

Lecture 13: Efficiency vs. Equity & International Trade

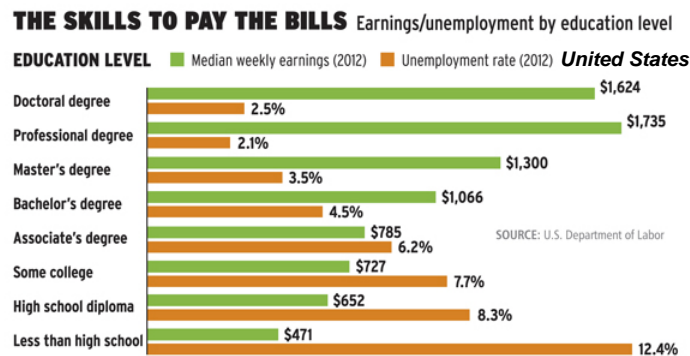
Efficiency, Equity

- **Efficiency** describes how much value an economy creates as compared to its potential.
 - Efficiency refers to the size of the pie.
- **Equity** describes the degree of fairness in the division of the value that the economy creates.
 - Equity refers to how the pie is cut up.
 - Very rich along side of very poor is often considered to be unfair.

Efficiency vs. Equity

- **Efficiency** concepts like **social surplus** do not consider equity.
- In fact, producing goods for the rich is more likely to increase **social surplus** than producing goods for the poor...
- ...because the rich normally have a higher **WTP** for many goods and services than the poor do.

- An ideal economic policy might be **to maximize surplus** and then **distribute it equitably**.
- But the combination of large surplus and equitable distribution is difficult to achieve, ...
 - because the economic incentives that generate high levels of surplus,
 - like high wages for the highly educated,
 - may shift income from the poor to the rich.



- Most economists emphasize the need to create surplus (sometimes called “value”).
 - We do not usually pay much attention to equity goals,...
 - like bringing the incomes of the rich and poor closer together.

- The emphasis on surplus seems right to people who get most of the surplus.
- Many economists argue that an emphasis on equity would make everyone equally poor.
- Great reductions in poverty (as in China), they say, come from economic growth, not from equity increases.
- But increasing the wealth of society may reduce poverty and reduce equity too, if most of the added wealth goes to the rich.
- Could equity be increased in the US without reducing wealth?
 - Central and northern European countries have a per-capita income similar to that of the US,...
 - but their distribution of income is a far more equitable.
 - In much of Europe, the ratio of **top-20%** / **bottom-20%** is about **5**, but it is more than **8** in the US.

Janet Yellen Statement (Last Friday)

- Janet Yellen is the Chair of the US Federal Reserve Bank (US central bank).
- She surprised the world on Friday with a speech in Boston about US income inequality.

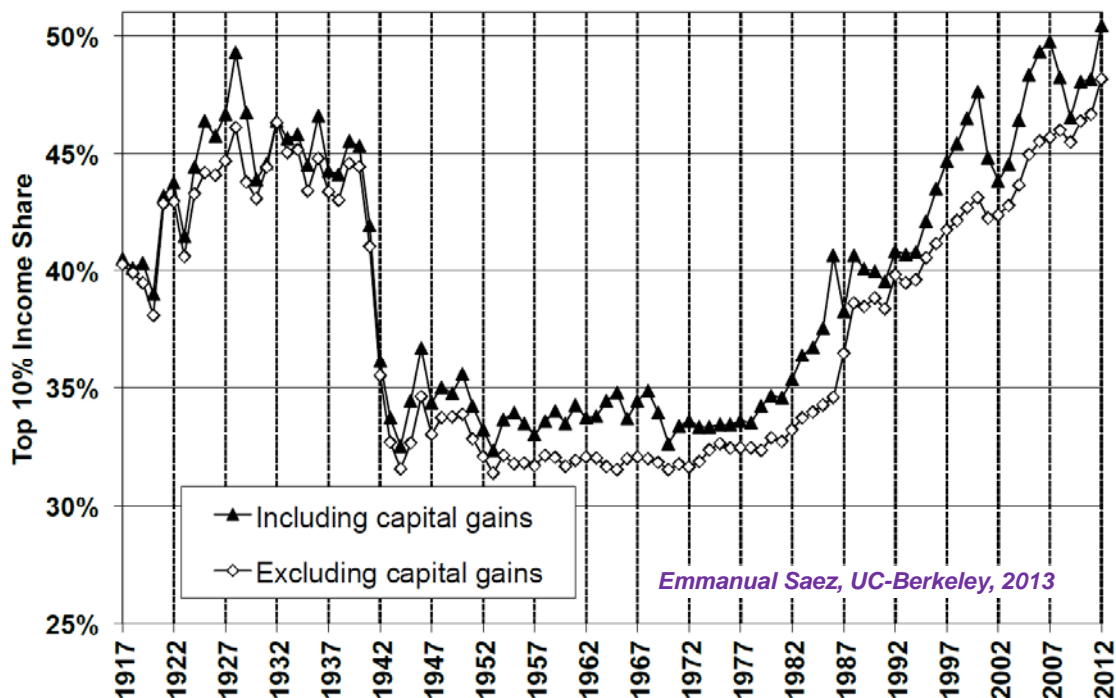


“It is no secret that the past few decades of widening inequality can be summed up as significant income and wealth gains for those at the very top and stagnant living standards for the majority. I think it is appropriate to ask whether this trend is compatible with values rooted in our nation's history, among them the high value Americans have traditionally placed on equality of opportunity.”

Entire speech will be available on the course website and LaunchPad.

Top 10 Percent Income Share in USA

Government Transfers not Included



Clicker Question

International Trade

Trade and Comparative Advantage

■ **Example:** Trains and Planes

Country	Resources* [\$ Millions]	
	Train	Plane
China	1	2
USA	6	3

- China has an **absolute advantage** over the US in producing **BOTH** trains and planes, because resources required for their production are cheaper in China than in the US.
- However, the USA has a **comparative advantage** over China in producing planes (as compared with trains),...
- because the **opportunity cost** of a plane in terms of trains sacrificed is lower in the US.

China: __ train(s)

US: __ train(s)

*Imaginary numbers invented by instructor

Comparative Advantage in the Long Run

- Sometimes, when less-developed economies invest and produce in sectors without a comparative advantage...
- ... human and physical capital is formed that creates a comparative advantage in the long run.
- Unfortunately, such strategies often fail.
- Recently, India constructed a rocket and a Mars orbiter, and sent it to Mars last month.
- Will it create a comparative advantage in some high-tech sectors?
- Or is it simply a waste of resources in a country where most people have no toilets.

Autarky* versus Trade

- Suppose **China** and the **US** want to have both trains and planes.
- Each country could produce its own trains and planes (autarky).
- Or **China** could specialize in producing one product, the **US** in the other, and trade to get both.
- If each country specializes according to its **comparative advantage** and then trades,...
- ...both **China** and the **US** can have more of *both products* without using more resources.
- **Trade** is more efficient than **autarky**.
- The same logic applies to individuals or regions within a single country.

*a no-trade policy

Resources: \$24 million each		Produce & Own	
Autarky		Trains	Planes
	China	16	4
	US	3	2
Total		19	6

Resources		
	Trains	Planes
China	1	2
US	6	3

Compare

\$24 million each Produce		Own	
Specialize and Trade		Trains	Planes
	China 24 Trains	20	5
	US 8 Planes	4	3
Total		24	8

- If **China** produces trains and the **US** produces planes,
- then both countries can have more trains and more planes for the same \$24 million of resources.

Bogotá, Colombia

August, 2006

Comparative Advantage of Colombia

- The GDP of Colombia in 2012 was \$511 billion USD [*estimated PPP*].
- In 2005, the Colombian exports with the highest market value were (in order)
 - Coal and Oil
 - Illegal Drugs [*estimated*]
 - Coffee
 - Flowers
- A country's exports tend to reflect its comparative advantage.

Determinants of Absolute and Comparative Advantage

■ Individual Level

- Inborn talent
- Education
- Training
- Experience

■ National Level

- Natural resources
- Cultural factors
- Institutions
- Capital stocks

Colombian Illegal Drugs: Comparative Advantage?

- In 2005 illegal drugs were probably Colombia's second most important export.
- In recent years, the Colombian government has reduced the power of the drug traffickers.
- But the criminal activity of drug traffickers has grown in other countries,...
- and continues to be a major problem around the world.
- The drug business is run by professional criminals, who
 - frequently employ violence and intimidation,
 - finance guerilla activity, and
 - engage in bribery and foster corruption.

- The coal and oil business in Colombia is run by ordinary business executives.
- So is the coffee business.
- So is the flower business.
- So why is the illegal-drug business in Colombia and everywhere else run by *professional criminals and gangsters?*

Comparative Advantage and Illegal Activities

- Who has the *comparative advantage* in operating illegal activities?
- Professional criminals have the talent and specialized skills required for illegal work.
- Many economists believe that legalization is the best solution to the illegal-drugs problem.
- In an editorial about drugs (April 2, 1988), *The Economist* news magazine recommended:
“**Legalize, control, discourage.**”

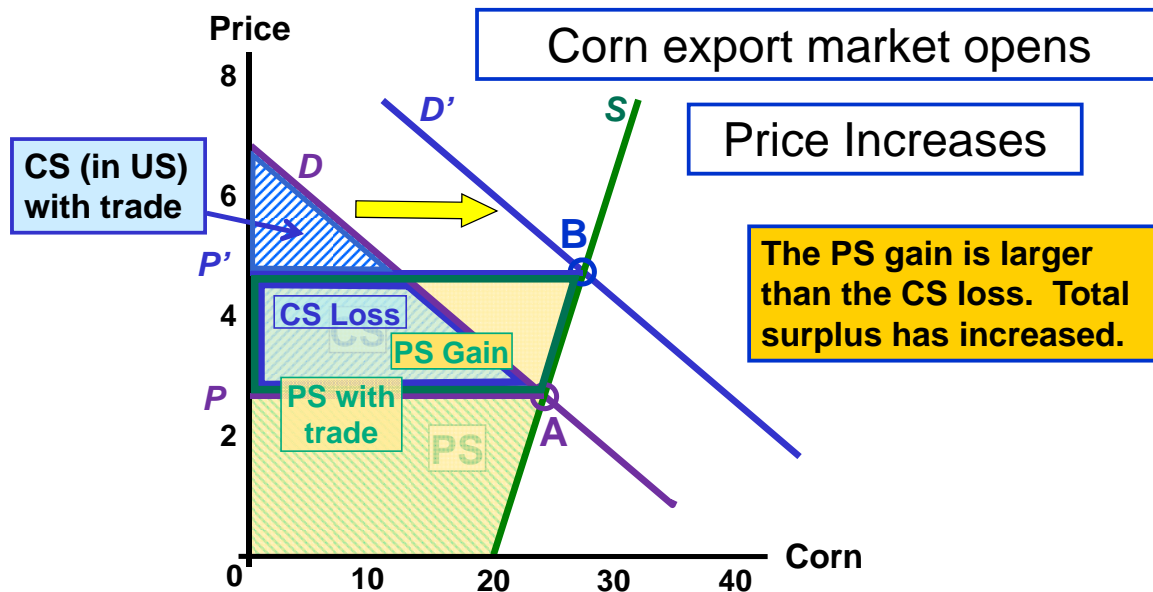
Please read the entire article—assigned in LaunchPad.

Winners and Losers from Exports

- Producers of exported goods win big.
 - Price of the good may increase.
 - Producers surplus increases.
 - Employment in those industries may be increased.
 - Gains may be concentrated among a small number of people.
 - Within agriculture, the gains may be largest in corporate agriculture.

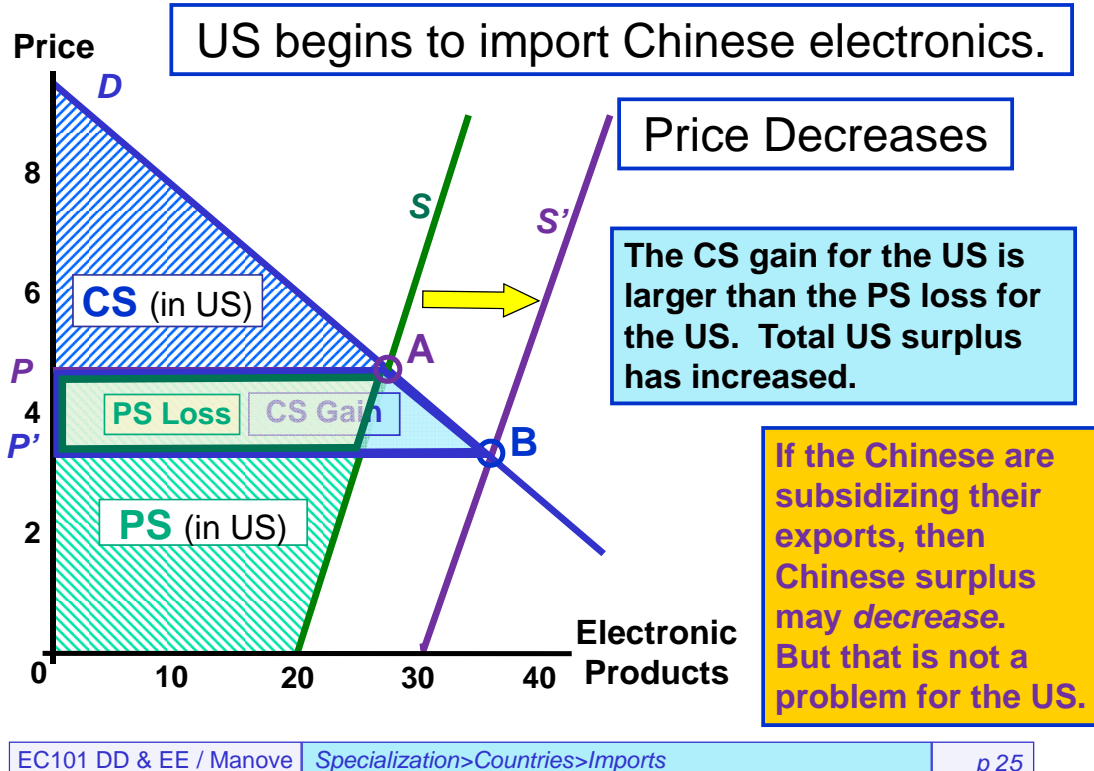
- Exports may hurt domestic consumers if the price of the exported product rises at home.
 - Consumer losses tend to be spread out.
 - Each consumer will normally lose a small amount.
 - But in poor countries, where one product is an important staple [e.g. rice in some Asian countries], exports can hurt domestic consumers a lot.

Example: Exports of US Corn (Maize)



Clicker Question

Example: US Imports Chinese Goods



Domestic Producers May Lose because of Competing Imports

- Foreign competition may force down the prices of competing domestic products
- Producer surplus may fall.
- Employment may fall, and unemployment may rise.
- A minority of people may sustain large losses,...
- ...and unemployment can cause serious hardship.
- US automobile producers were bankrupted by Japanese competition and survived mainly because of government help.

Consumers Gain from Imports

- Imports may be cheaper than domestic products, and they often drive down domestic-product prices.
- Many people may be able to buy cheaper goods.
- Firms that use imported inputs, may increase profits and lower prices of their products.
- The variety of goods available to the consumer increases.
- Import competition is likely to improve the quality of domestic products.
- US Auto Industry again

U.S. Imports from China

- Imports from China expanded by a factor of 12 from 1990 to 2007,...
- which increased unemployment in the U.S. by an estimated 0.7%.
- Are low-priced imports from China harmful?
 - Some American workers are losing jobs.
 - But China is selling goods to American consumers at a low prices.
 - And lending their profits to the US at very low interest rates.
 - How should the US government react?

Concentrated Losses vs. Diffuse Gains

- The negative psychological effect of economic losses is larger than the positive psychological effect of gains.
- Economic psychologists call this “loss aversion.”
 - Economic losses are coercive: they can force a person to change his behavior.
 - Economic gains are not coercive: a person is free to ignore the gains and continue on as before.
- Losses from trade may have a larger political effect than gains from trade.
- This is especially true of losses from imports (especially job losses): those losses are much larger per person than the gains from imports.

Clicker Question

End of File