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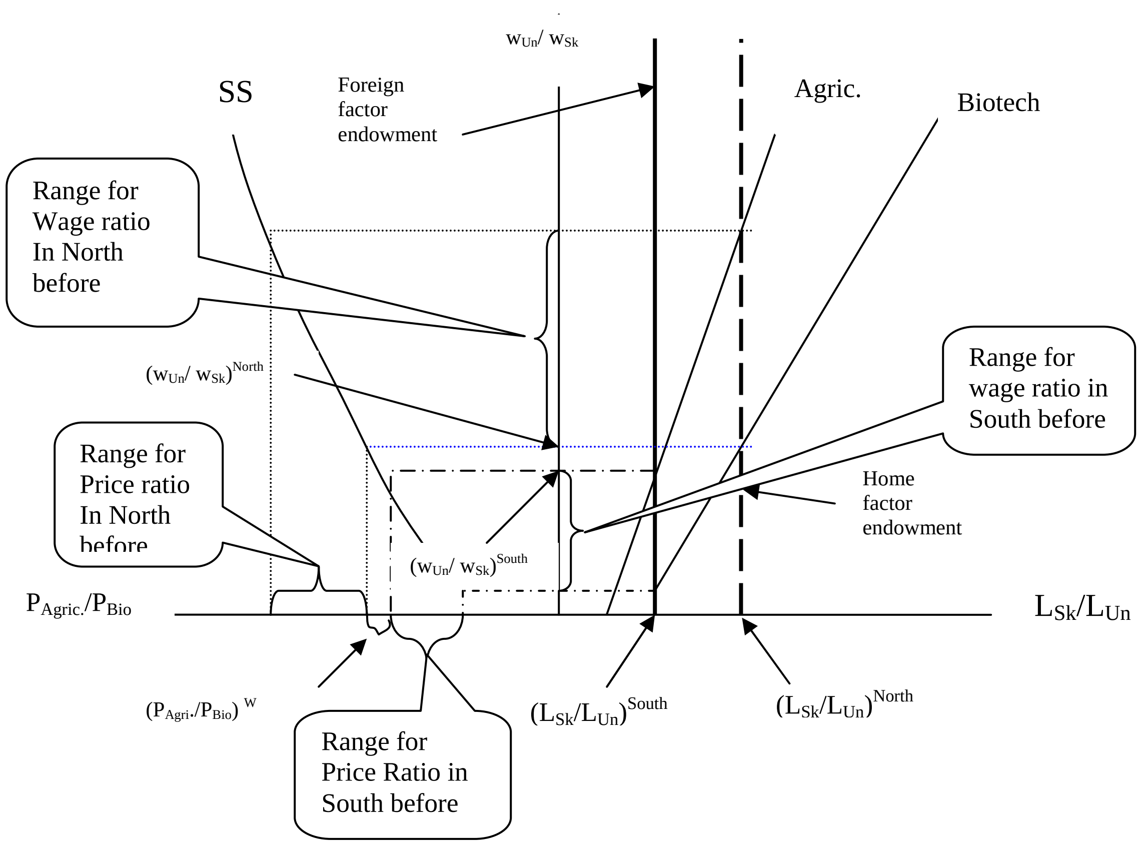
More on Trade and Income Inequality

1. Interpretation in a Hecksher-Ohlin World

Consider a two country world, with "North" relatively abundant in high skilled labor and "South" relatively abundant in unskilled labor.

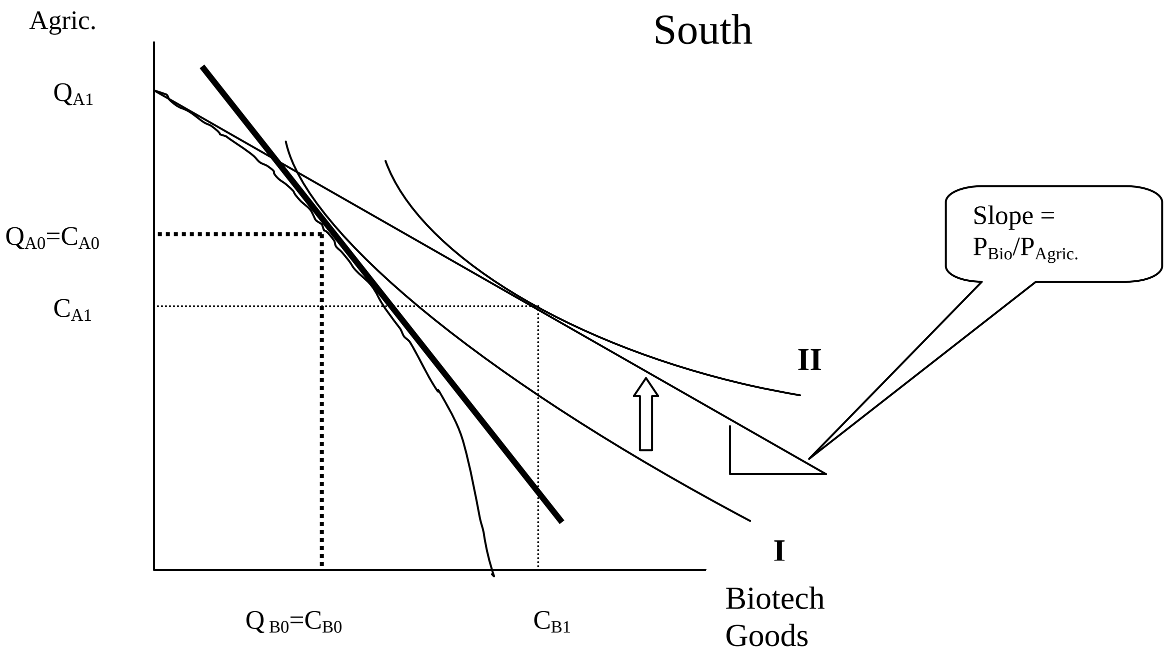
Assume high skilled labor is used intensively in biotechnology, while low skilled labor is used intensively in agriculture.

Assume North and South are initially engaged in free trade. What happens if trade is opened up between the two economies, in terms of production patterns?



In the picture above, endowments are such that there is no factor price equalization, and the relative price of Agricultural goods relative to Biotech goods are in the indicated ranges. The economies are incompletely specialized. After trade is opened up, the price ratio moves to the range indicated as $(P_{Agric.}/P_{Bio.})^W$. The relative wage ratios move to the extremes of the ranges. North and South now specialize, as indicated by "After". North produces biotech, South agriculture.

Note that "South" benefits from the opening up. This can be seen by reference to the production possibilities frontier (PPF) for South.



Initially, South is *not* specialized, so $Q_{A0} = C_{A0}$ and $Q_{B0} = C_{B0}$. When trade is closed, then South must produce what it consumes. This means that the Indifference Curve is tangent to the price line which is also tangent to the PPF. When trade opens up, then $Q_{A1} > 0$, and $Q_{B1} = 0$; the relative price is given by $P_{Bio}/P_{Agric.}$, and the utility level is associated with Indifference Curve II. Notice further that the relative price line is now flatter, indicating that it takes fewer units of Agriculture to purchase a single unit of Biotech, i.e., Biotech is now less expensive. Finally, note that consumption is on Indifference Curve II, which is higher than Indifference Curve I, indicating that there is a increase in welfare for South.