Home Country Bias in International Emissions Trading: Evidence from the EU ETS

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12th Conference on the Economics of Energy and Climate
Background on the EU ETS

- EU+3 wide market, about 50% of emissions covered
- **Organized by phase**, each with different rules
  - Here phase I (2005-07), phase II (2008-12) and start of phase III (2013-20)
  - Grandfathering = default allocation rule in phase I and phase II
  - Participants = regulated firms + anyone who wants
  - Market organisation = spot (exchanges + OTC) and derivatives (exchanges and OTC)
- **Key events in phase II**: VAT fraud, economic crisis, very low prices
- **Transaction data** available with a lag on the EC website (account level ≠ firm level)
Document a home bias in EU emissions allowances spot transactions:

The home bias varies across countries and is lower for large trades.

\[ RHB_c = \frac{\text{fraction of purchased allowances in country } c \text{ bought domestically}}{\text{fraction of allowances in country}} \]
• Why would firms prefer to trade allowances with a domestic counterpart?
  • Unlike in trade settings: homogenous good (→ no taste-based explanation), no transportation costs.
• Explanation must come from organisation of the market that may biased decision towards a local counterpart
  • Up to 8 exchanges at one point
  • Financial intermediaries
  • Trading desks
• Need to be careful about the welfare interpretation: Home bias may reflect a strong presence of intermediation at home as well as market frictions
• Also need to acknowledge presence of derivative market, which acts as a substitute
• Paper runs a large number of robustness checks
  • Least convinced about the way you deal with VAT fraud

• I think you can do more than you say in terms of identifying the type of transaction (exchange / OTC, ...)
  • Some exchanges required dedicated trader account, other exchanges used clearing members which acted as in-between.
  • May lead some double-counting

• The sell-side and the buy-side was very different but measure of home-bias is constructed on the basis of buy-side.