IV. Tariffs: Small Country (Can't affect world prices)
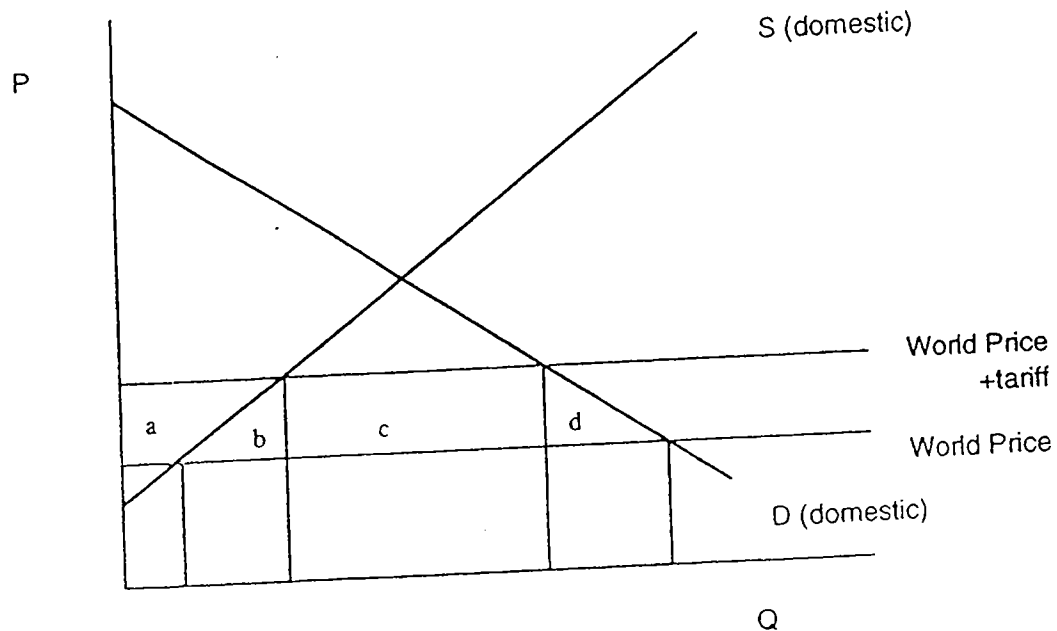
Definition of Tariff:

Tax on imported goods.

$P_d = P_w + t$ Specific
$P_d = P_w (1+t)$ Ad Valorem

What happens going from free trade to tariff?

Domestic Consumers lose :   -(a+b+c+d)
Domestic Producers gain :   +a
Government Rev.   :   +c

Net Loss = b+d = dead weight loss

Where do these losses come from?

1.) Triangle b

The tariff encourages US producers to produce stuff that is more costly for them to produce than to be supplied by foreign exporters.

2.) Triangle d

The tariff forces US consumers to cut back their purchases when there were producers out there willing to sell to them at a lower price. (Think about a smuggling.)

V. Estimating Tariff Costs

Numbers Estimated:

Consumer Loss: (a+b+c+d)
Consumer Loss/job saved
Producer Gain: (a)
Deadweight Loss: b+d

VIII. Measuring Tariff Levels: Effective Rate of Protection

How high are the barriers to trade in certain industries?

How much is that industry helped by trade policy?

Not always that obvious.

What happens when an input has a tariff imposed, but not the good itself?

Effective Rate of protection = One way of trying to adjust

Measures the percentage change in value added for a good before and after protection.

Value Added = Selling price - Cost of inputs

Example:

Portable computer
Uses one part - Computer screen
Price = 100, cost of screen = 50

Value added (before tariff) = 100 - 50 = 50

What are the Effective rate of protection (ERP) and nominal rate of protection (NRP) of a 10% (ad valorem) tariff on computers?

P computers after tariff = $100(1+1.1) = 110$
NRP = 10% Easy

Effective Rate of Protection:

Percentage change of value added =

Value added after = 110-50 = 60
Value added before = 100-50 = 50

ERP = (60-50)/50 = 20%

ERP is higher than NRP

What about a tariff on screens only (the input)?

10% Screen tariff

Value added after tariff = 100 - 50(1.10) = 100 - 55 = 45

ERP = (45-50)/50 = -10%

The ERP is negative. This reflects the fact that putting a tariff on the input good, screens, may help that industry, but it will hurt others, computers.