## Lecture 11 Economics 181, International Trade Reviewing HO, Outsourcing, and the Standard Trade Model

Assignment #2 Due Next Tuesday

## I. Reviewing HO

1) H-O explains trade in terms of factor endowments. A country will export the good which uses intensively its abundant factor, such as skilled labor in the USA.

(2) The most useful contribution of the HO approach is the insights it yields into the impact of trade on the distribution of income.

(3) However, there are alot of problems with this approach. For example, the USA tends to export skill-intensive, but not capital-intensive goods. This fact is what is known as the Leontief paradox: the USA has generally exported goods which are labor-intensive, not capital intensive. The Leontief paradox is no longer a paradox once WE make the distinction between skilled and unskilled intensive goods.

(4) In addition, the assumption of equal technology applied to each factor across countries does not seem reasonable. Finally, wages do not equalize across countries.

(5) For a complete picture of where our comparative advantage truly lies, we need to combine both the HO and Ricardo approaches--each yields useful insights.

(6) These two approaches--HO and Ricardo--provide the basis for our belief in the gains from trade. They form the core of economists' and policy-makers beliefs in opening up to trade. These approaches are also useful for showing the basis of income differences and the distributional conflicts that arise from opening up to trade.

Tricky issues:



Graph at left shows that if Price of Cloth increases, return to factor used Intensively to produce cloth rises, and both Sectors reduce their use of that factor. Left quadrant illustrates SS; right quadrant Indicates factor intensity and how it changes with changes in factor prices.

Intuition for Factor Price Equalization (Discussion)

## II. Outsourcing of service jobs to India: what do these models say?

In context of HO, think of a two-good, two-factor world. Two goods are (phone and technology) services and all other goods (AOG). Two factors are skilled and unskilled labor. What is happening is that India has increased its endowment of high skilled service jobs, so if our Rybczynski Theorem is correct, we should see a more than proportional increase in production (and trade) of these higher tech items coming from India. This should increase returns to skilled workers in India and lower returns to unskilled workers, leading to an increase in inequality. The

opposite will happen in the USA. Both countries will benefit, as the prices of these high-skilled services (phones/technology) fall.

Who benefits? Consumers in both countries, skilled labor in India Who loses? Skilled labor in the USA Traditional policy prescription: re-education/ assistance to displaced workers

What HO and all these models miss: factors (especially capital) can move. (Chapter 7 in text, page 170). But with some thinking, you could take the specific sector model, make capital the mobile factor between countries, and show the scenario that the press and the democratic candidates are discussing. Is this realistic? Why or why not?

## III. The Standard Trade Model

The last part of the first half of the course brings together all three models to present a standard model of trade. So far, all three models that we have studied (Ricardo, Specific Factor, HO) have the following in common: (1) PPF summarizes production capacity of economy (2) opening up to trade leads to welfare gains and (3) PPF determines a country's relative supply schedule (4) world equilibrium determined by intersection of world RD curve and world RS curve.

We draw a general production possibility frontier, with the price line (what is the slope?) tangent to the PPF at point Q. The economy below produces at Q but consumes at D. The benefit of trade is it allows us to separate consumption and production points.



A country's terms of trade are defined as : TOT = Pexport/Pimport = Pe/PiIf your TOT rise (ie Pe rises or Pi falls), welfare rises. (ie you are better off). Below, the country exports cloth. If Pcloth rises, what happens?

- (1) The production of cloth rises
- (2) The country's terms of trade improved
- (3) Welfare increased; the country is now
- on a higher indifference curve.

But trade could also lead to declining terms of trade (ie Pcloth falls relative to Pfood). Generally, any even that increases export prices Will improve your terms of trade, and anything that raises import prices reduces terms of trade.



production,  $Q_{C}$