# International Trade Law and the Economics of Climate Policy

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## Overview

- Border adjustments to address leakage and competitiveness concerns
  - Benefits
  - Risks
    - Potential WTO Issues
- Free allocation to address competitiveness
  Potential WTO Issues and other harms
- Alternative approaches



### Expected Benefits of Border Adjustments

Reduce Leakage?

 Protect Competitiveness of Certain Carbon-Intensive U.S. firms

Politics

### Expected Benefits of Border Adjustments

- Reduce Leakage?
  - Leakage estimates are small
  - Border adjustments would do little to reduce leakage
- Protect Competitiveness of Certain Carbon-Intensive U.S. firms
- Politics



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### Leakage Estimates are Small

 Estimates vary, but most studies find that 10% of emission reductions from climate policies are offset by emission increases in the rest of the world



- <u>EPA</u>: Leakage under Lieberman-Warner of 11% in 2030 and 8% in 2050
- <u>Paltsev 2001</u>: Leakage under Kyoto Protocol (if all countries meet targets) of 10.5%. US leakage under Kyoto only 5.5%
- <u>McKibbin et al. 1999</u>: US unilateral adoption of Kyoto targets would lead to 10% leakage in 2010
- <u>IPCC</u>: Comprehensive survey finds credible leakage estimates between 5% and 20%



# Estimated Leakage Reductions from Border Adjustments on Carbon-Intensive Imports



#### Reasons for small impact

Source: EPA Analysis of S. 2191

- 1. Ignores production leakage from export competitiveness
- 2. Applies only to subset of imports from subset of countries
- 3. Does not address increased global demand for fossil fuels from lower prices that reductions in US quantity demanded will cause



### China's Share of Global Carbon Intensive Production and Share Exported to the U.S.





### Expected Benefits of Border Adjustments

- Reduce Leakage?
- Protect Competitiveness of Certain Carbon-Intensive U.S. firms







### Change in U.S. Imports of Energy-Intensive Goods from Annex 2 Countries in 2050





### Expected Benefits of Border Adjustments

Reduce Leakage?

 Protect Competitiveness of Certain Carbon-Intensive U.S. firms

Politics

### **Expected Costs of Border Adjustments**

- Abused for purely protectionist reasons
- Retaliatory tit-for-tat trade wars
  - China may point to historical responsibility or emissions per capita
  - Sets dangerous precedent, particularly if U.S. takes weak action
  - Risk to free trade when free trade is already under attack
- Risk of noncompliance with WTO law



### WTO Analysis of Border Adjustments

Is border adjustment consistent with nondiscrimination obligations?

If not, is it permissible under Article XX environmental exception?

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National Treatment obligations

Most-Favored Nation obligations

If not, is it permissible under Article XX environmental exception?

### National Treatment Obligations (Art. III)

- Treatment "no less favorable" than that accorded to "like" domestic products
- "Like": High-carbon steel "like" low-carbon steel
  - Distinctions not permitted based on *how* a product is made.
- "No less favorable":
  - □ How much did U.S. firm pay for permit?
    - Cost-of-service regulated utilities
    - Free vs. Auctioned Allocation
  - How to determine carbon content of imports?



### WTO Analysis of Border Adjustments

- Is border adjustment consistent with nondiscrimination obligations?
  - National Treatment obligations

Most-Favored Nation obligations

If not, is it permissible under Article XX environmental exception?

# Most-Favored Nation Treatment Obligations (Art. I)

- Prohibits discrimination between WTO Members
- Applying only to countries without "comparably effective" policies may violate.
- "Comparably Effective":
  - Hard to determine given varied approaches
  - Using national reduction data may be problematic
    - Geographical location of consumption or production?
    - Nations may have different trajectories to same goal
    - May fail to account for land use changes
    - Ignores changes in population or GDP



### WTO Analysis of Border Adjustments

- Is border adjustment consistent with nondiscrimination obligations?
  - National Treatment obligations
  - Most-Favored Nation obligations
- If not, is it permissible under Article XX environmental exception?
  - Article XX(g)
  - Chapeau



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### Environmental Exceptions--Art. XX(g)

- "Relating to conservation of exhaustible natural resources"
- "Related to"?
  - "primarily aimed at" conservation
  - "Substantial relationship" betw measure and goal
  - "Means and ends relationship" that is "close and real"
  - Not clear climate aims would be less "effective" or "substantially frustrated" without border adjustments
- But may not matter how much benefit to be "related to"



### Environmental Exceptions--Art. XX Chapeau

- "Measures are not applied in a manner that would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade."
- Purpose: prevent "abuse of the exceptions" and ensure "exercised in good faith" to protect "legitimate" Art XX interests, not as way to circumvent WTO obligations



### Environmental Exceptions--Art. XX Chapeau

#### Possible WTO concerns:

- Larger impact on protecting certain firms than on reducing leakage
- May need to permit importers to demonstrate individual emissions
- Must permit flexibility in how other nations address climate change
- Must take "into consideration different conditions which may occur" in different countries, which may preclude applying one carbon price equally to all nations
- Must engage in "serious, across-the-board negotiations"



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# Free allocation to address competitiveness Potential WTO Issues and other harms

Alternative approaches



### Free Allocation to Compensate Firms

- WTO Compliance
  - □ Test for illegal subsidy under SCM Agreement:
    - "Financial contribution"\*\*\*
    - "Benefit"
    - "Specific"
    - "Adverse Effects"\*\*\*



### Free Allocation to Compensate Firms

#### "Financial contribution"

- □ Free allocation → "functionally equivalent" to distributing cash (CBO)
- "Adverse Effects"
  - "Serious prejudice": "displaces or impedes imports" by reducing costs in U.S.
    - But free allocation should not affect pricing and output in U.S. (e.g., EU), so imports might not be harmed (nor will U.S. employment be protected)
    - Output-based allocation: Subsidizes production, which would harm importers (and also protect employment)
  - WTO compliant only to extent ineffective in protecting U.S. firms



## Conclusions

- Expected costs of border adjustments may well outweigh potential benefits
  - Do little for environment
  - Potential for abuse for purely protectionist reasons
  - Risk of tit-for-tat trade retaliation
  - Risk of WTO noncompliance
- Free allocation also not good policy option
  - Benefits accrue to shareholders, but costs still passed on and employment and output in sectors still reduced
  - Possible WTO concerns depending on how designed





### **Alternative Approaches**

- International engagement and negotiation
- U.S. unilateral action to show leadership, at long last, on climate change
- Use revenue from auction to help dislocated workers transition or reduce distributional impact or cost of carbon price mechanism
- Work with other high-income countries to provide assistance, financial and technological, to low-income countries to reduce emissions



### Appendix

Sectors that Face Greatest Competition from Annex II Countries Also Comprise Largest Shares of US GDP and Employment

	Share of U.S. GDP	Share of U.S. Employment
Chemicals	1.68	0.65
Cement	0.43	0.38
Paper and pulp	0.44	0.36
Steel	0.29	0.19
Aluminum	0.20	0.11





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