

Distributional effects and perceived fairness of carbon taxes

Thomas Sterner

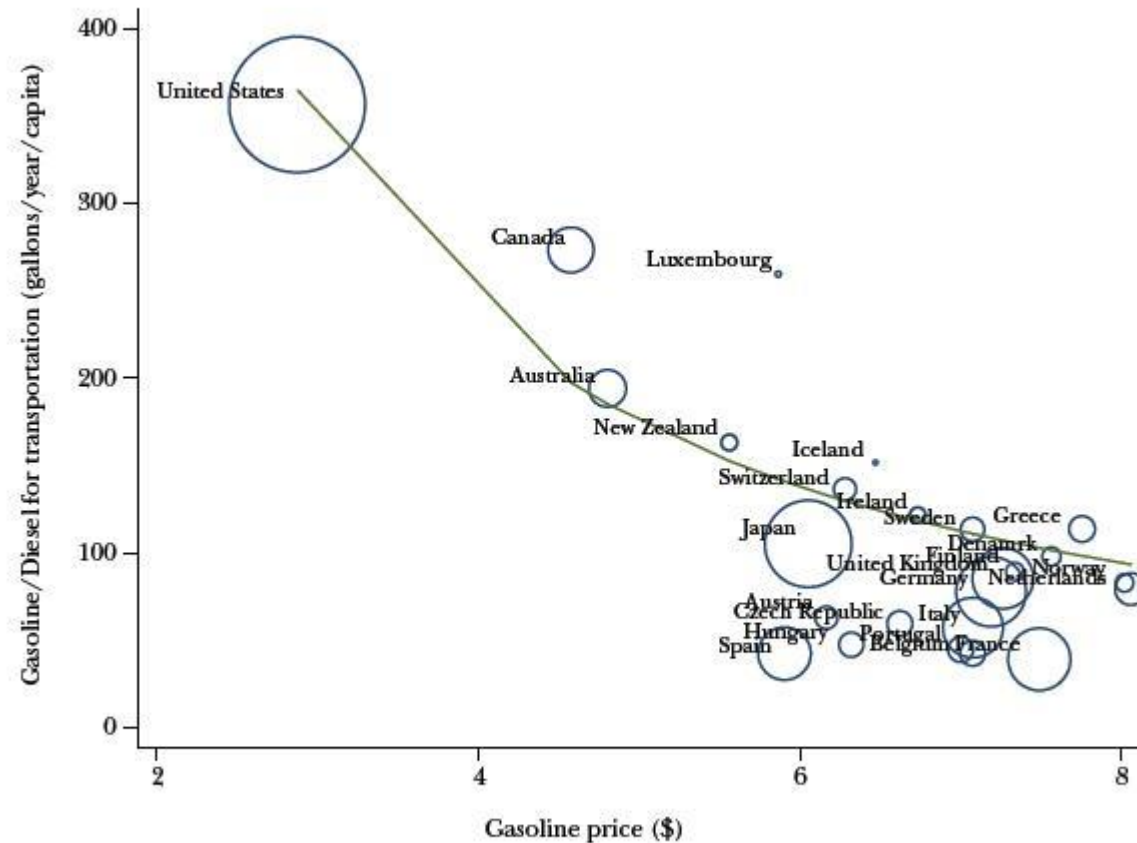
Gothenburg

Sweden

Fuel Taxes are VERY effective

Figure 1

Transportation Fuel Consumption per Capita versus Fuel Price



Source: Data from Worldbank.org.

Notes: Size of the circle proportional to population. The line is the fitted value from a regression of the log of consumption on the log of price.

Are they fair and Popular?

Thomas Sterner

Gothenburg





Nigeria abolished fuel subsidy





FUEL TAXES AND THE POOR

THE DISTRIBUTIONAL EFFECTS OF
GASOLINE TAXATION AND THEIR IMPLICATIONS
FOR CLIMATE POLICY

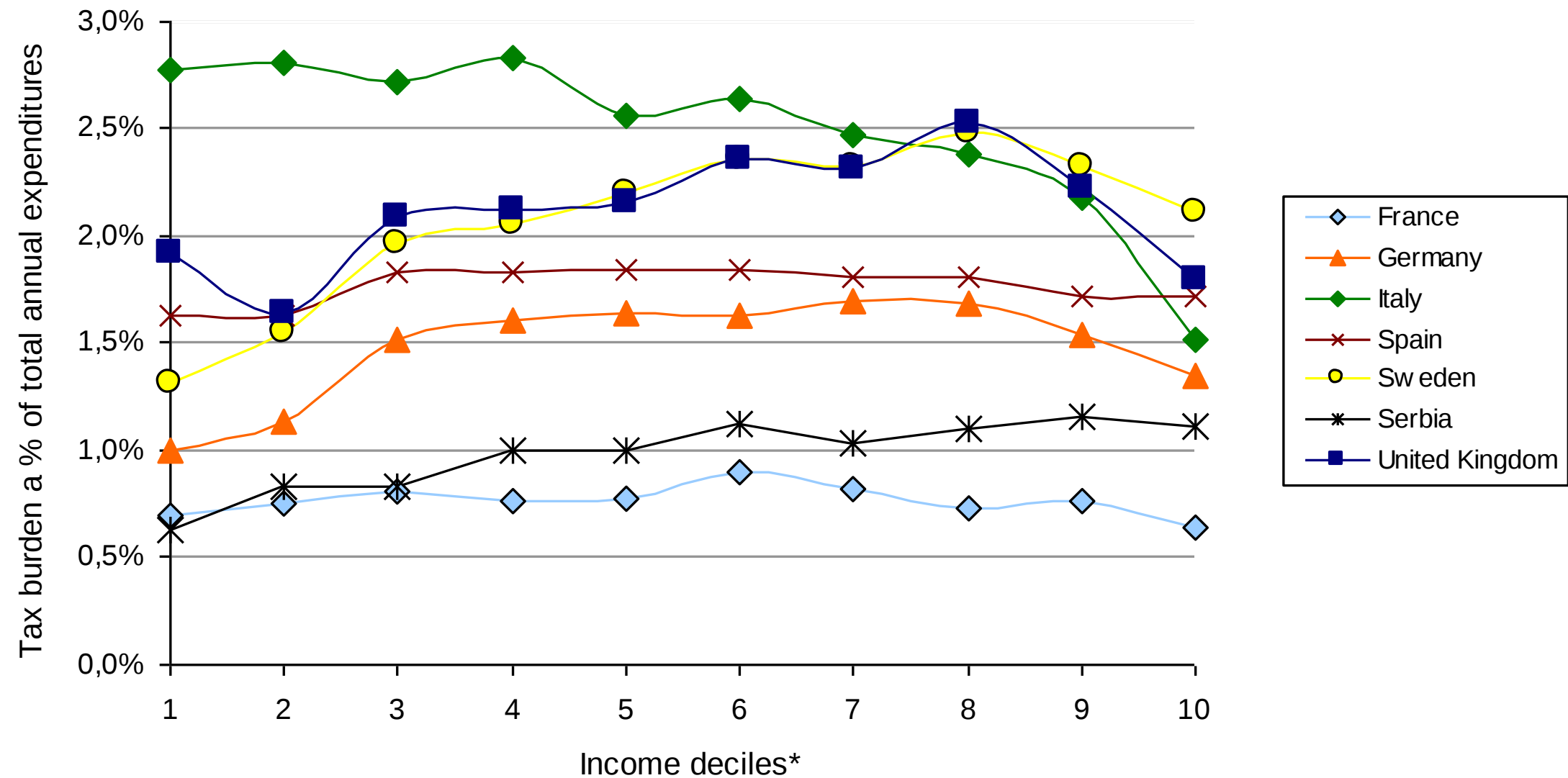
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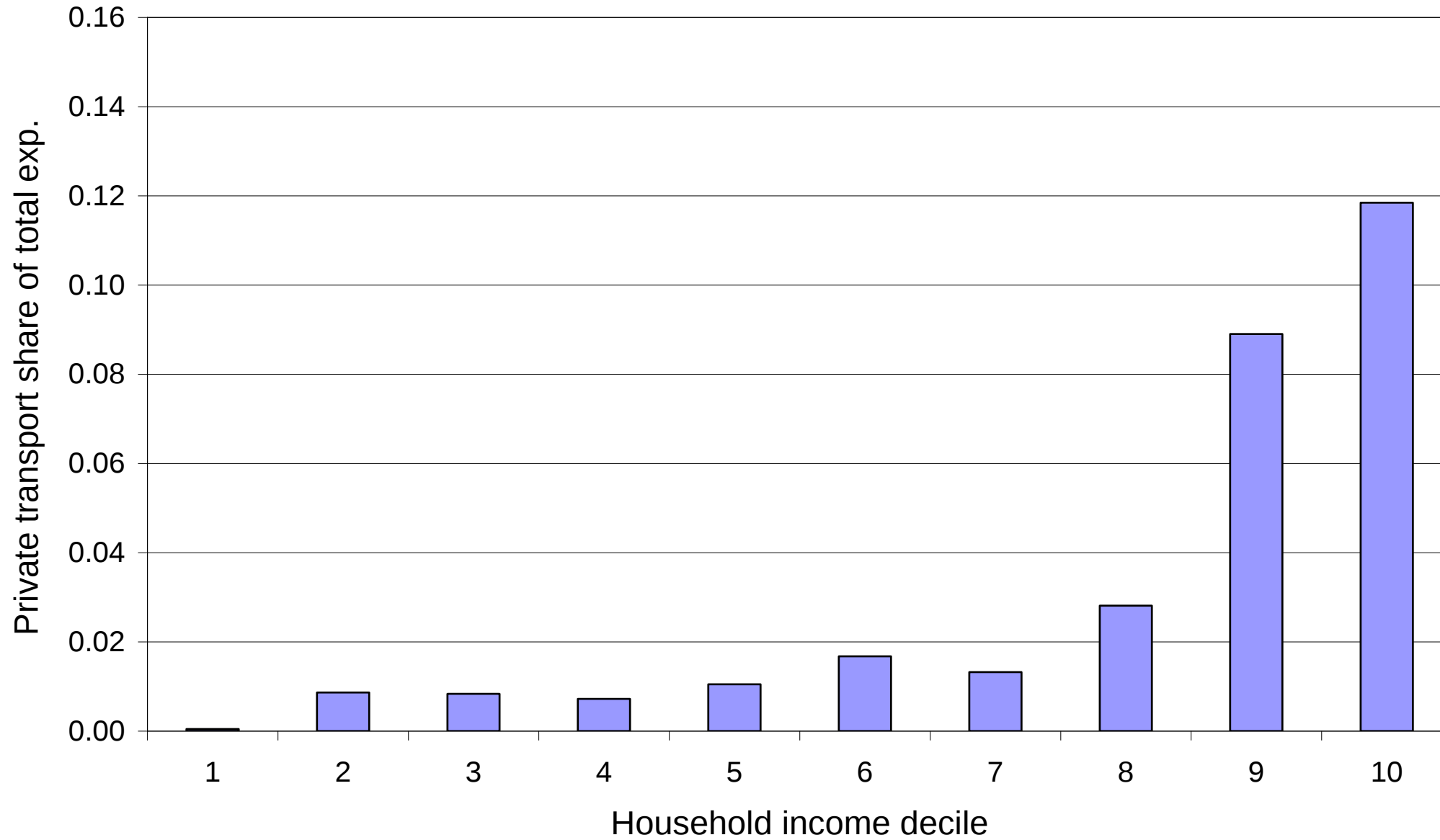
- Distributional issues
- Diamonds: Rich use more. Tax is progressive
- Potatoes: Poor have higher expenditure share: Regressive
- Actual Fairness/
- Perceived Fairness

Using Expenditure

In EUROPE it is --- neutral



In Most countries (LOW income countries) fuel tax: Progressive





Energy Economics

Volume 103, November 2021, 105550

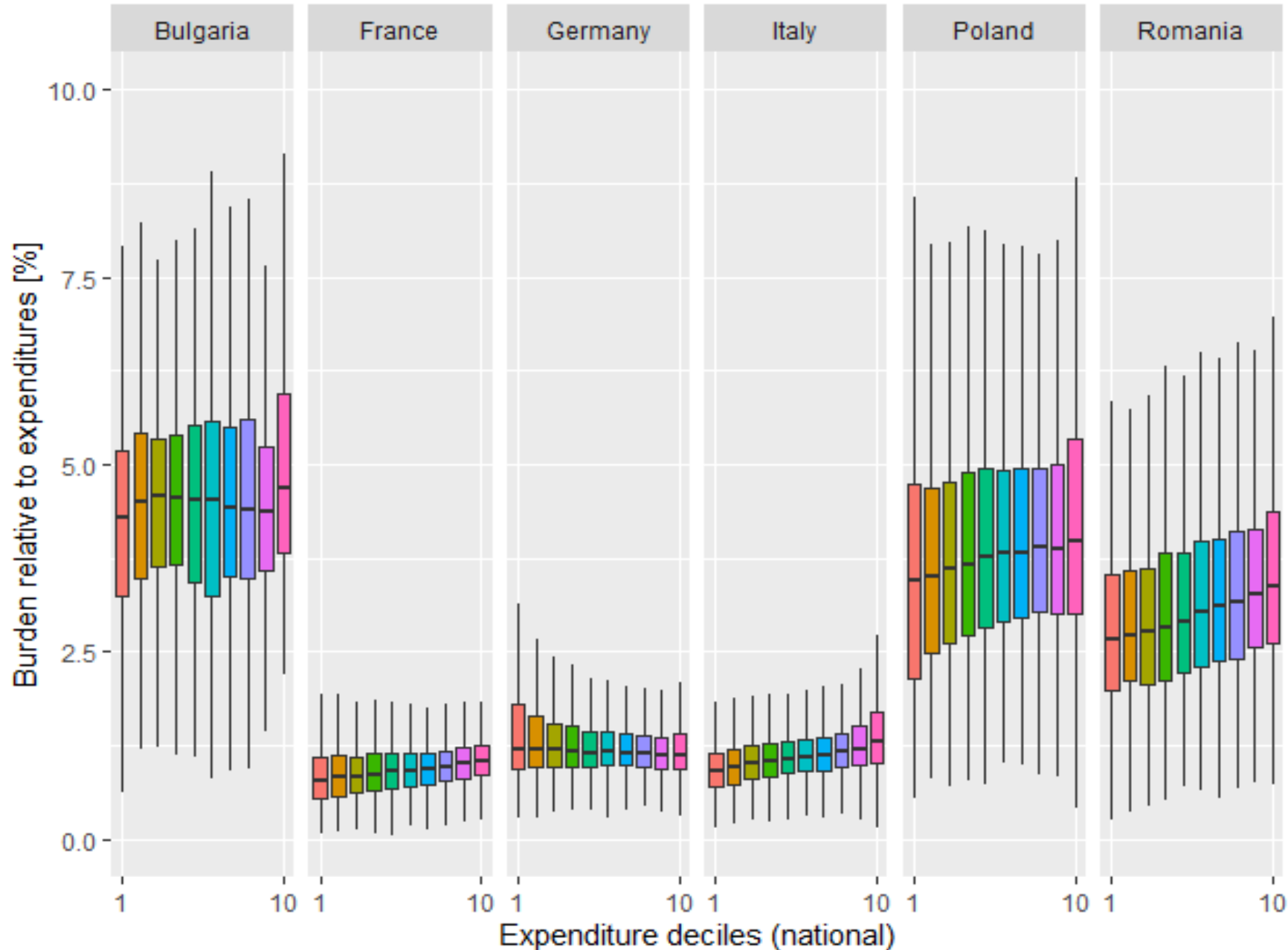


Understanding regressivity: Challenges and opportunities of European carbon pricing ☆

Simon Feindt^{a b}  , Ulrike Kornek^{a c d}, José M. Labeaga^e, Thomas Sterner^f,
Hauke Ward^{a c g}

Distribution of HH costs across countries

Carbon tax = 25EUR/tCO₂



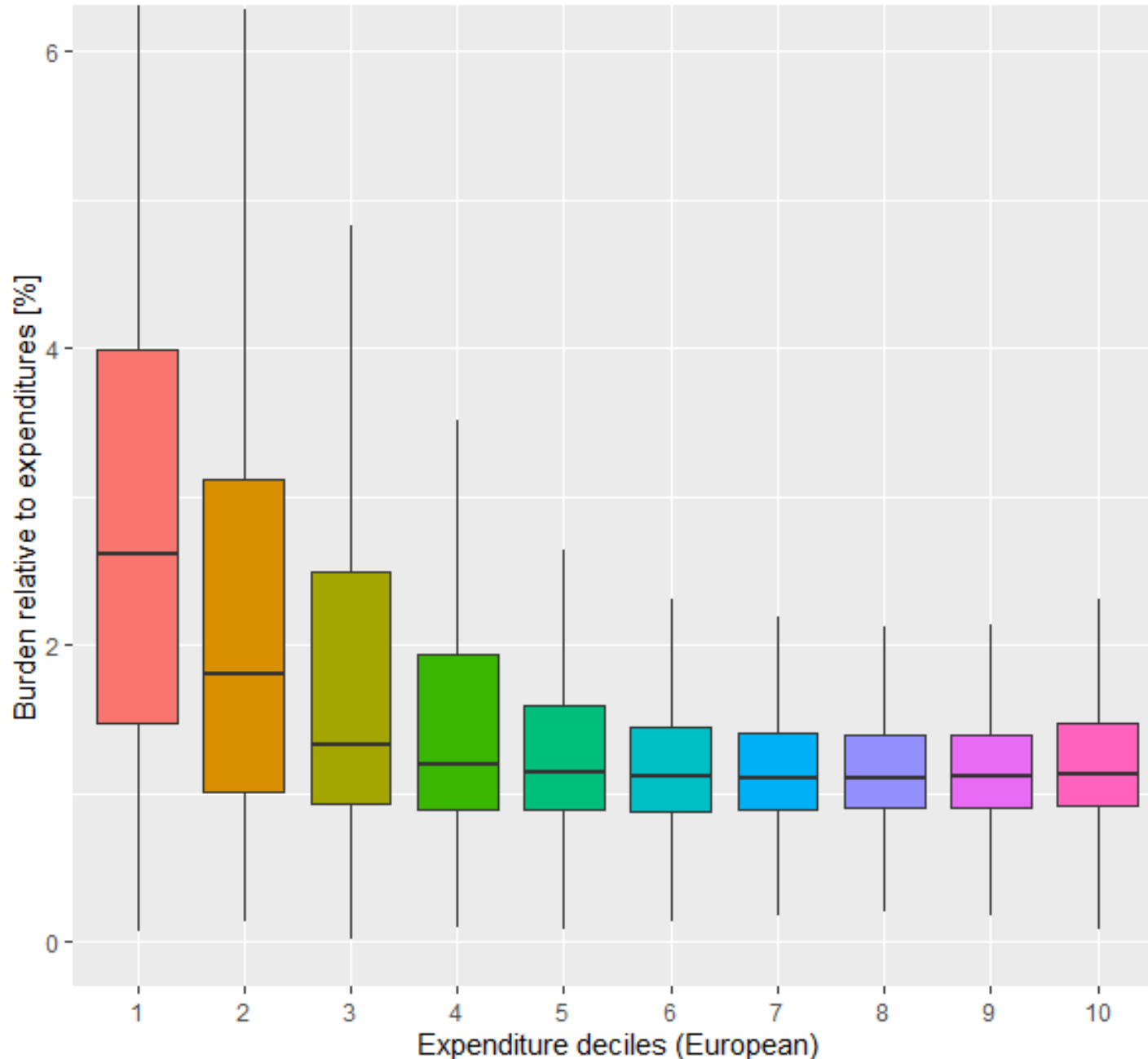
Feindt, Sterner, T et al (2021).
Understanding Regressivity:
Challenges and Opportunities of
European Carbon Pricing. *Energy
Economics*,

Progressive
nationally

But...
Poor countries
more affected

Distribution of HH costs in Europe (w/o UK)

Carbon tax = 25EUR/tCO₂



Regressive ... if EU were one country

- C tax of 25€ on all emissions (territorial + imported)
- **Regressive** (lowest 4)
- Higher variance among poor
- 7% revenue enough to compensate losers

Indoor air pollution: Dont tax LPG/Kerosene



- The fossil lobbies have succeeded in delaying climate action.
- First strategy was science denial.
- Today strategy seems to be “caring for the poor” who will be hurt by fuel taxes.
- BUT Who will be hurt by climate changes of 3.5 C?

ONE OF BARACK OBAMA'S
FAVOURITE BOOKS OF THE YEAR

THE MINISTRY FOR THE FUTURE

KIM STANLEY
ROBINSON

'A novel that presents a rousing vision of how we might

THANK You

- [illegible]