Chapter 21
What role for Border Tax Adjustments?

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Research Question: How effective Border Tax Adjustments are?
International Climate Policy Framework?

(1) Cap & Trade (like Kyoto Protocol),
(2) Pledge & Review (like Copenhagen Agreement),
(3) Internationally Harmonized Carbon Tax
(Nordhaus 2005, Stiglitz 2006, etc)

=> Domestic carbon tax (introduced by many countries) does not contradicts Pledge & Review
   = Tax rate is set by each country, the revenue accrues to the national government
BTA as solution of Competitiveness Issue

- **Obstacle of carbon tax:**
  Concern about carbon leakage and competitiveness issue

\[<= \text{price gap of domestic products (with carbon tax) and foreign goods}\]
- BTA is trade sanction? No!
BTA is not a Trade Sanction against climate-unfriendly countries, but a normal practice for domestic indirect tax such as VAT, energy tax, etc., based on “destination principle”

=> No “trigger of trade war” or “disguised protectionism”!

*Note: Industrial Lobbies (enemy of eco-tax) are often in favour of VAT, because of BTA.
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- BTA violates the international trade rules?

It depends on design!

Principle of WTO rules:

“most favored nation (MFN)”, you cannot discriminate among trade partner countries

“national treatment”, you cannot treat your domestic products more favorably than imports
- How should the BTA designed so as to conform to WTO rules?

You can impose the “indirect” carbon tax on imports which falls in a SPECIFIED CATEGORY (steel, iron, basic chemical materials etc.), at no higher than a tax rate (yen per product unit) based on standard carbon intensity of DOMESTIC products regardless of carbon intensity of production process in the country of origin (not to violate “MFN” and “national treatment”).

Exports enjoy refunds
Modeling Process (Possible?)

(1) Define the specified category of energy intensive and trade exposed goods (domestic industries).
(2) Calculate the “carbon tax adjustment rate” of a product unit (real euro value) by dividing “carbon tax value imposed on energy inputs used in a domestic production sector” by “the value of outputs”.

* It may be complicated because E3ME has “goods sectors” and “energy user sectors”.
** Carbon tax value included in electricity consumption will also be considered, by “grid average carbon intensity per kWh”.
(3) Levy the import tax on the imports included in the “specified category”, and refund the domestic carbon tax for exports included in the “specified category”.
(4) Apply this to “single-country”, “no-recycling” scenarios, and analyze the impact on those sectors and trade balances.
Your Opinion?