Conflicting Perspectives in Trade and Environmental Negotiations

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Trade-Environment Linkages

- Economic growth
- Transportation
- Production allocation
- Changes in prices
- New markets
- Environmental competition
Formally…

“Sustainable growth” is often mentioned among the objectives of trade policies.

“Trade impacts” should be considered in the implementation of environmental policies.
Actually…

- Integrated trade-environmental policies are missing
- Environmental aspects under weighted in the trade debate
- Trade aspects under weighted in the environmental debate
- Complex reasons (see Esty (2001))
- The role of models
Strategic modelling of trade and environmental negotiations

- Use different model closures to mimic different “perceptions”
- Use a simple general equilibrium framework to get values for a “payoff matrix”, explaining the negotiators’ choices
Model I (Fantasy)

- HOS hypotheses
- Two country, two industries (clean, dirty)
- One resource, level inversely related to global production in the dirty industry
- Four instruments: production taxes and tariffs
- Three closures: FULL, TRADE, ENV
EV elasticities (x100)

<table>
<thead>
<tr>
<th></th>
<th>FULL</th>
<th>TRADE</th>
<th>ENV</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td>$c_a$</td>
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<td>-0.40</td>
<td>0.51</td>
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<tr>
<td>$c_b$</td>
<td>1.07</td>
<td>-0.53</td>
<td>0.76</td>
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<tr>
<td>$c_c$</td>
<td>0.90</td>
<td>-0.98</td>
<td>0.88</td>
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<tr>
<td>$c_e$</td>
<td>-0.97</td>
<td>0.93</td>
<td>-0.98</td>
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Model II (Gtap)

- Two countries (KYO = Kyoto signatory countries, NUS = Rest of the World), two industries (carbon intensive and the rest), one resource
- Rather arbitrary environmental impacts (but differentiated carbon content)
- ENV scenario constructed by fixing the international price of only carbon-intensive commodities
- Production taxes -> Reduced subsidies
## EV elasticities (x1000)

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<th>ENV</th>
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<tbody>
<tr>
<td></td>
<td>NUS</td>
<td>KYO</td>
<td>NUS</td>
</tr>
<tr>
<td>$C_{k,p}$</td>
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<td>$C_{\alpha\alpha}$</td>
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<td>$T_{\alpha\alpha}$</td>
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<td>-0.80</td>
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