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# Political Economy of Low Carbon Policy Border Carbon Adjustments in Support of Domestic Climate Policies

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# Border Carbon Mechanisms

- Border carbon mechanisms (i.e., border tax adjustments (BTAs) or border carbon adjustments (BCAs)) are proposed as the second best to complement domestic carbon pricing to reduce the competitiveness and leakage effects.

- Border carbon mechanisms are core to the European Union's Green Deal.

- In theory, a carbon border mechanism would allow a country to pursue more ambitious climate change policies in the knowledge that domestic industry would not be unfairly undercut by foreign suppliers.
  - Address competitiveness concerns and carbon leakage.
  - Help force major developing countries to take on hard commitments.

- In practice, implementing an effective carbon border tax will be tricky, costly and sure to provoke legal challenge.
  - Determining whether it is WTO-legal.
  - Addressing principles of non-discrimination.
  - Reliance on GATT's General Exceptions.
  - Determining comparable effort.

# Border Carbon Mechanisms Features

- There are two key features of a border carbon mechanism:
  - A tariff based on the embodied carbon content of the imported goods.
  - Rebates in the amount of emission taxes paid by producers of exports; and

- Most of the discussion is on the tariff rather than the rebate.

# Mitigating Competitiveness and Leakage Effects

- The main argument for implementing a border carbon mechanism is that it could mitigate competitiveness and leakage effects.
  - While modeling suggests that border carbon mechanisms are effective in mitigating competitiveness effects, results are driven by model assumptions.

- An alternative approach such as an output-based performance standards which rewards firms that exceed a standard and penalize firms that fail to meet the standard also has the potential of mitigate competitiveness and leakage effects.

# Modeling Insights on BCA

- Stanford Energy Modeling Forum (i.e., Study Group 29) explored BCA issues
  - Energy Economics Vol 34, December 2012.

- Key Findings
  - BCA can effectively reduce emissions leakage and address competitiveness concerns, however it cannot completely eliminate it.
  - The global cost savings from BCA are small – as it does not really incentivize emissions abatement in firms abroad.
  - BCA can have substantial redistributive effects – carbon tariff imposed by industrialized countries change the terms-of-trade against the developing world, thereby shifting the burden of emissions and exacerbating existing income inequalities.
  - The inclusion of rebates in BCA is of secondary importance for efficiency and distributional effects, since industrial countries are major net importer of embodied carbon.
  - The attribution of tariff revenues from BCA to exporting counties can substantially reduce the adverse distributional impacts of BCA.

# Issues in Implementing Border Carbon Adjustments

- WTO compliance is important

- Equally important challenges are:
  - How to determine comparable effort?
  - How to set the border carbon adjustments? Product or industry
  - How to determine emission intensity of the product?
  - Do we need labelling?
  - Tracking country of origin?

# Some Policy and Modeling related Questions

- Given that the worldwide ambition level is near net-zero in 2050, will BCA's improve global welfare outcomes?
- How should domestic sensitive sectors (e.g agriculture) which have low coverage or very high rebate amount impose a BCA on imports?
- General literature suggests that with Canada being a small open economy, BCA's seem to result in non-welfare improving outcomes but help with the competitiveness impacts on the domestic economy and reduces carbon leakage, how can these ideas be balanced?
- Does the imposition of BCA's imply a more fair distribution of economic impacts across countries or are developing countries unfairly impacted?
- How does BCA's welfare impacts change when the domestic carbon system is a cap and trade versus a carbon price?
- Would it be a better idea for Canada to enact a BCA or instead to engage in international/regional cap and trades to reduce competitiveness and carbon leakage?

# THANK YOU

# QUESTION?