09.18.2010

A note on Stolper-Samuelson Theorem:
How to use basic theory of demand and supply to understand the theorem

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1) The basic logic

When relative price of cloth increases, or P_C/P_F increases, firms increase supply of cloth by producing more of it. Since cloth production is labor intensive, the economy as a whole will demand relatively more labor than land. With labor supply fixed, this will lead to an increase of wage relative to land rental rate, or an increase of w/r.

The increase of w/r is another way of saying labor has become relatively more expensive than land. Since we assume firms can substitute factor of production, so when labor becomes relatively more expensive, firms (in both industries) have incentives to substitute the cheaper factor of production for the more expensive one, i.e., substitute land for labor. Firms' rational response to the change of prices in factor market results in more use of land relative to labor in both food and cloth production, thus T/L ratio in both industries increase.

One thing to note is: even though firms in both industries now use relatively more land than before, firms in cloth industry still remain labor intensive.

2) When relative price change is caused by imports

When foreign imports enter the domestic market, if they are both cheaper and direct substitutes of domestic goods, consumers will buy more foreign imported goods, thus reducing the demand of domestic goods. Let's still use cloth and food as an example, and assume the good imported is cloth.

The reduced demand of cloth lowers the relative price of cloth, or a drop of P_C/P_F. And firms in cloth industry will respond by producing less of it. This in turn leads to a drop of w/r, and a decrease of T/L ratio in both food and cloth industries.

The above analysis assumed foreign cloth and domestic cloth are 100% substitutes. When this is not true, as often in reality, the actual domestic demand may not decrease or decrease as much, so the relative drop of w/r is smaller.