

Gains from Trade

International Trade

Lecture Slides

April 2017

Gains from Trade and the Compensation of the Losers

Assume that each individual h in a country maximizes its utility $u^h(c)$ with respect to the budget constraint:

$$p_a c_a \leq w_a v_a^h$$

p_a is the autarky a price of the output good, c_a^h is the consumption of individual h under autarky prices a , w_a is the factor price (e.g. wage), and v_a^h is the factor supply (e.g. hours of work).

When moving to free trade, the new budget constraint is given by

$$pc^h \leq wv^h. \quad (1)$$

Some people gain from trade and others may lose when moving from autarky to trade (remember the models you have seen during the trade course). Now we try to find a system of transfers to compensate losers from trade. This means that we want to allow all individuals to be at least as well off as they were in autarky. To this end, consider the following system:

$$R^h = (p - p_a)c_a^h - (w - w_a)v_a^h \quad (2)$$

R^h denotes the transfer, an individual might receive. If R^h is negative for an individual, it can be interpreted as a tax.

Plug R^h into the budget constraint and show that under this transfer system, all individuals can still afford their autarky choices.

The budget constraint under free trade becomes:

$$pc^h \leq wv^h + R^h \quad (3)$$

Plug in the expression for R^h and check whether the autarky choices are still feasible.

The resulting expression can be simplified to get:

$$p_a c_a^h \leq w_a v_a^h \quad (4)$$

This is just the autarky budget constraint.

What problems could arise if such a system were implemented in practice?