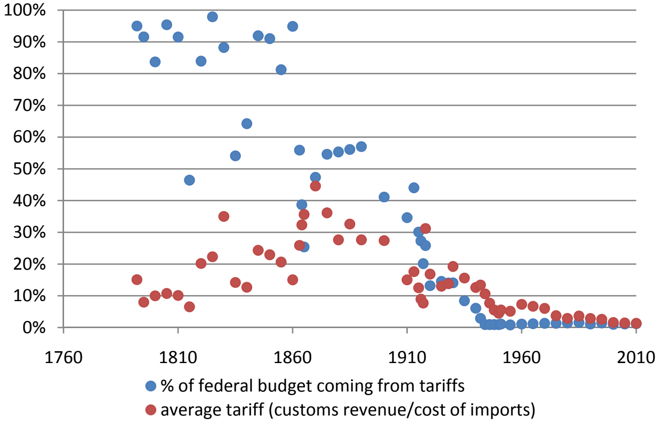
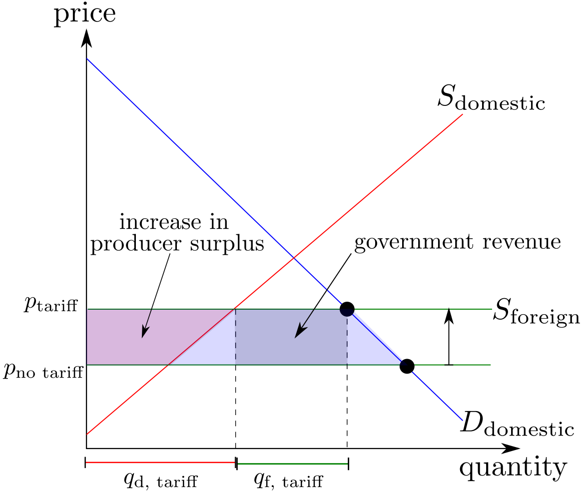
Historical Tariffs



Historical Tariffs

- So tariffs were much higher in the nineteenth century
- There were also a much more important component of the federal government's revenue
- So why has policy shifted away from the use of tariffs over time?
- Why have we decided that income tax is a better way to fund the federal government and free trade is better than protectionism?

The Economics of Tariffs



The Economic Argument Against Tariffs: Efficiency

- So there are a few economic consequences of imposing tariffs
- Consumers end up paying higher prices and consuming less
- Domestic producers sell more at higher prices
- Foreign producers sell less at the same price as before (after subtracting the tariff)
- Tariffs generate revenue for the government
- The gain in government revenue and producer surplus is smaller than the loss in consumer surplus

The Economic Argument Against Tariffs: Comparative Advantage

A simple comparative advantage argument:

- Suppose an American worker can produce 2 units of food (F) or 1 unit of manufactured goods (M) and a British worker can produce 1 unit of F or 2 units of M
- Assume each country has one hundred workers
- Say American consumers want 50 M
- Without trade, that would take 50 workers, leaving 50 workers for food production (or 100 units of F)
- Britain also wants 50 units of M, this takes 25 workers leaving 75 workers to produce 75 units of F
- What if America specializes in food and trades 1.5 units of F for every 1 unit of M?

The Economic Argument Against Tariffs: Comparative Advantage

- If America uses all 100 workers to produce food, it will produce 200 units of F
- America trades 75 F for 50 M from Britain, leaving America with 125 F and 50 M
- If Britain uses all 100 workers in manufacturing, it will produce 200 units of M
- It trades 50 of those units for 75 F, leaving Britain with 150 units of M

The Economic Argument Against Tariffs: Comparative Advantage

- So without specialization and trade:
  - America gets 50 M and 100 F
  - Britain gets 50 M and 75 F
- With specialization and trade:
  - America gets 50 M and 125 F
  - Britain gets 150 M and 75 F
- Specialization and trade has made everybody better off

The Economic Argument Against Tariffs

- So tariffs are inefficient, they generate a deadweight loss to society
- Add to this Hamilton's point about forcing "industry out of its more natural channels"
- Restricting trade reduces the benefits from exploiting comparative advantage
- The economic arguments for tariffs start to look pretty weak
- Was the US foolish to rely so heavily on tariffs?

The Economic Argument For Tariffs

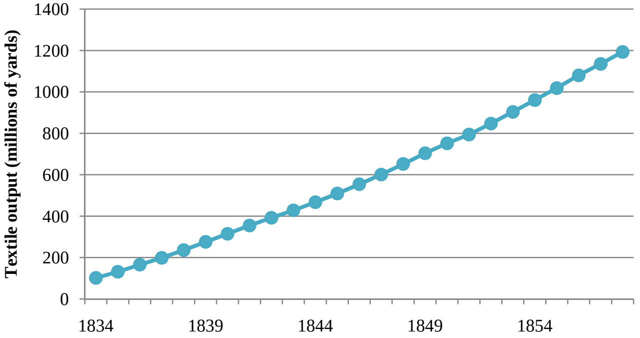
The economic case for tariffs, courtesy of Hamilton in the 1792 *Report on Manufactures*:

> *"The superiority antecedently enjoyed by nations who have preoccupied and perfected a branch of industry, constitutes a more formidable obstacle...to the introduction of the same branch into a country in which it did not before exist."*

The Economic Argument For Tariffs

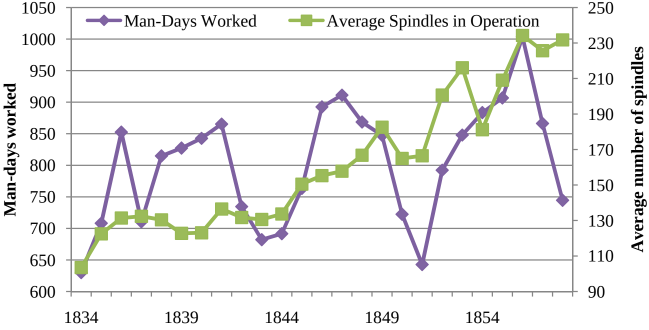
- The basic argument is that infant industries need protection early on
- It takes time for firms to become efficient and until they are, their high costs mean they can't compete with mature firms
- This is especially important if you consider Britain's head start on manufacturing, particularly textiles
- Economists have shown that a fair amount of *learning by doing* took place in the textile industry
- If learning by doing is important, you can't expect to be competitive right away even with the latest technology

The Economic Argument For Tariffs



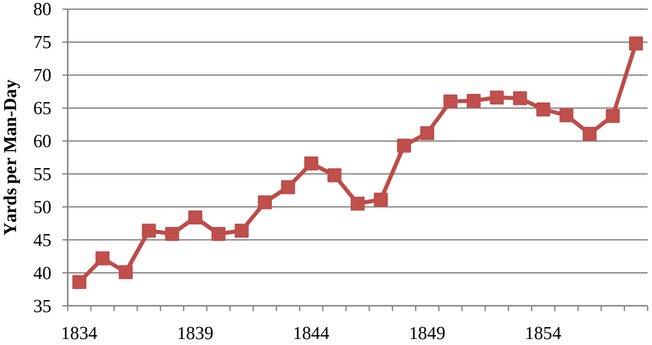
American textile output, 1834-1858

The Economic Argument For Tariffs



Inputs in the American textile industry, 1834-1858

The Economic Argument For Tariffs



Labor productivity in the American textile industry, 1834-1858

The Economic Argument For Tariffs

Growth in the American textile industry, 1833-1859

	1833-1839	1855-1859
Growth rate of cloth output per man-hour:	6.67%	3.20%
Due to:		
Increase in spindle-hours per man-hour	0.74%	0.43%
Increase in raw cotton per man-hour	3.33%	1.60%
Growth of productivity of all inputs	2.60%	1.17%
Growth in productivity from learning by doing	2.02%	0.54%

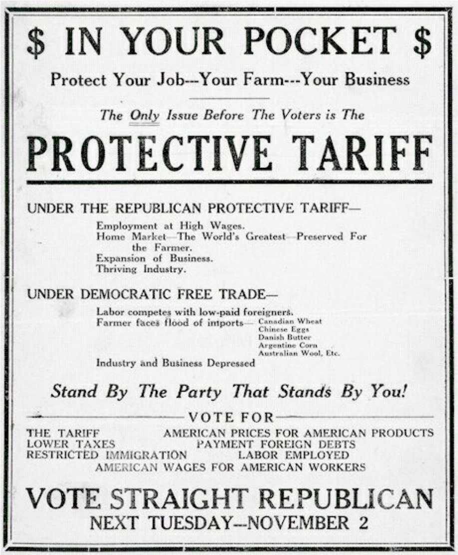
The Politics of Tariffs

- Policy is not strictly guided by economic analysis
- The politics of tariffs are also important in understanding why we relied on a potentially inefficient policy tool
- Consider the reasons Hamilton gave Congress for enacting a tariff:
  - To support the government
  - To discharge the debts of the United States
  - To encourge manufacturers

The Politics of Tariffs

INCOME TAX – THE MORE YOU WORK, THE MORE TAXES YOU MUST PAY

The Politics of Tariffs



The Politics of Tariffs

TRY YOUR STRENGTH, GENTS!

The Harder You Hit It, the Higher It Goes.

The Politics of Tariffs

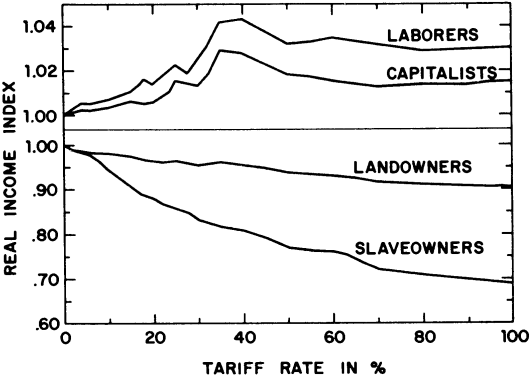


FIGURE 2. DOMESTIC MANUFACTURING OUTPUT AS A FUNCTION OF THE TARIFF RATE, 1859

From "The Optimal Tariff in the Antebellum United States" by John James, American Economic Review, Vol. 71, No. 4, 1981

The Political Economy of Tariffs

- The impacts of high tariffs differed greatly across occupational groups and geographical regions
- In general, manufacturers of protected goods benefited, consumers were hurt
- This meant factory owners and skilled workers in the North made more money
- It also meant that producers of unprotected goods would pay the price by getting fewer manufactured goods in exchange for their output
- Most southerners fell in this latter category

Tariffs in the Twentieth Century

Tariffs in the Twentieth Century

Money and Banking Before the Civil War

What is Money?

- Money is anything used as a medium of exchange, a store of value and a unit of account
- It can range from promises (checks, bank notes, etc.) to goods (tobacco, furs, precious metals, etc.)
- Reliance on goods as money suffers from the problem of requiring a "double coincidence of wants"
- Money in the form of promises (bank notes, paper currency, bills of exchange) is needed to drive a large economy
- We are going to trace the development of money and banking and its role in promoting (and occasionally hindering) economic growth

A Brief History of Money

 $\Longleftrightarrow$ 

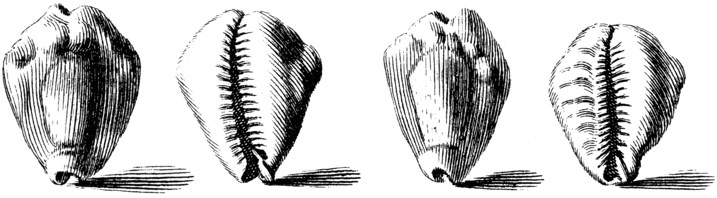
Bartering has been around for ages. It involves exchanging goods directly with another person and suffers from the double coincidence of wants problem. Not particularly useful once your economy starts growing.

Double Coincidence of Wants - A Craigslist Example

From a Sacramento Craigslist posting:

> *I'm looking for the big picture book edition of the Pilgrim's Progress. Must be in good condition and must be the edition I'm looking for. I have many items and services to trade/barter with as well as some cash. I fabricate go carts, I'm a welder, and make special occasion custom DVDs and photo albums for a few examples. Thanks.*

A Brief History of Money



People began using shells as currency around 1200 BC.

Paper bank notes first begin to appear in the seventh century in China. The first European bank notes were issued by a Swedish bank in the 1600s.

Money and Banking in the United States

- By the time the United States is setting up its banking system, all sorts of money and financial instruments exist
- During the colonial period, colonists used the British pound sterling, foreign coin, personal IOUs, and colonial paper money
- During the transition to independence, the Continental dollar and state issued paper currency entered the mix
- These paper currencies were plagued with problems and led to a major revamping of money after the Constitution

The Federal Government's Approach to Currency

- After the Constitution, the federal government had to decide how to issue currency
- Hamilton opted for a bimetallic currency (minting both gold and silver coins)
- Both US minted coins and foreign minted coins were accepted as legal tender
- The value of a gold coin was fixed to be 15 times the value of a silver coin which created some serious problems

The Bimetallic Standard and Arbitrage

Suppose that the value of gold coins is set to 15 times the value of silver coins but an ounce of gold is worth 17 ounces of silver on the world market.

Start with 15 ounces of silver coins

Trade them for 1 ounce of gold coins from the US government

Take that 1 ounce of gold to London and trade it for 17 ounces of silver coins

Trade those 17 ounces of silver coins to the US government for 1.13 ounces of gold

Take the gold to London and keep going through the process until the US mint runs out of gold

The Bimetallic Standard and Arbitrage

- The bimetallic standard led to either gold or silver coins being overvalued
- Initially, gold was undervalued leaving only silver coins in circulation
- When the government revised the gold/silver ratio, gold became overvalued
- This revision of the ratio plus the effects of the gold rush led to silver disappearing from circulation
- By 1900, the United States finally dropped the bimetallic standard and went with the gold standard
- Now we are no longer on the gold standard

The Bimetallic Standard and Arbitrage