Thoughts on the
Political Economy
of Climate Change Policy

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Key questions

• Positive politics: what actually gets adopted?
  – What drives policy action?
  – What drives the type of policy instrument adopted?
  – How different from optimal?

• Many factors, e.g.
  – Institutional structure, scale, voting rules?
  – Global interests?
  – National interests?
  – Group interests (= interest group politics)?
  – Public opinion?
  – Crisis events?
  – Policy entrepreneurs?

Political economy may vary for different policy options

- Economic activities
- GHG Emissions
- Climate change
- Impacts

Reduce emissions (tax, trading, tech, etc.)
Sequester emissions (CCS, REDD)
Geo-engineering (SRM)
Adaptation
Political economy may vary for different institutions

- No single decision maker choosing optimal policy.
- International
  - Treaties: by nations’ consent. Need ~ perceived national net benefit to engage participation (Pareto-improving)
  - (unless coercion, e.g. hegemony, UN Security Council)
- National
  - Institutions & political economy vary across countries
  - Laws: by majority rule (or supra- or sub-majority?)
  - Laws can impose costs on dissenters (K-H effic. if B>C)
  - Multiple institutions, checks & balances (e.g. Congress/agencies/courts)
  - Public opinion (voters; slope for interest groups to climb)
  - Policy entrepreneurs (innovations to increase net benefits; …shape preferences?)
  - Crisis events (spur outcry, punctuate change?)
International

• Treaties: MP (1987), FCCC (1992), KP (1997), Copenhagen/Cancun/Durban ...
• Liability for transboundary harm?

National: USA
• New legislation?
• CAA: SCt 2007; EPA regs …
• Energy law (CAFE, ARPA-E)
• NEPA, ESA, CWA, …

Supranational: EU
• ETS (Phase I, II, III …)
• Other climate policy

Member states
• UK
• Germany
• France
• Others
• Role in ETS

States, local
• RGGI; California & WCI; et al.
• Tort/Nuisance liability lawsuits (but SCt 2011)
• Land use, transportation law
• Other

National:
• Australia, Canada, Brazil, China, India, Indonesia, S. Africa, Russia, etc. …

States / provinces / local
Complex & proliferating climate policy institutions

Source: Matthew Paterson, Univ. Ottawa
Climate science & Political economy

1. Impacts distant in space & time; Politics focus on here & now.
2. Shared global benefits of GHG emissions abatement (but local costs). = Incentive to “free ride” on others’ abatement, = collective action is difficult. (SRM = lower cost … too low = hasty 1st movers?)
3. Impacts vary across countries. Some may perceive small losses or even gains from (modest) climate change. = Collective action is even more difficult. = Impacts studies are key to politics.
4. GHGs mix globally in the atmosphere. Sources of emissions are widespread, and mobile in integrated world economy. = Partial policies yield “leakage” (envt’l & political). Need broad participation.
7. Costs of abatement vary across countries. = save via emissions trading. Plus, allowance allocation can offer side payments to join.
8. Uncertainty; learning over time. Need “laws that learn” – updating.
9. Crises & catastrophes: do they spur political action??
Political economy in the US

- President & EPA regulations (optimize, or threaten to prod Congress?)
  - GHG Reporting Rule
  - CAA 201: Mobile sources rule
  - CAA 111: new sources; existing sources (111(d)). Trading?
  - CAA 115? CAA 615?
- Interest group politics: overclaimed? evolving? E.g.:
  - Envtl groups: shifted on cap & trade (but so did Repubs).
  - Coal industry: vs. climate; vs. shale gas; if CCS; …
  - Coalitions: Baptists & Bootleggers (raising rivals’ costs).
- Role of crisis events? Katrina. Sandy. BP Deepwater spill.
Political economy in the EU

- 1990s: favored tax, opposed trading
- 2001- : adopted trading (EU ETS)

Why the switch?
- Learning from US SO2 trading success during 1990s
- Policy entrepreneurs in Europe
- Voting rule for adoption (~ unanimity of member states), and ability to embed side payments in varying allowance allocations
- Critique of US approach shifted after US withdrew from KP
- Other?

Managing the ETS
- Role of Member States: initial allocations; parallel national policies
- Low prices; so, tighten cap, backloading auctions?
- Adding other sectors, other gases? e.g. Aviation controversy
- Other climate policies outside ETS (e.g. renewable feed-in-tariffs)
Political economy in China

- Emissions growth; combating poverty
- Climate impacts: +/- ? evolving science; drought; coastal sea level
- Co-benefits: public health, PM, black carbon
- Regional politics
- Political instability: envt’l disasters spur protests; history of dynastic change and war; ‘mandate from heaven’
- Impacts on LDC allies
- Renewables e.g. wind, solar; Energy R&D e.g. batteries
- Intensity targets
- Trading
  - CDM credits
  - Trading markets in 7 cities beginning 2013, national by 2016
Do crisis events spur policy action?
- Gradual impacts may yield complacency and/or adaptation
- Crisis events may stimulate outcry, galvanize action
  - Relative to baseline risk. Safer society = crisis looks more scandalous.
  - Framing: identified victim, villain
  - Policy experts may learn from the crisis (or seize its opportunity)
- But not always:
  - Some crises yield little policy change (or only cosmetic). Katrina, Sandy?
  - Some policy changes do not arise from crises. SO2 Trading.
- Which type of policy instrument?
  - E.g. crisis outrage may hinder use of economic incentive instruments.

Truly mega-catastrophes may not spur policy change
- Ex ante: political market failure = neglect
- Ex post: too damaging, wipe out policy institutions
Perceptions and the Politics of Risk

Relative to experts, public understates “familiar” risks and overstates unusual “available” risks (Kahneman & Tversky; Slovic).

Should public view prevail in a democracy?

unusual but ‘available’ risks

‘familiar’ risks
Un-availability: A twist in perceptions?

Typical public/expert contrast is reversed for rare catastrophic risks: no experienced “available” event occurs to trigger “prospection” (Slovic & Weber 2002; Weber 2006; Gilbert & Wilson 2007).

Should expert view prevail?
Overwhelming:
Mass impact and ‘psychic numbing’
(Slovic, Judgment and Decision Making 2: 79-95 (2007))

Expected value:

Catastrophe premium:

Figure 2: A normative model for valuing the saving of human lives. Every human life is of equal value.

Diminishing marginal concern:

Mass numbing:

Figure 4: A psychophysical model describing how the saving of human lives may actually be valued.

Figure 3: Another normative model: Large losses threaten the viability of the group or society (as with genocide).

Figure 11: A model depicting psychic numbing — the collapse of compassion — when valuing the saving of lives.
Underdeterrence

- Catastrophe may damage or wipe out institutions.
  - Less or no opportunity for learning from the crisis, ex post.
  - Deterrence via ex post sanctions may not be credible, ex ante.

- If institutions survive:
  - Liability in excess of firm’s assets yields underdeterrence.
  - Moral hazard yields underdeterrence. Ex ante anticipation of relief or compensation can undermine incentives for precaution. E.g. underpriced insurance, bailouts, disaster relief.
Challenges of Catastrophic Risk

• Inattention: Public perception and political systems tend to neglect rare catastrophic risks.
  • Need greater attention to extreme catastrophic risks, to help correct the political/perception gap (as conventional regulation attempts to correct market/commons failures).
  • Simulations to enable learning.
  • Should experts prevail over public? Supply ‘availability’ to public?

• Risk-risk: policies may yield catastrophe-catastrophe tradeoffs.
  • Global policies, or actions by first-movers with incentives to prevent catastrophic risk, may yield adverse effects (on others). E.g. climate geoengineering (SRM). Need governance to restrain harmful action.

• Triage: shouldn’t overreact to worst-case scenarios.
  • Need to set priorities: as cognizable $p \to 0$, number of scenarios $\to \infty$. Which of several extreme risks should we address? E.g. climate, pandemic, war, asteroid collision, back contamination, strangelet, …
Thank you.

[Image 1: Risk vs. Risk: Tradeoffs in Protecting Health and the Environment]
[Image 2: Reconstructing Climate Policy: What the United States Should Do after Kyoto]
[Image 3: The Reality of Precaution: Comparing Risk Regulation in the United States and Europe]

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