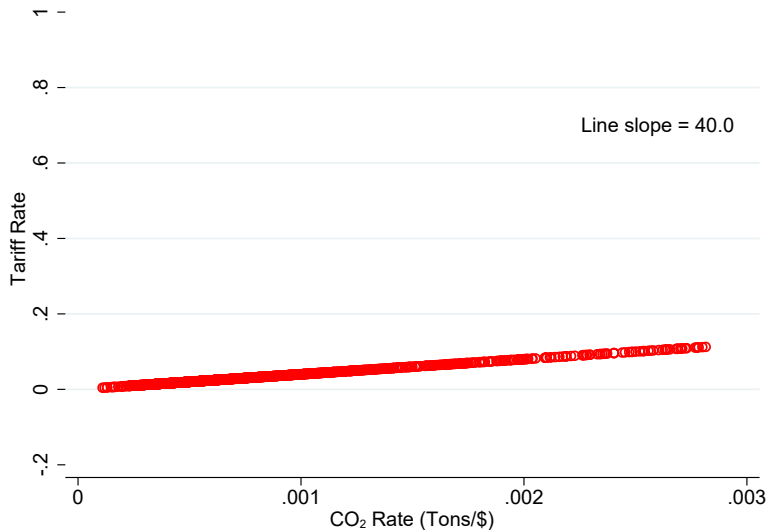


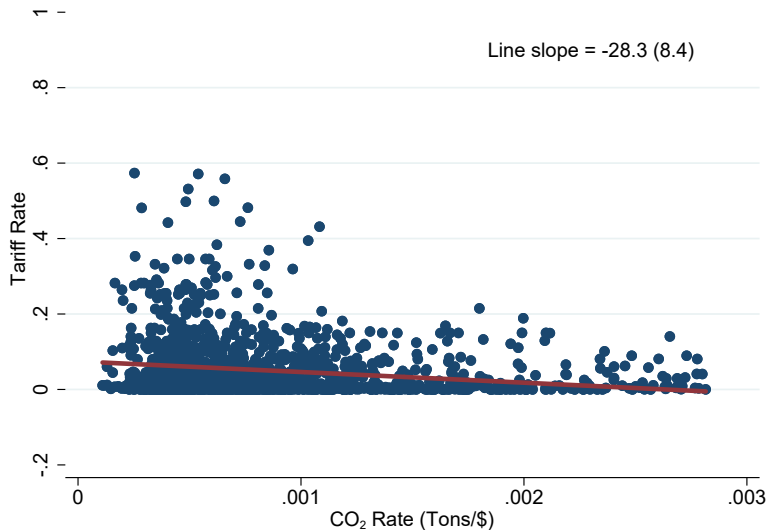
The Environmental Bias of Trade Policy

Joseph S. Shapiro
UC Berkeley and NBER

Hypothetical Carbon Border Adjustment with \$40/Ton Carbon Tax

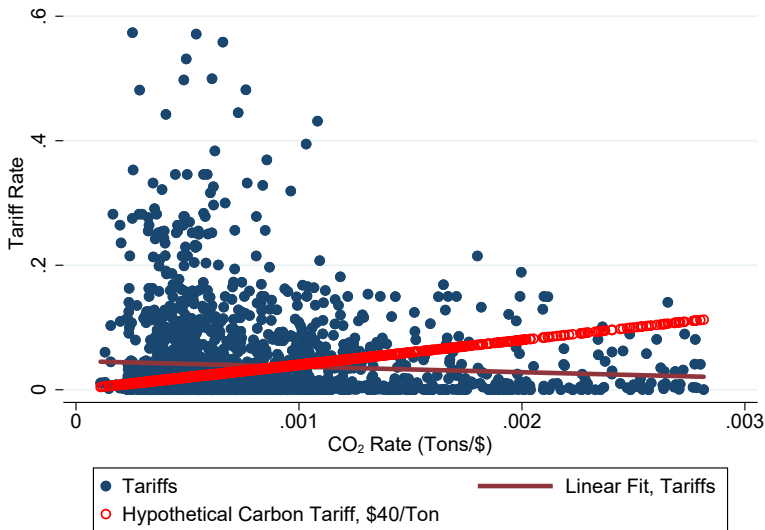


Results: Actual Global Tariffs Versus Carbon Intensity

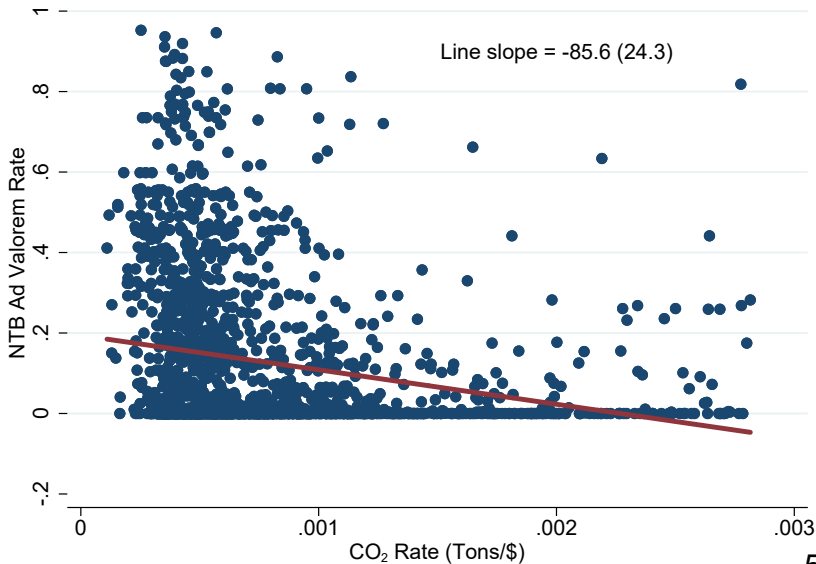


Graph with weights

Results: Actual Global Tariffs Versus Carbon Intensity

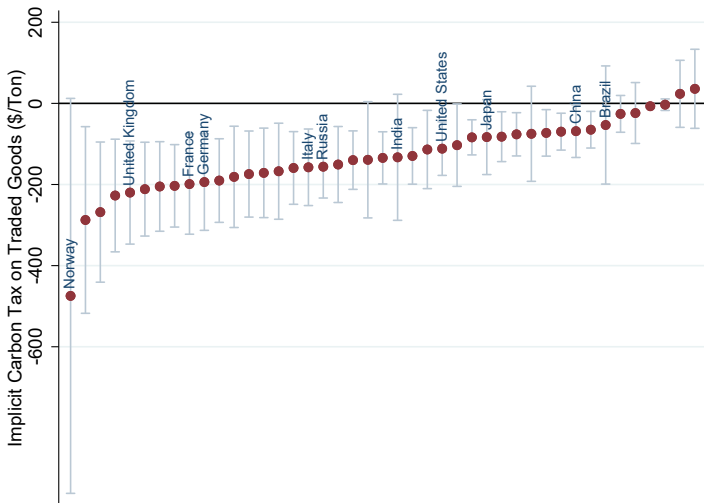


Results: Carbon Taxes Implicit in Global Non-Tariff Barriers



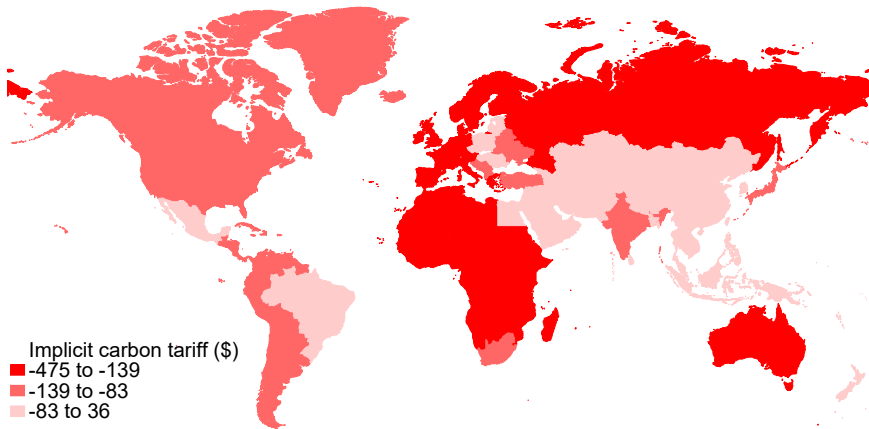
Results: Total Implicit Carbon Taxes, by Country

$$t_s = \alpha_j E_s + \varepsilon_s$$

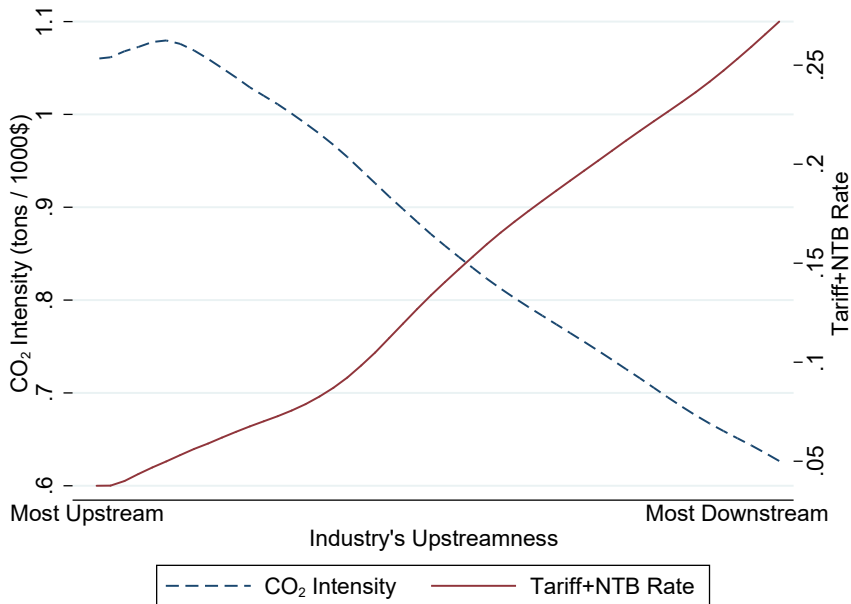


Results: Total Implicit Carbon Taxes, by Country

$$t_s = \alpha_j E_s + \varepsilon_s$$

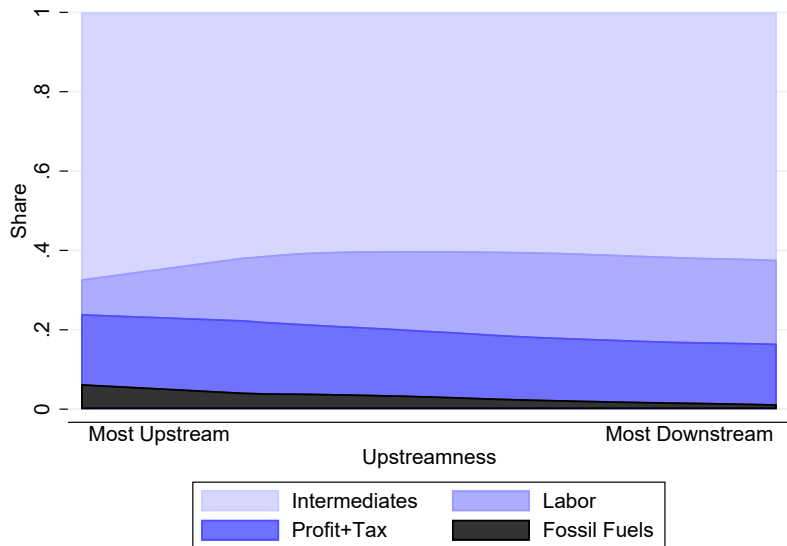


Political Economy Explanations



Explanations: Why are upstream industries dirtier?

Cost shares versus upstreamness, by U.S. industry



Conclusions

- Existing trade policy implicitly subsidizes CO₂ emissions
 - ▶ EU: trade policy is encouraging leakage, not preventing it
 - ▶ Aggregate subsidy to climate change > \$500 billion/year
 - ▶ Policy reforms could decrease global CO₂, increase global GDP
- Main explanation: downstream industries have higher tariffs, lower CO₂ intensity
- Consequences
 - ▶ Trade policy negotiations consider climate change consequences of tariff escalation?