

# Green fiscal policy in an empirical UK E-SFC model

Adam George and Yannis Dafermos

Discussion – Etienne Espagne

# An important contribution to empirical SFC literature

- The seminal DEFINE family of SFC models
- The recommendations of the Expert Group on Debt, Nature and Climate for multilateral institutions
- More references in the developing and emerging world:
  - Colombia (Godin et al., 2023, 2024)
  - Tunisia (Yilmaz et al., 2023)
  - Vietnam (Espagne et al., 2021)
  - Brazil (Torchinsky et al., 2025, to be published)
  - The Financial Sector Mitigation and Adaptation Tool (Valdecantos et al., 2025, to be published)

# On the importance of policy mixes

- Carbon prices:
  - What is the empirical evidence of carbon price in affecting the share of green/non-green investments in your data?
  - Consider UK contracts for differences more explicitly?
- Technological change/policies:
  - What is the dynamics of costs reduction – technology adoption in the model?
  - You seem to find that profit expectations do not play a major role in driving investments. Is it also the case for green investments? How do you reconcile with Brett Christophers' arguments in "The price is wrong" ?
  - Is it similar to your cannibalization effect? What policies would you suggest to mitigate this cannibalization effect?
- Green housing subsidy:
  - A key challenge of green housing is the actual mobilization/restructuring of the housing sector to fully embed the constraints of energy efficiency. Maybe useful to represent the risks associated to this policy?
  - A range of green houses could turn up not being so green after all.
- Missing transportation policies?

# On the importance of policy mixes

- All of the above scenario:
  - How to test the robustness of these benefits?
  - Could there be cases when a certain policy mix is less good than the individual policies?
  - Need for more systematic assessment?
- Broader question on policy insights:
  - Testing robust policy decisions against a set of objective variables (See : Daumas, Louis, Antoine Godin, Céline Guivarch, and Sakir Devrim Yilmaz. "Robust financing mixes for Colombia's climate strategy-A Robust Decision-Making Application of the GEMMES-Colombia model." *Available at SSRN 5327551* (2025).)

# Towards more realistic scenarios

- Possible complementary scenarios:
  - War economy scenarios: introducing fiscal spending for defense and looking at possible substitution effects.
  - Geoeconomic fragmentation scenarios: introducing supply constraints on the imports of some of the green goods
  - Liz Truss effect scenario: exchange rate due to confidence shock of foreign investors

# Some modelling questions

- P28: what happens to PS default rates in years 2034, 2035?
- Fixed cost coefficients for renewable electricity?
- Import propensity of green investment goods?
- Eq 161: no profit motive in the share between green/non-green investment?
- What is the equation of the exchange rate?