Why do Countries Trade? Part III

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International Commerce and the World Economy

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Increasing Opportunity Costs

- Standard modern theory of trade is due to Swedish economists Heckscher and Ohlin writing in the 1930s, with further developments by Samuelson
- Theory assumes there are *increasing opportunity costs* of producing more units of one good at expense of other good
- Explanation for increasing opportunity costs:

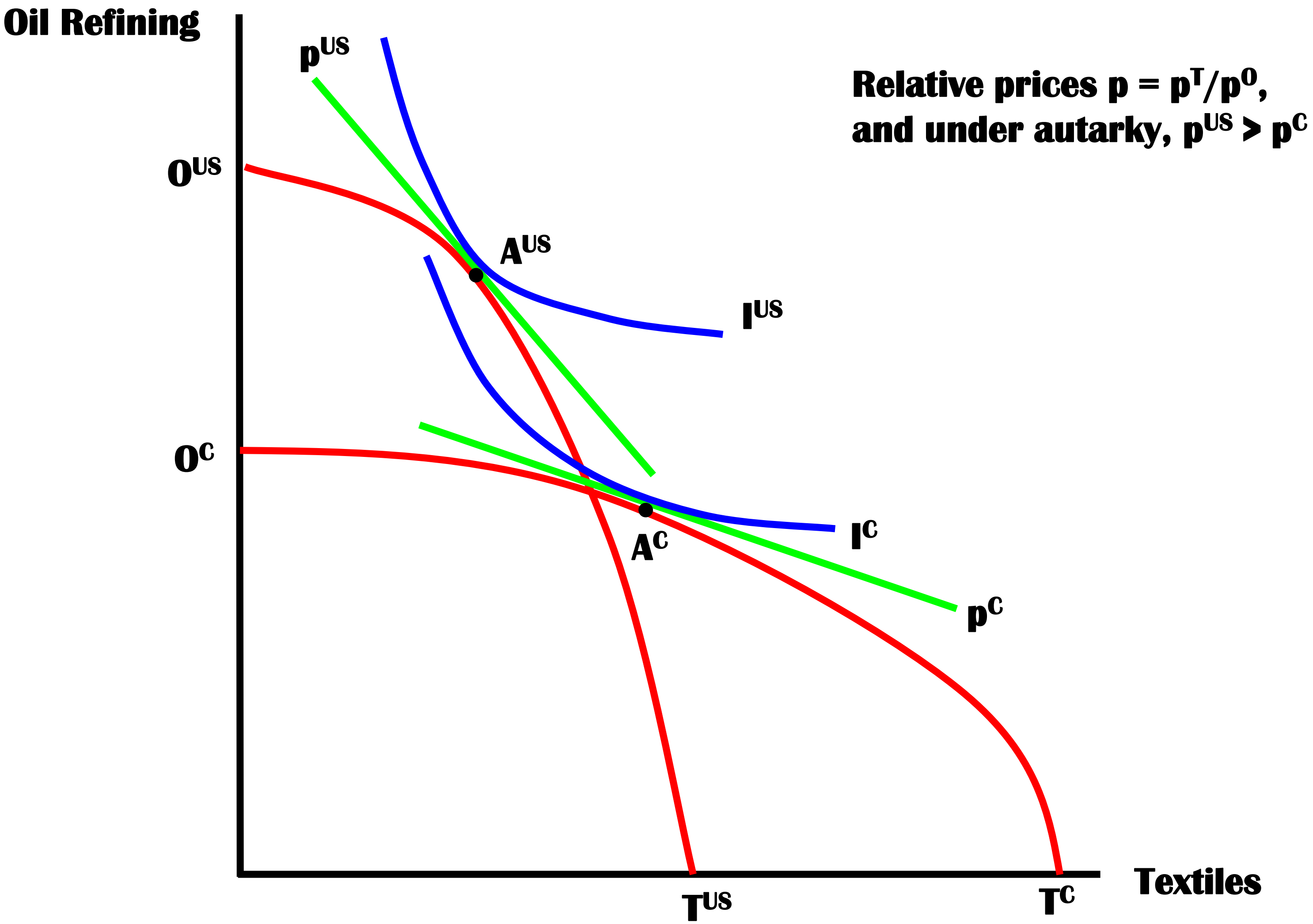
  (i) two *factors of production*, e.g., capital and labor, which are fixed in supply

  (ii) oil-refining is *capital-intensive* in production, textiles are *labor-intensive*

Increasing Opportunity Costs

- Causes "bowed out" production possibilities frontier
- As oil refining is reduced, releases lots of capital and not much labor
- As more capital is added to slowly changing amounts of labor, fewer units of textiles obtained for each extra unit of lost oil refining
- Fundamental difference between countries: one is relatively well-endowed in capital relative to labor, and vice-versa for other country
- Differences in relative factor endowments drive trade

Autarky Equilibrium



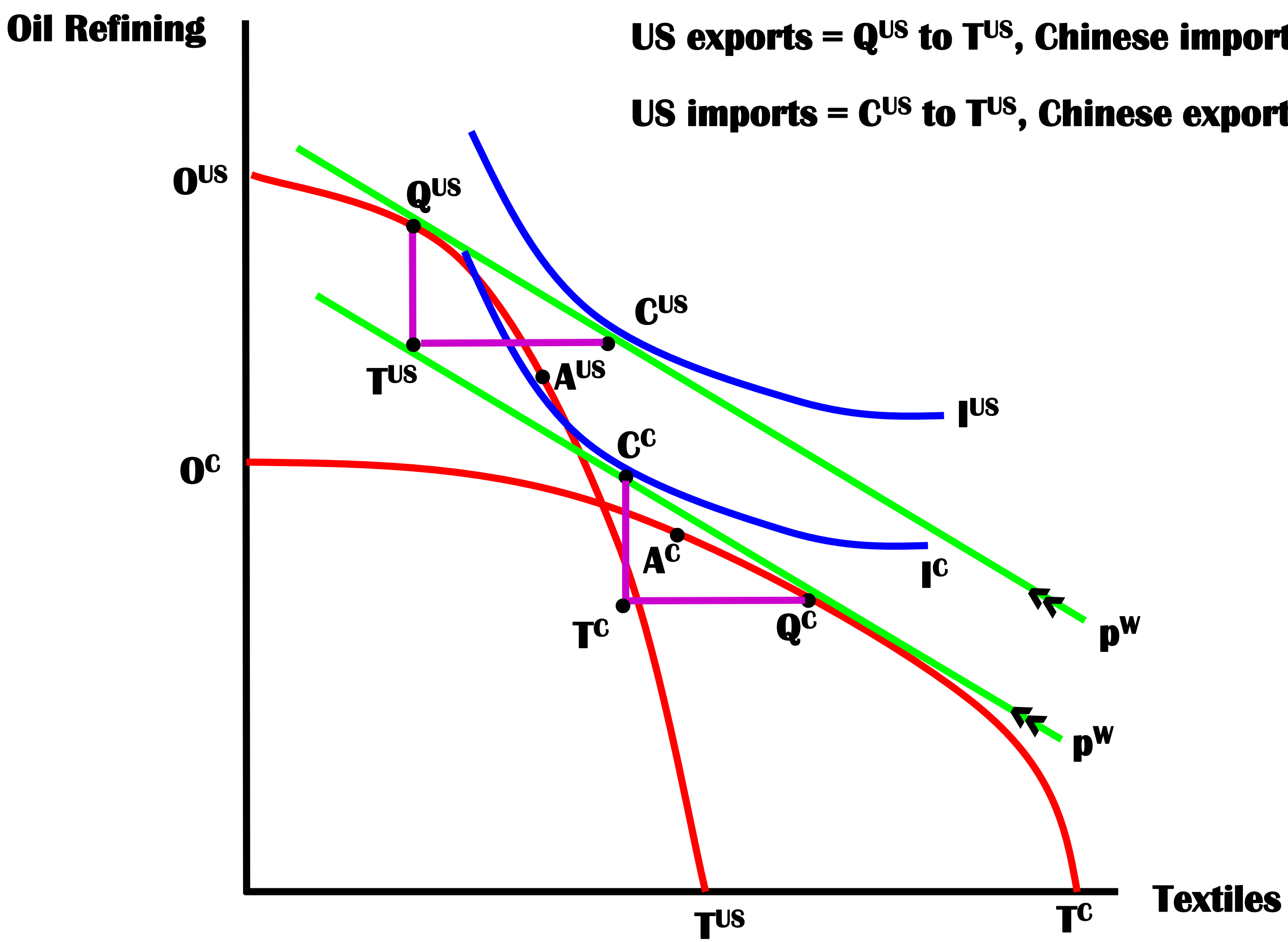
What Determines Trade?

- Assume US has relatively more capital than labor, and China has relatively more labor than capital
- Difference reflected in autarky prices, i.e., oil refining relatively cheaper in US, textiles relatively cheaper in China
- Price differences an incentive for arbitrage and hence for trade
- Equilibrium is where each country exports (imports) that good which intensively uses factor of production in which it is relatively well-endowed (less well-endowed)

Trade Equilibrium

US exports = Q^{US} to T^{US}, Chinese imports = C^{C} to T^{C}

US imports = C^{US} to T^{US}, Chinese exports = Q^{C} to T^{C}



Who Wins, Who Loses?

	US	China
Initial prices	Oil refining cheap, textiles expensive	Oil refining expensive, textiles cheap
Trade effects	Refined oil products exported Textiles imported	Refined oil products imported Textiles exported
Price effects	Price of refined oil products rises Price of textiles falls	Price of refined oil products falls Price of textiles rises
Output effects	Produce more refined oil products Produce less textiles	Produce less refined oil products Produce more textiles
Factor effects	Many workers, and small amount of capital unemployed	Small number of workers, and large amount of capital unemployed
Short-run	Wage rates fall, capital rental rates rise	Wage rates rise, capital rental rates fall
Long-run	Winners: owners of capital/consumers Losers: workers	Winners: workers/consumers Losers: owners of capital

Does Model Fit China?

- Over past three decades China integrated into world market – what has been its pattern of trade?
- Growth in China's exports of labor-intensive products and imports of capital-intensive products
- China's product specialization is *incomplete*, i.e., it still produces some capital-intensive products
- Available statistics suggest many in Chinese population have increased their purchasing power with trade
- Experience mirrors that of other Asian economies, i.e., Japan and Korea