

The Opening of Japan

- The Development of Social Classes
 - The rise of merchants and the immiseration of Samurai
 - History and Economics
- The Opening of Japan
 - History
- Economics of Trade Liberalization
 - Theory of Gains and Losses from Trade
 - Empirical Evidence

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What Did We Learn Last Class?

- High degrees of variation in population density has always been a feature of the world
 - Zipf's law has always held, i.e. n^{th} largest region is $1/n$ times the size of the largest region
 - Suggests the importance of either Random Growth model or Locational Fundamentals Model
 - High degree of persistence in the size of regions over time
 - Suggests that Locational Fundamentals are critical to understanding region size
 - There has been an increase in concentration in last century which coincides with industrialization
 - Increasing returns may play a role in the size of cities

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Development of Social Classes

- Samurai were gradually transformed
 - Distance grew between daimyo and samurai
 - Samurai became dependant on daimyo for rice stipends and could not collect them directly from peasants
 - Samurai existed in urban Japan “as in an inn.” (Ogyu Sorai)
- Administrators, Samurai were supposed to be highly educated scholar-statesmen
 - Confucian ideal that rulers were to be good to people
 - appointed merit based officials in cities (included commoners)
 - Tokugawa needed administrators not warriors
- Over time one saw the position of the samurai decline while the position of merchants rose
 - Why

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The Rise of Merchants: A little history

- Many modern Japanese companies date from this period
 - Mitsui
 - Began as a sake brewery in Ise in 1620
 - 1673 opened a dry goods store in Edo
 - 1680 had branches in Kyoto and Osaka
 - 1690 Financial agent of the Shogunate
 - Helped develop a runner service between Osaka and Edo for communications.
 - Sumitomo
 - Began with a dry goods store in Kyoto
 - Began to trade copper in Kyoto and Osaka
 - Got into mining at Besshi in 1791
 - 1760 two hundred merchant houses with value of over 200,000 ryo (koku) as compared with 22 daimyo

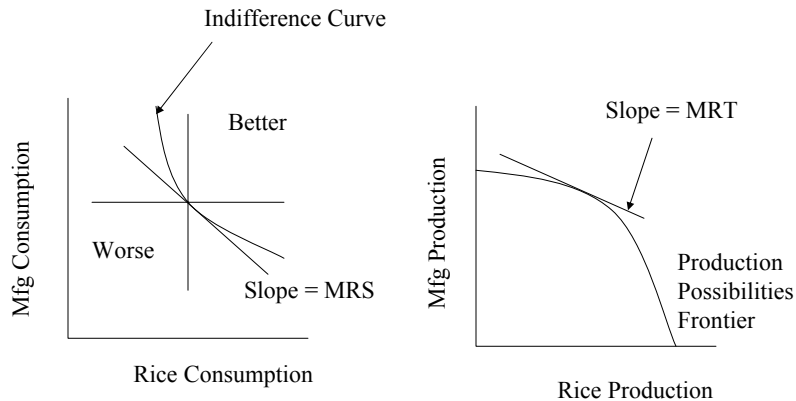
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The Rise of Merchants: Japan Specific Reasons

- Bakufu established monopolies to stabilize prices
 - silk, gold, silver, copper, lime, vegetable oil
- Benefitted from supplying castle towns
 - Developed system of wholesale dealers, brokers, money-changers
- Merchants often could avoid taxes since government thought they didn't produce anything of value!
 - Furthermore because tax collection was more efficient in cities many merchants moved to the countryside, thereby enhancing development of distribution networks.
 - Rural areas became more wealthy relative to urban areas
 - This helped caused a small drop in the size of cities toward the end of the Tokugawa period, but lead to the development of cities like Narita, Kobe, Hachioji, Itami

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The Economics Behind the Rise of Merchants



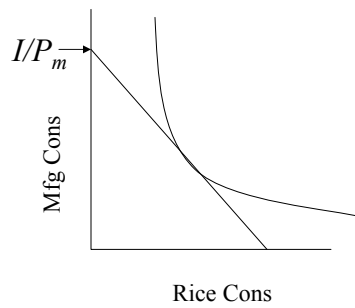
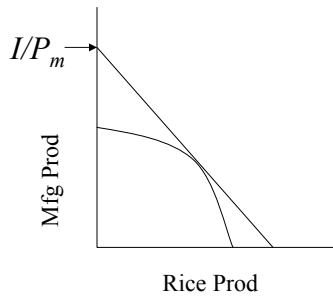
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The Economics Behind the Rise of Merchants

Budget Constraint:

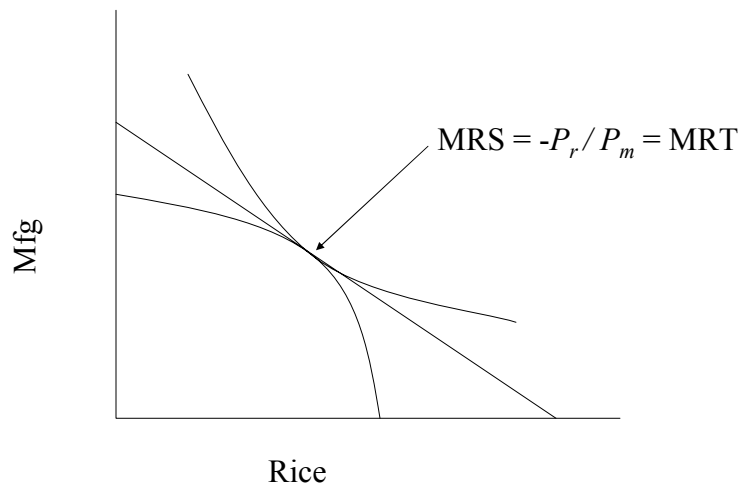
$$P_m X_m + P_r X_r = I = P_m C_m + P_r C_r$$

$$X_m = -\frac{P_r}{P_m} X_r + I/P_m \Leftrightarrow C_m = -\frac{P_r}{P_m} C_r + I/P_m$$



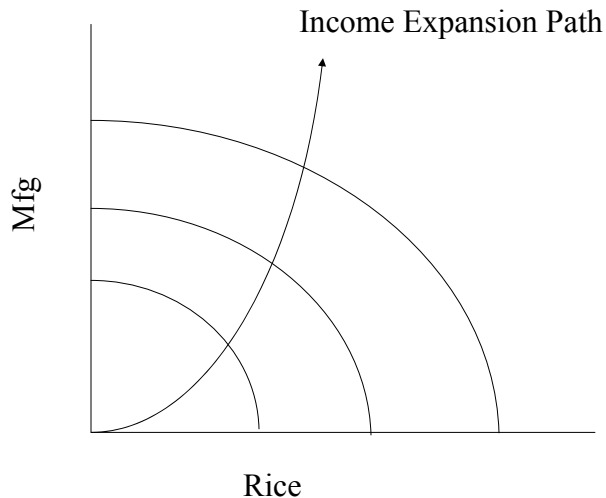
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Putting it all Together



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Engel Curves and Samurai



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Impact

- Many Samurai became indebted to merchants.
 - Needed money changers to convert stipends into cash
 - Pressured to have laws enacted to restrict ostentation.
- Daimyo and samurai began to go into business
 - Set up their own sources of wealth
 - Cotton production, tobacco
 - Began to take over distribution systems
 - Major daimyos established warehouse marketing facilities in Osaka
 - 130 warehouses in Osaka. Cap. 1 million koku
 - One han obtained a monopoly of sugar production and distribution
 - The three largest merchants in Kyoto had been closely associated with Ieyasu at Sekigahara and were also Samurai
- By the 18th century the Samurai were closely interrelated and the status of merchants had risen above their official level.

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The Opening of Japan

- The Tokugawa had been aware of major events through their listening post in Nagasaki.
 - Knew of Western expansion in Asia
 - Warned by the Dutch about opium war and impending missions to Japan
 - Knew of Western military technology
 - Had built up coastal defenses but knew that they would not hold
- In the late 18th and early 19th centuries the Russians and British had twice tried to establish relations with Japan
 - 1825 the Shogunate issued an order that all foreign ships had to be driven away.
 - British attention became occupied with opium war (1839-42)
- US sent several missions to Japan in early 19th century but disease or canon batteries often prevented them from reaching Japan.
 - With the acquisition of California in 1848, US increased trade with China. Became more interested in Japan

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Major Reasons Why the US Wanted to Open the Japanese Market

- Economic reasons
 - US was whaling near Japan and had many shipwrecks off the coast. Wanted a harbor
 - Needed a coaling station
- Imperialist
 - Belief that what happened to China was destiny. That all countries should be exposed to the west and be westernized
 - Belief in manifest destiny in the Pacific

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What Happened?

- In 1853, Commodore Matthew Perry sailed into Edo bay with four warships.
 - Shogunate panicked and asked for more time
 - Perry agreed to come back in one year
- In 1854 Perry returned with 9 warships
 - The americans picked Townsend Harris as their negotiator in 1856
 - Harris had been a merchant and businessman in the east cost
 - Had a reasonable knowledge of economics
- Signed treaty in 1858

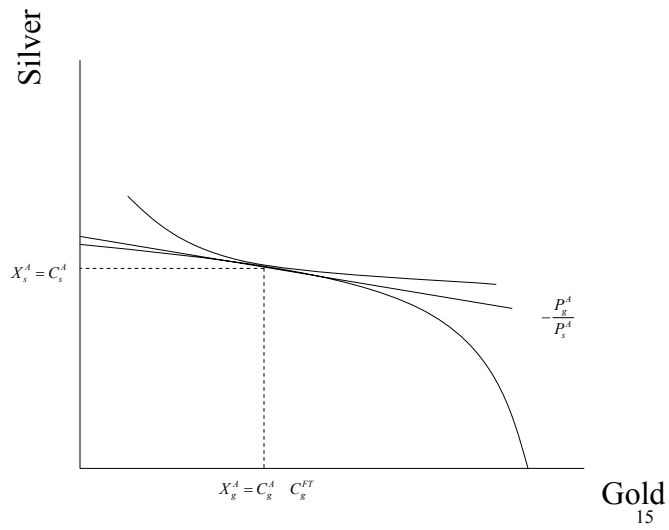
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What are the Implications of Opening to Trade?

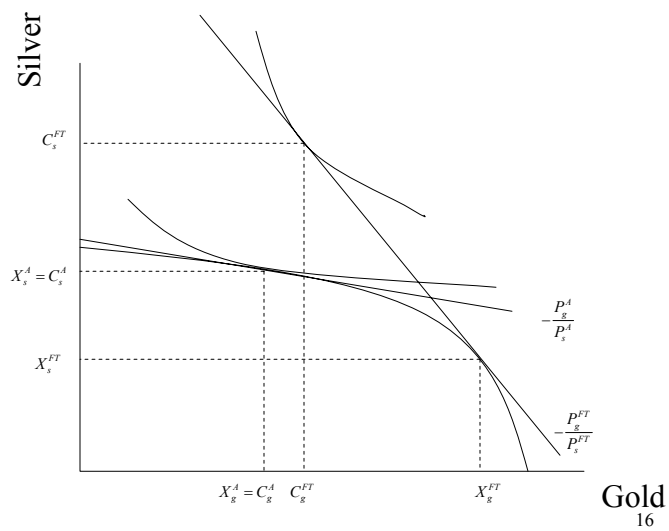
- Japanese were nervous about opening Japan
 - Anticipated a drop in welfare
 - Wanted to move slowly
- Japanese government didn't want gold to leave country
 - But in the 1850's P_g/P_s in Japan was 6 but in the rest of the world was 16
 - Foreigners were buying up Japanese gold while silver came flooding in
 - Was this a problem?

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The Gains from Trade: Autarky



The Gains from Trade: Free Trade



How do we know if this theory is right?

- Let's look at the predictions
- The opening of a country to trade should mean that
 - The relative price of exports should rise
 - The relative price of imports should fall
 - Aggregate welfare should rise
 - *But did this really happen?!?!*

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Price Changes of Exports

Exports	% of Exports	1846-55 vs.1871-79
Raw Silk	39	50%
Tea	25	43% to 64%
Refined Copper	3	3%
Rice	6	-20%

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Price Changes of Imports

Imports	% of Imports	1846-55 vs.1871-79
Iron	7	-62%
Iron Nails		-74%
Cotton Cloth	8	-49%
Cotton Yarn	18	-45%
Raw Sugar	11	-47%

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Welfare Implications

	1846-55 vs.1871-79
Fuel	-28
Building Mat	-36
Food & Drink	-27
Transportation	-37
All prices	-29
Wages	20
Real wages	70

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