Discussion of

"Institutional Investors and Carbon Pricing: Evidence from Equity Portfolios"

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The paper in a nutshell

Research question: How does carbon pricing affect the equity allocation across firms?

Approach:

1. Construction of a database combining information on equity holdings by mutual funds, firms characteristics and policy variation from the ETS
2. Assessment of effect of carbon pricing on investors' holdings in firms regulated by the ETS via an instrumental variable approach where carbon price shocks are identified as in Känzig (2023)

Main findings

- An increase in quarterly carbon pricing leads to a reduction in the dollar value of the average investor's holding of a regulated firm by 0.58%
- This seems to be due to a decrease in the average firm's profitability and share prices
- The effect is somewhat muted for firms that are less carbon-intensive and receive a greater share of permits for free
- Investors increase their holdings of extra-EU firms located in countries with relatively looser climate policies

General comment

- The paper is well polished and the exercise precisely outlined.
- However, it lacks a bit of contextualization. What is the extent of the phenomenon? Can results be put in a more interesting economic perspective? What could be the policy implications? Is there a theory that could help interpret the results? These are all questions that are left unanswered after reading the paper.
- While the work is based on other well-established analyses - or maybe because of that - I find the draft as it is more similar to a spin-off than a stand alone paper.
- There is a lot of potential to tackle interesting questions on future climate initiatives, so it is worth to put a bit more effort in interpreting the results.

Main comments

On the sample

- Representativeness: "As of 2019, the matched firms account for 35% of ETS emissions (p. 7)"
  - How much is this? What is the amount of these firms' shares held in the portfolios?
  - The ETS itself, at the current stage, covers sectors accounting for around 40% of the EU's emissions. What is the economic weight of the covered sectors in the EU's economies?
- Contextualizing the magnitude of the phenomenon would help the reader put the results in a more encompassing perspective.

Main comments

On the carbon leakage

- Dirty sectors are the carbon-intensive sectors classified as GICS 10, 15 and 55 (energy, materials and utilities). This is a standard but a bit simplistic classification, as some subsectors cannot be deemed as carbon-intensive as others (e.g. sub-industry 55105020 - Renewable Electricity). Results should be then carefully interpreted also in light of these classification details.
- The EU effect: there is scope here to discuss if an anticipation on the possible expansion of the ETS perimeter is at play. A quick way to answer is to check which sectors are driving the results.
- The "beneficiaries": which countries with looser policies are benefiting the most? Advanced economies, emerging markets?

Technical comments

- On the main dependent variable: Alekseev et al. (2022) define active trading as

$$ActiveChanges^{I}_{f,t} = \left[\left(\frac{\sum_{j\in I} P_{j,t-3}S_{f,j,t}}{\sum_{j} P_{j,t-3}S_{f,j,t}}\right) - \left(\frac{\sum_{j\in I} P_{j,t-3}S_{f,j,t-3}}{\sum_{j} P_{j,t-3}S_{f,j,t-3}}\right)\right]\frac{1}{(Share^{I}_{t})}.$$

  In Section 2.2, you don't seem to re-scale for the share size as they do. Any reason for that?
- On the regression: you might want to check (and in case correct) for cross-sectional correlation (see for instance Chudik and Pesaran (2015)).
- Additional comments: some clarifications would be appreciated in two respects:
  1. how do you aggregate carbon pricing shocks at the quarterly/annual frequency?
  2. how many observations are discarded after the data polishing (which seems quite elaborated)?