

Discussion of "The effects of carbon pricing along the production network"

NBB biennial conference

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September 26, 2024

Outline

- Quick summary of the paper
- Questions about methodology and results
- Connection to (computable) general equilibrium ?
- Extension to dynamic networks ?

Summary of the paper

- Combine highly granular data on the Belgian production network, production, and participation of firms to the carbon market (EU-ETS)
- In order to assess propagation of (carbon) price shock through the production network.
- Little evidence of cost pass through or of direct impacts on clients/suppliers.
- More significant impact on the structure of the network (new suppliers/clients) and on innovation behavior.

Questions about methodology/results

- ETS participation represented only by a dummy ? Why not considering the actual level of emissions ?
- Similar question for the share of ETS firms upstream and downstream.
- Other explanations for the lack of cost pass-through ? (other analysis do find a cost-pass through, e.g. Cludius and al. 2020)
- Possibility to extend the structural analysis of the network ?
- In particular, compare centrality of ETS firms to that of an “average” firm: are ETS firms systemic ?

Relation to the general equilibrium literature

- Motivation strongly linked to recent literature on production networks.
- Another way to ask the same question is "what are the general equilibrium effects of carbon pricing?"
- Although very few econometric/empirical literature on the topic, this have been extensively investigated by (computable) general equilibrium modelling
- Impact assessment of environmental policy (and carbon pricing in particular) has been a key focus of these models (Stanford Energy Modeling Forum, assessment of European climate policy).
- Strong potential synergies with your work:
 - ex-post: validation of general equilibrium model results
 - ex-ante: calibration of production functions

Network dynamics

- Current results hint more at an effect on the structure of the network ?
- Possibility to link this to the recent literature on dynamics of production network ?
- Two drivers of network evolution in your setting: price and innovation.

Thank you

- Thank you !