

# **Environmental-Unfriendly Tax Avoidance**

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# Three Strengths

## 1. **Important** (even if not novel) **mechanism**

- Carbon allowances as a profit-shifting asset

## 2. Impressive data collection

- EUTL transactions + Orbis + LLM/manual ownership matching  
+ Worldscope + CDP

## 3. Policy relevance

- Tax avoidance may weaken the incentive effect of carbon pricing

# What Does the Paper Study?



# Key Associations Observed

**EU ETS carbon allowances**



**Internal carbon trading hub**



**Lower group tax burden**



**Lower abatement investment and higher emissions**

# Why This Contribution Matters (My Take)

## Core Contribution

- Most tax papers study profit shifting
- Most carbon-market papers study emissions and abatement
- This paper studies:
  - how tax planning may change the incentives created by carbon markets

## Lucas-Critique-Style Insight

- Policy rules change the business environment
- Firms learn and adapt:
  - Environmental regulation + tax law + transfer pricing
- Unintended consequence:
  - Tax avoidance capability → **lowers effective cost of allowances** → weakens pressure to reduce emissions

# Some Areas for Improvement

- Suggestion 1:
  - Separate tax planning from operational centralization?
- Suggestion 2:
  - Direction of causality: weak decarbonization strategy may precede hub use?
- Suggestion 3:
  - Account for carbon price uncertainty?
- Suggestion 4:
  - Selection and conditioning issues

# #1: Tax Planning or Operational Centralization?

## Paper Addresses It. How?

- Distinguishes operators from hubs
- Separates collect, supply, and balance hubs
- Shows strongest ETR results for **balance × international** hubs

## What Remains to be Isolated?

- Centralized allowance procurement
- Carbon-price risk management
- Internal carbon-budget governance across subsidiaries

Can the paper more directly separate  
tax-motivated hubs  
from  
internal emissions control hubs?

# #2: Does Weak Decarbonization Precede Hub Use?

## Paper's Interpretation

Tax-motivated allowance trading

→ Lowers effective carbon cost

→ Lower abatement investment

## Alternative Pathway

Weak decarbonization strategy

→ Continued need for allowances

→ Greater value of internal trading

hub

Distinguish

*“tax avoidance weakens decarbonization”*

from

*“weak decarbonization increases demand for tax-efficient allowance trading”*

# Possible Ways to Explore

- Show **abatement-investment pre-trends before hub creation**
- Examine **changes around first adoption of an international hub**
- Do results differ for **firms with persistent allowance shortfalls?**
- Do results differ for firms **on decreasing-emissions trajectories?**

## #3: Carbon Price Uncertainty

- The paper's **tax-planning mechanism relies on** allowance prices moving between purchase, internal transfer, and surrender.
- But the same price movements may also affect abatement investment for non-tax reasons.
- Firms may centralize allowance trading because they are **managing price risk, inventory, or compliance timing.**

# Possible Ways to Explore

- Account for carbon price levels and volatility (uncertainty) directly?
- Test whether associations change for high-volatility years?
- Interact shifted profit share with carbon price uncertainty?

Fuchs, M., Stroebel, J., & Terstege, J. (2024). Carbon VIX: Carbon price uncertainty and decarbonization investments. *Journal of Financial Economics*, forthcoming.

## #4: Selection/ Conditioning Issues

- Effective Tax Rate = tax expense / profit before tax
- Analysis drops loss-making observations from ETR regressions
- Selection / Collider-Conditioning Concern:
  - Is the analysis conditioning on some form of the outcome itself?

# CDP Selection in Environmental Tests

- Tables 9-10 rely on CDP disclosure
- The paper partially addresses selection by:
  - Showing results for **All**, **Ever**, and **Current** samples
- Consider examining:
  - How do CDP and non-CDP firms differ?
  - Are CDP firms less or more likely to have hubs, especially opaque hubs?
  - Do CDP firms differ in shifted-profit intensity?

This is an important paper!

I hope these comments help strengthen your work.

Best of Luck!