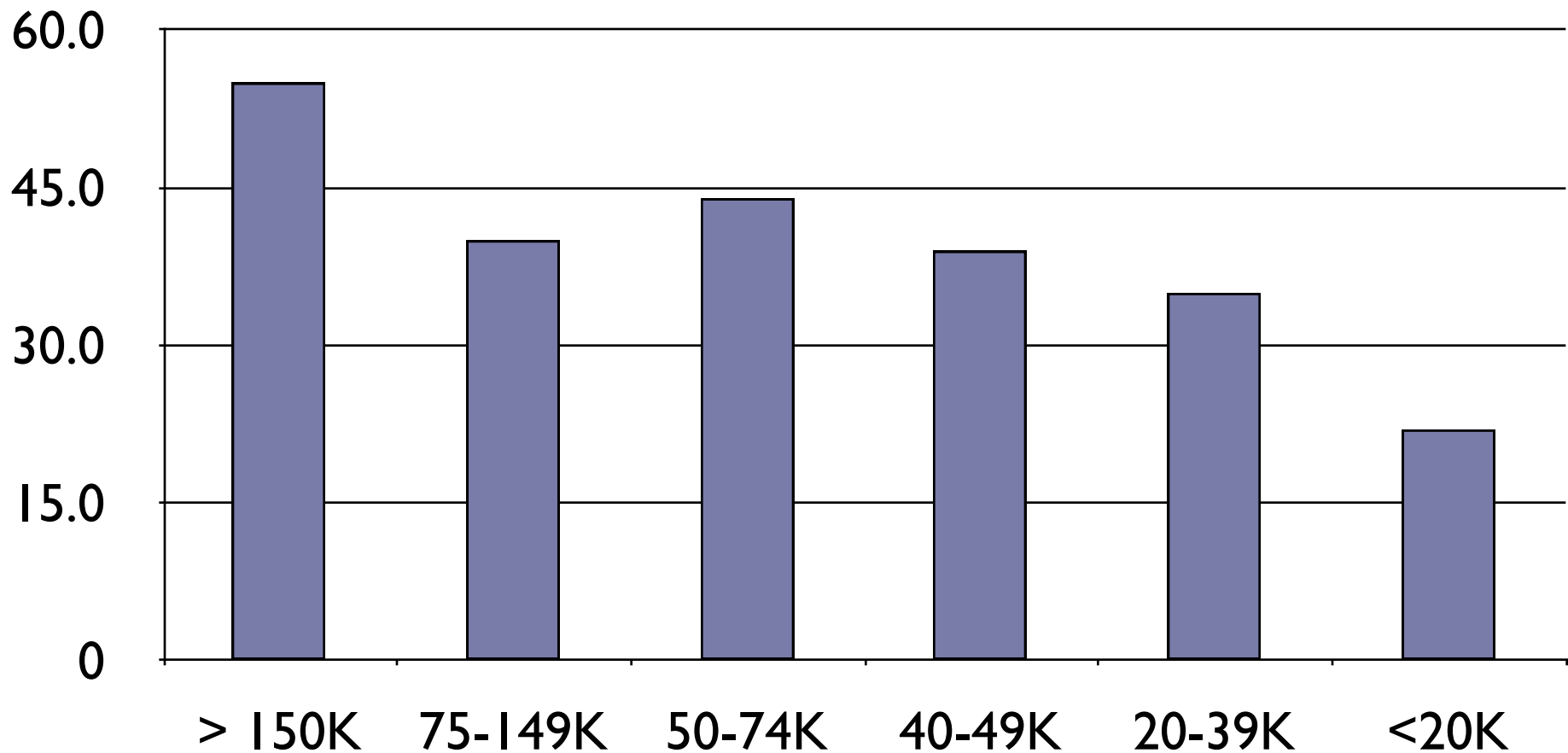


Source: Economic Policy Institute, http://www.epi.org/datazone/06/wagebyed_a.pdf

Trade and Wages Debate

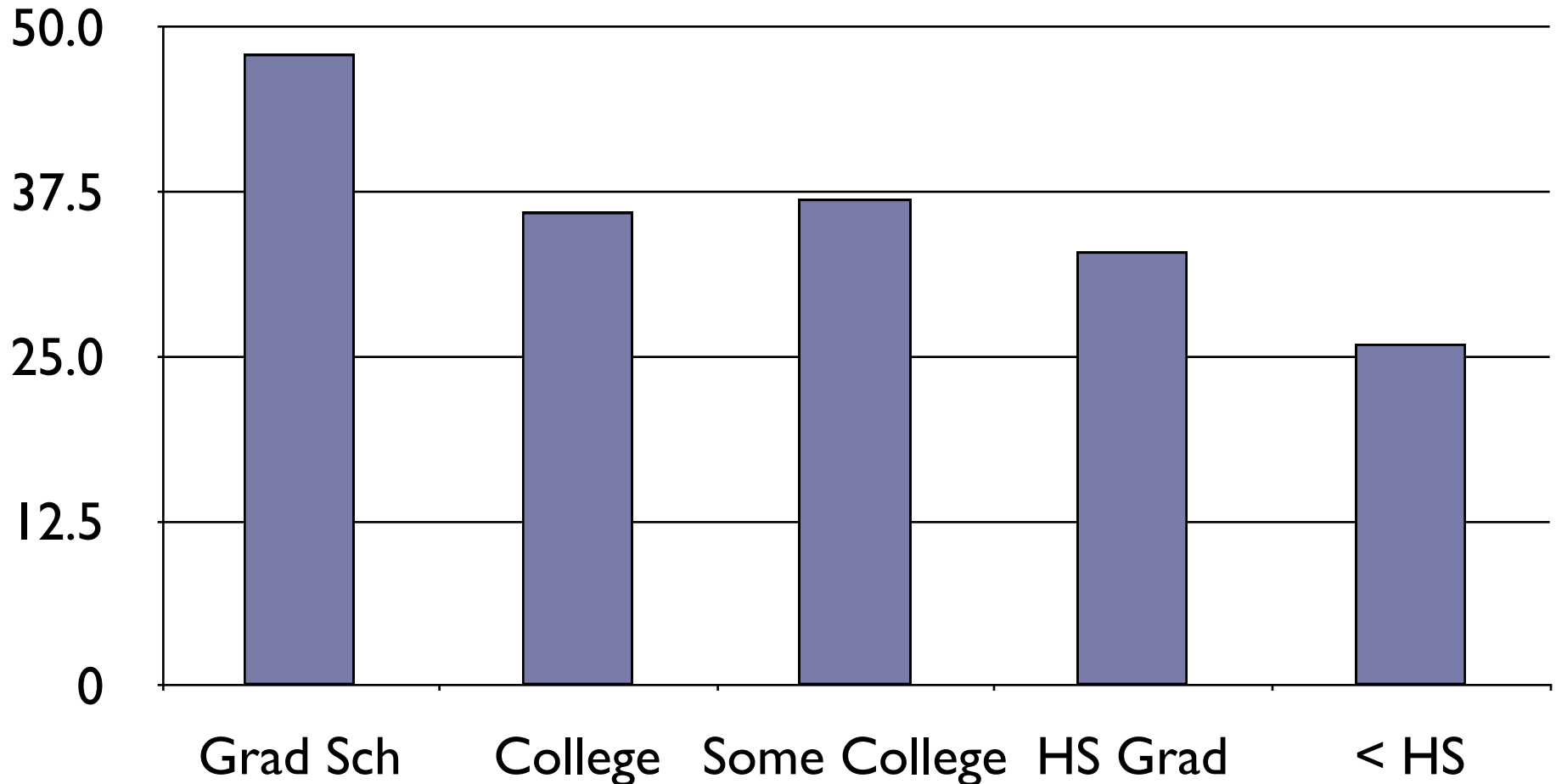
- **Vigorous debate not about trends but about role of trade in depressing wages of low skilled workers. Economists estimate that only about 20 percent of decline can be attributed to job displacement caused by increased imports.**
- **Other causes include tax policy, weaker labor unions, and increased use of technology.**

Who Feels Helped by Free Trade? By Income.



Source: Pew Charitable Trusts, Dec. 2006, <http://people-press.org/reports/display.php3?ReportID=299>

Who Feels Helped by Free Trade? By Education.



Source: Pew Charitable Trusts, Dec. 2006, <http://people-press.org/reports/display.php3?ReportID=299>

Embedded Liberal Compromise

- According to law of comparative advantage, gainers gain more than losers lose. Former can compensate latter to build coalition in favor of freer trade.
- Embedded liberal compromise allowed compensation through fiscal transfers, reflected in greater social spending by the government. In essence, as trade openness increased, winners (capital and human capital) compensated the losers (unskilled workers).

Figure 4.1 Spending on social protection in five OECD countries, 1960-91 (as share of GDP)

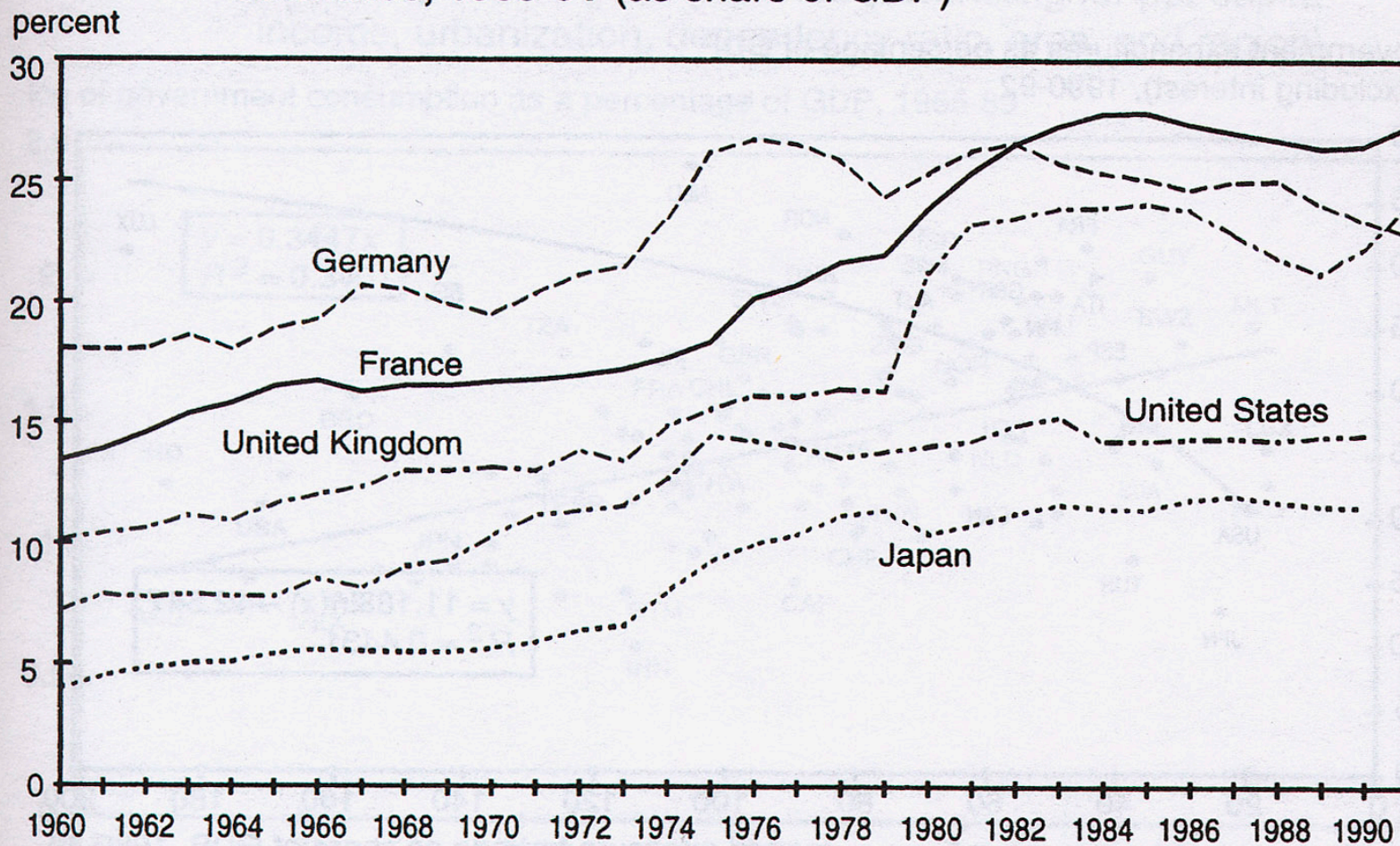
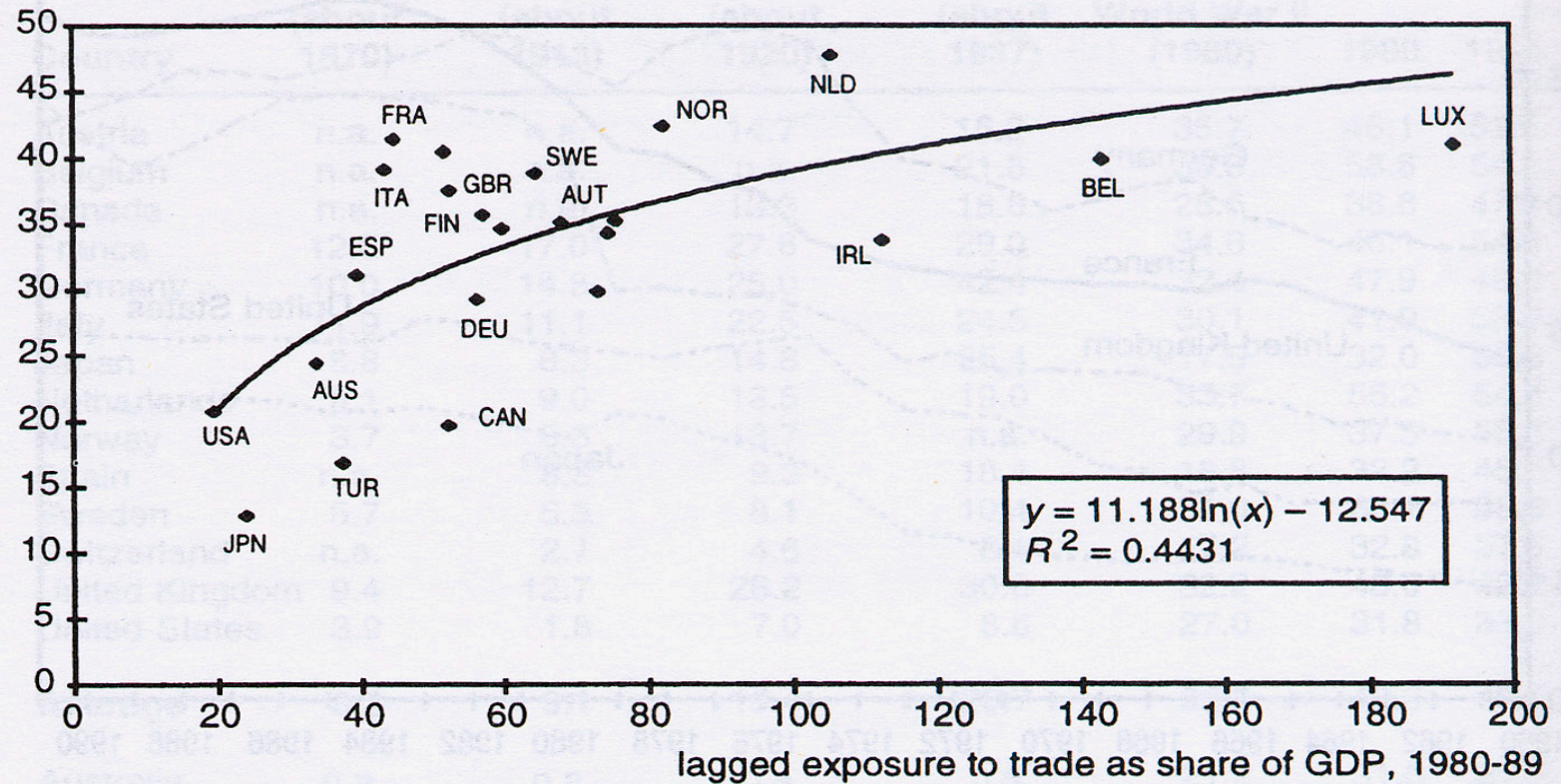


Figure 4.2 Relationship between openness and public expenditures in 23 OECD countries

government expenditures as percentage of GDP
(excluding interest), 1990-92



Source: Rodrik (1996).

Unraveling of the Compromise

- From 1945 to the mid-1970s, increasing openness was associated with greater public spending in the form of income transfers.
- Since the mid-1970s, increasing openness has been associated with less public spending on income transfers and the decline of the “welfare state.”
- As more middle class voters accumulate capital and human capital, the “winners” from freer trade need the votes of the “losers” less. Less political support for the embedded liberal compromise.