

Global Environmental Politics

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Last class: climate change and firms

- Strategic problems hamstring cooperation for climate regulation.
 - Short-sightedness: to care about the future.
 - Inter-temporal inconsistency: to incorporate costs of inaction.
 - Collective action: more feasible in small/homogenous groups.
 - Credibility: actors' commitment to cooperate needs to be credible.
- Changing the incentives structure of can change behavior.
- Poorly designed incentives can backfire.
 - e.g., resource curse; unconditional transfers.
 - ... important to consider strategic adjustment due to incentives.

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Results from original experiment by Tingley and Tomz

Table 5. Preferred Methods of Responding to a Country That Increases Consumption.

United States should	Other country signed treaty		Effect of Treaty
	No	Yes	
Selected options			
Increase U.S. use of fossil fuels	3	2	0 (-3 to 2)
Criticize the country publicly	48	59	11 (4 to 19)
Cut off trade with the country	37	51	14 (7 to 21)
Take military action against the country	2	3	1 (-2 to 3)
Not take any action in this situation	19	11	-7 (-12 to -2)
Volunteered options			
Decrease U.S. use of fossil fuels	7	6	-1 (-5 to 3)
Help the country decrease its use	8	7	-1 (-5 to 3)
Engage in private diplomatic talks	22	19	-3 (-9 to 3)
Refer the problem to the UN	3	2	-1 (-3 to 1)

Results from class experiment with blind opinions

United States should	Other country signed treaty		Effect of Treaty
	No	Yes	
Selected options			
Increase UK use of fossil fuels	0	0	0
Criticize the country publicly	19	18	-1
Cut off trade with the country	5	7	2
Take military action against the country	0	0	0
Not take any action in this situation	0	0	0
Volunteered options			
Decrease UK use of fossil fuels	15	15	0
Help the country decrease its use	16	19	3
Engage in private diplomatic talks	20	22	2
Refer the problem to the UN	16	17	1

Results from class experiment without blind opinions

United States should	Other country signed treaty		Effect of Treaty
	No	Yes	
Selected options			
Increase UK use of fossil fuels	0	0	0
Criticize the country publicly	21	16	-5
Cut off trade with the country	3	7	4
Take military action against the country	0	0	0
Not take any action in this situation	0	4	4
Volunteered options			
Decrease UK use of fossil fuels	17	17	0
Help the country decrease its use	19	17	-2
Engage in private diplomatic talks	22	19	-3
Refer the problem to the UN	18	19	1

The problem of zero sum

- What someone wins, can be another's loss.
 - ... mutual gain is not possible; someone faces a net cost.
 - ... more resources for one group, means less for others.
 - ... implies some sort of competition for finite resources.

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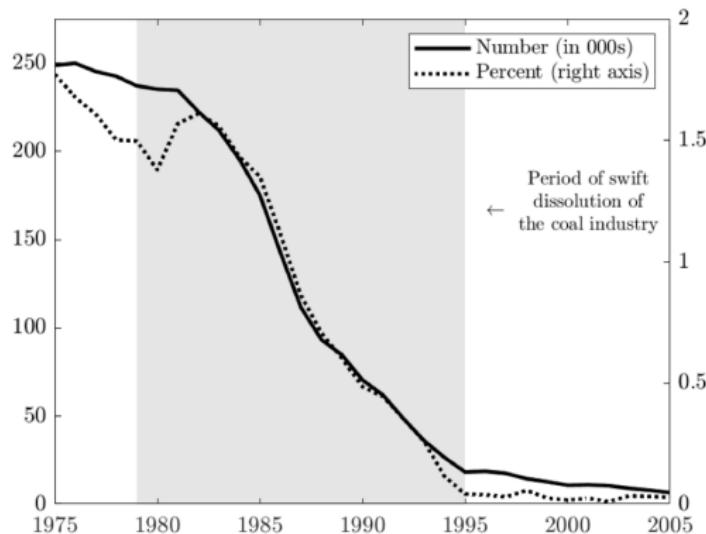
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- We need to redistribute the gains, compensating the losers!
 - ... allocations that are Pareto dominant.
 - ... implies *embedded liberalism* or *welfare state*.

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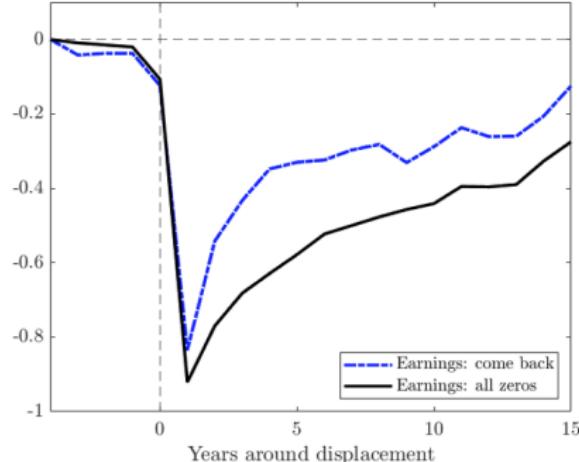
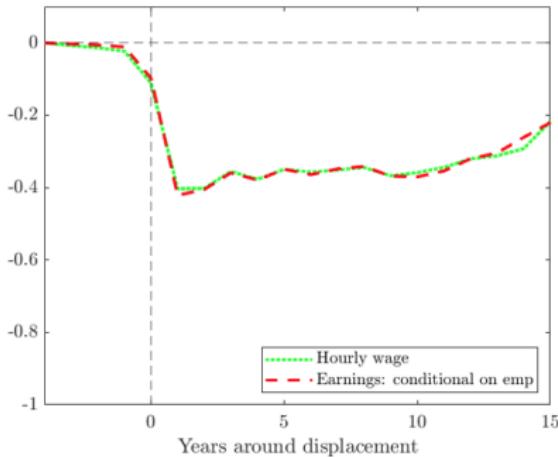
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- We need to redistribute the gains, compensating the losers!
 - ... allocations that are Pareto dominant.
 - ... implies *embedded liberalism* or *welfare state*.
- Without a social contract, it's hard to sustain cooperation.
 - ... different allocation of resources is seen as a threat.

The case of coal



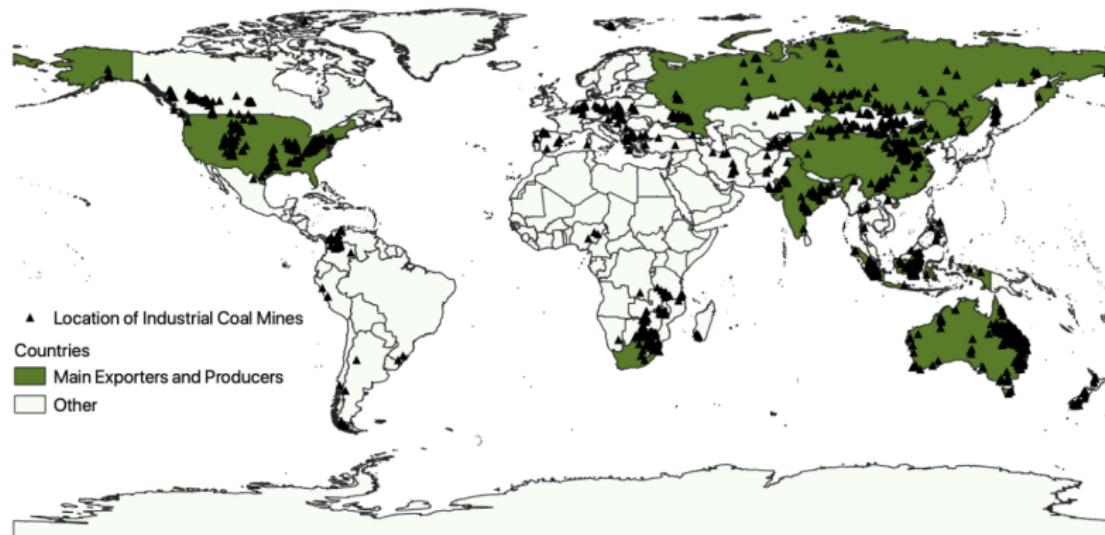
- Fast transitions can generate negative impacts on communities.
- These communities exist across the world.

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The redistributive effect of adaptation



- Adaptation creates winners (e.g., solar) and losers (e.g., coal)!
- Losers oppose transition if transition benefits are low.
- Compensate losers $\Rightarrow \uparrow \Pr(\text{coalitions for climate})?$

The redistributive effect of adaptation

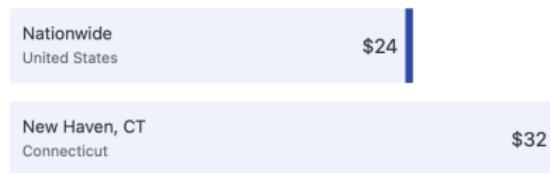


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Coal Mine Salary Comparison by Location

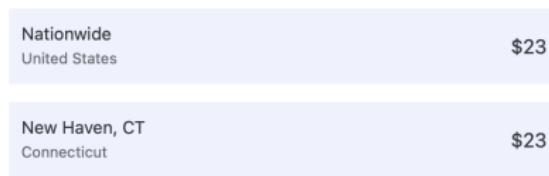


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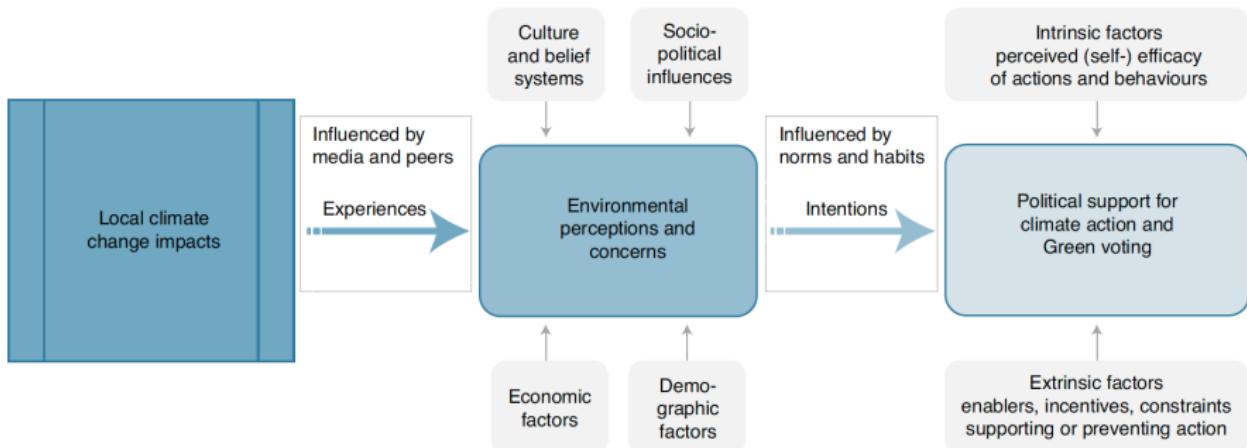


Solar Panel Salary Comparison by Location



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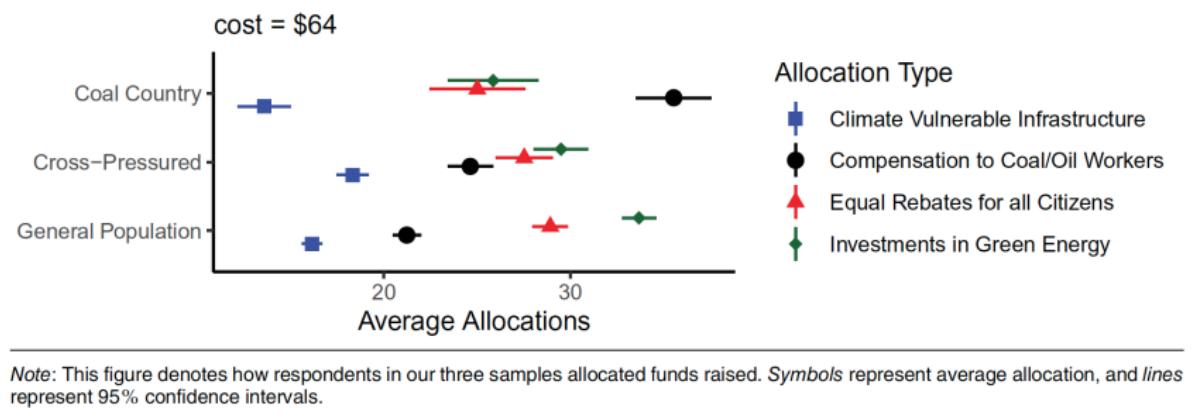
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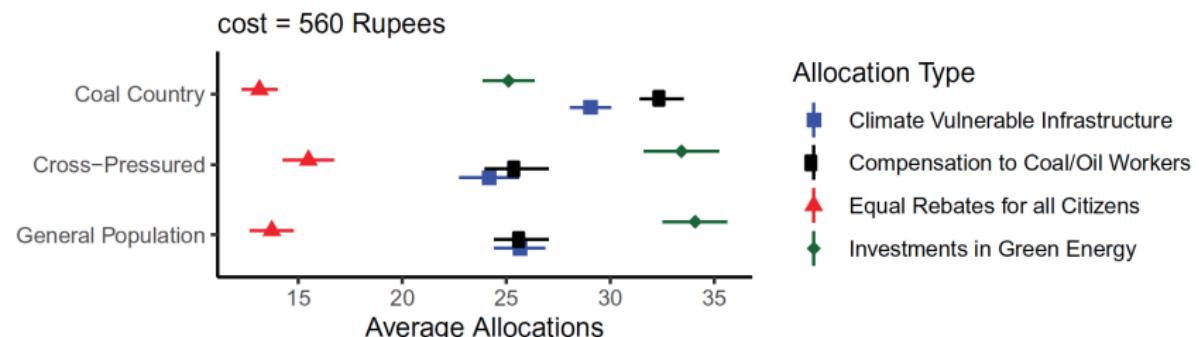
FIGURE 2. US Preferences for Allocation Purposes of Climate Policy Funds, by Sample



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The redistributive effect of adaptation

FIGURE 3. India Preferences for Allocation Purposes of Climate Policy Funds, by Sample



Note: This figure denotes how respondents in our three samples allocated funds raised. Symbols represent average allocation, and lines represent 95% confidence intervals

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More than a money problem



- Not only economic opportunity cost (relative wages).
- Effect on the local social structure (e.g., identity, community).
- Don't interiorize negative externalities on others.
- Economic policies can be myopic; only money incentives.

More than a money problem



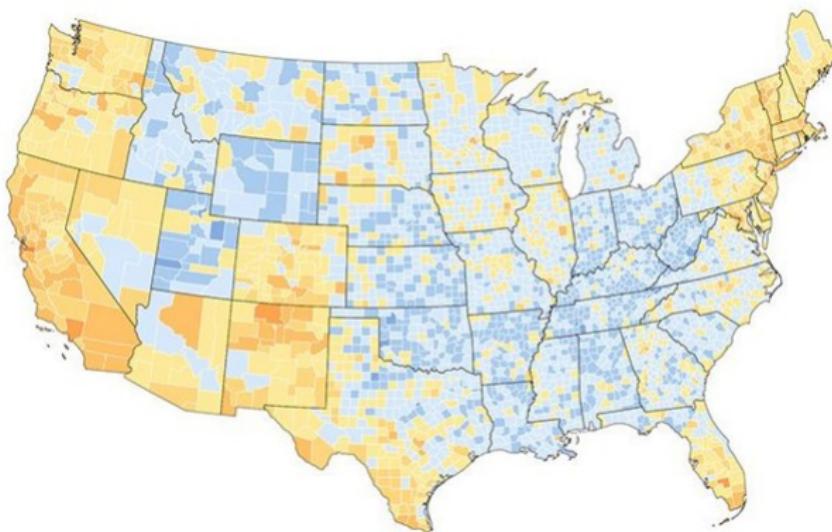
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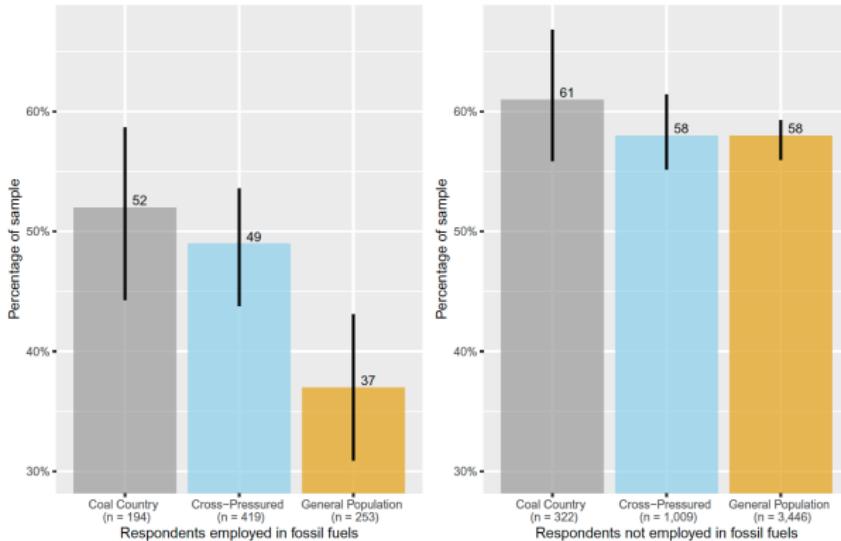
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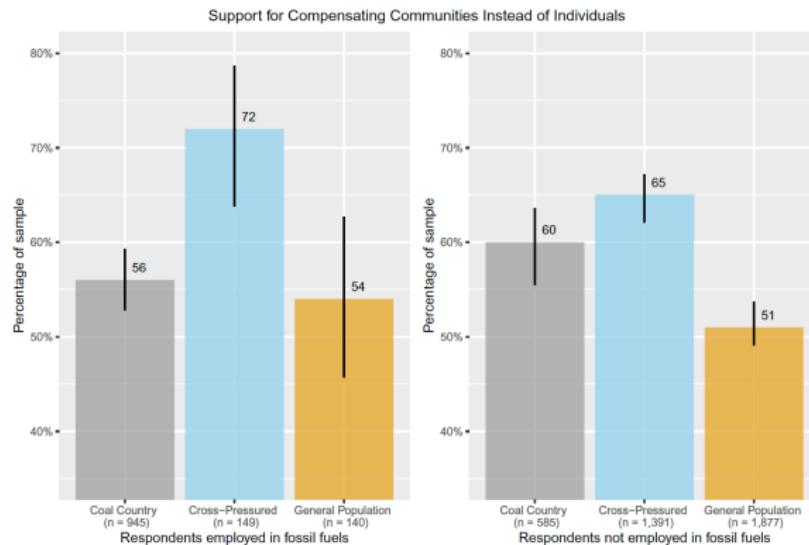
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Support for Compensating Communities Instead of Individuals



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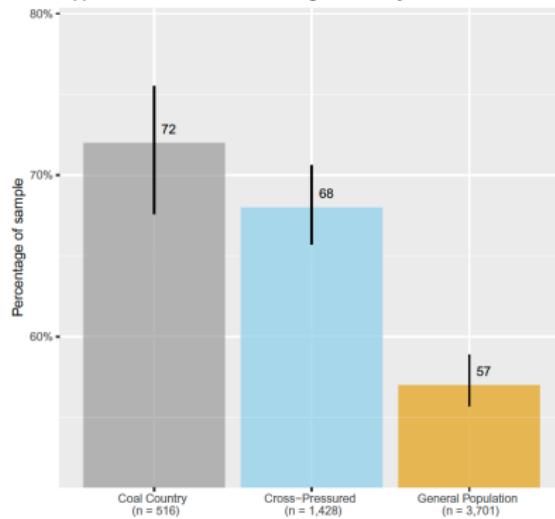
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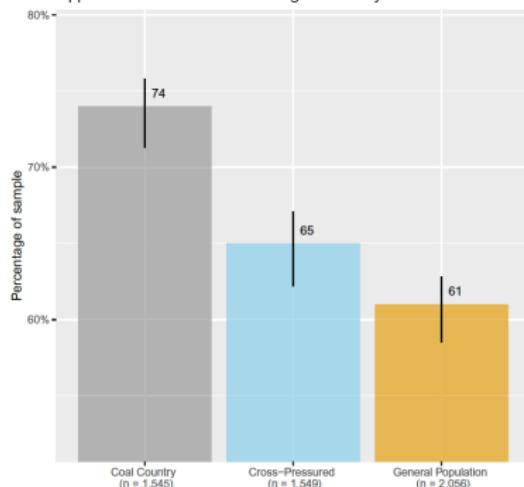
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Opposition to Policies Threatening the Identity of Coal Communities



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Redistribution is easier said than done

- Programs can have implementation issues; scratched off; lose funding.
- Effective programs should be credible - absence of third party enforcement is limiting.
- Effective programs should be self-enforcing - incentive compatible.
- Hands-tying commitments need to be embedded in the system.
 - ... benefits if alternatives are successful (e.g., shares in companies selling/developing alternative energies).
 - ... generate informal institutions (e.g., identity) around climate cooperation (e.g., morality, economic dependence, etc.).

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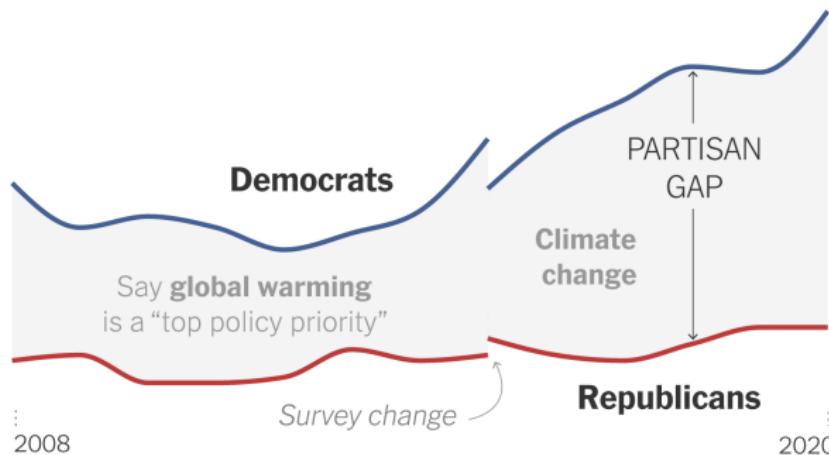
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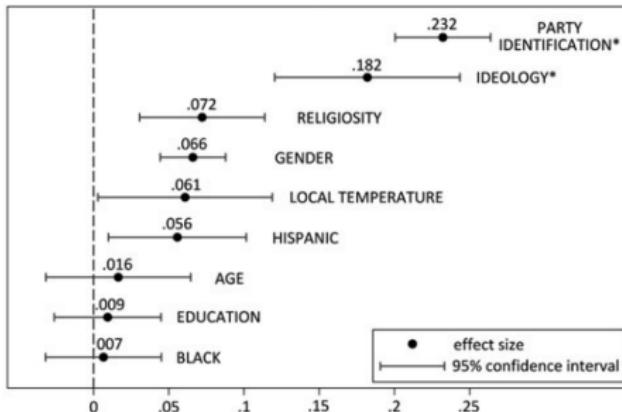
Ideology and other regarding preferences



- Right-wing + religious beliefs $\Rightarrow \uparrow \text{Pr}(\text{climate denialism})$.
- Consistent with strong apprehension towards scientific evidence.
- Citizens may not internalize the negative externalities on others.
- Elites cues can shape attitudes; heuristics to interpret events.

Ideology and other regarding preferences

FIGURE 2 Effects of Variables on Americans' Beliefs about the Evidence for Global Warming

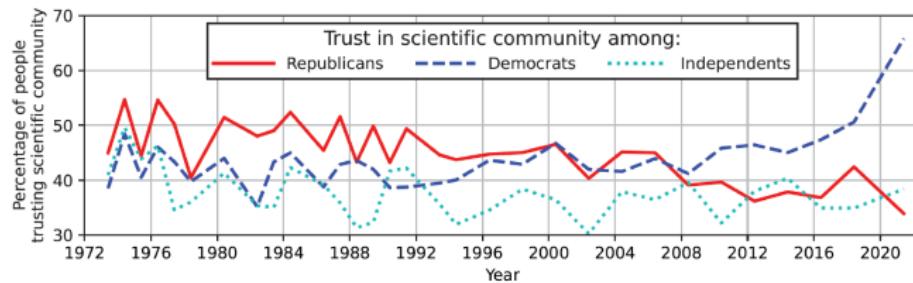


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Figure 1

Level of Confidence in Science by Political Party, 1974 – 2022



Source : The General Social Survey, the latest conducted from December 1, 2020–May 3, 2021. Auditors asked, “I am going to name some institutions in this country. As far as the people running these institutions are concerned, would you say you have a great deal of confidence, only some confidence, or hardly any confidence at all in them ?” Figure by Alexander Kaurov.

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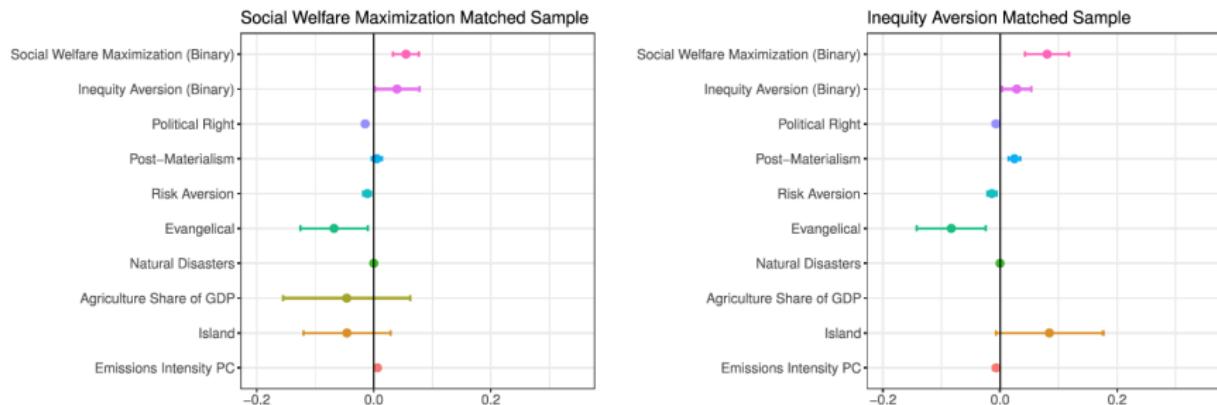
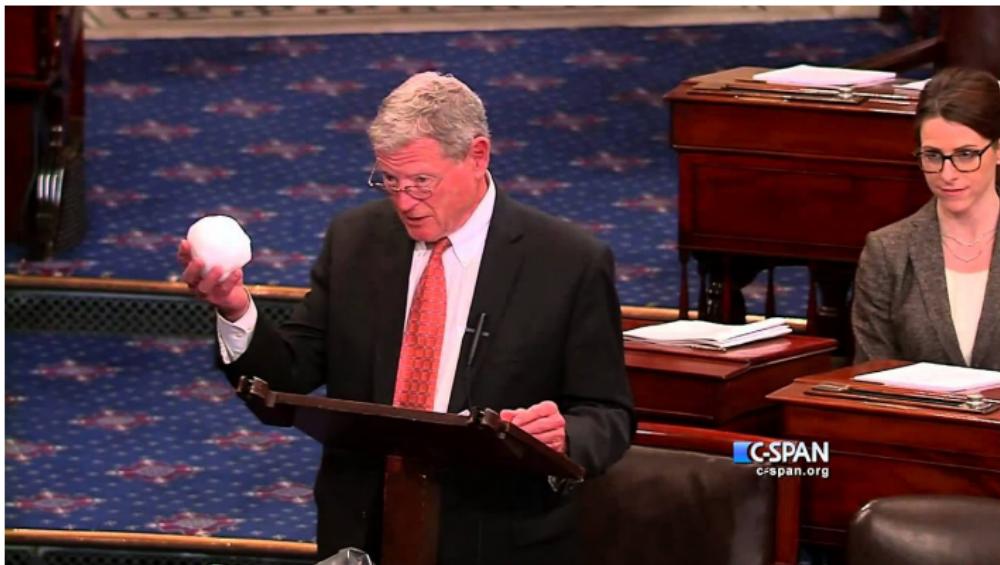


Fig. 2 Marginal Effects of Main Independent Variables. Marginal effects of social preference variables

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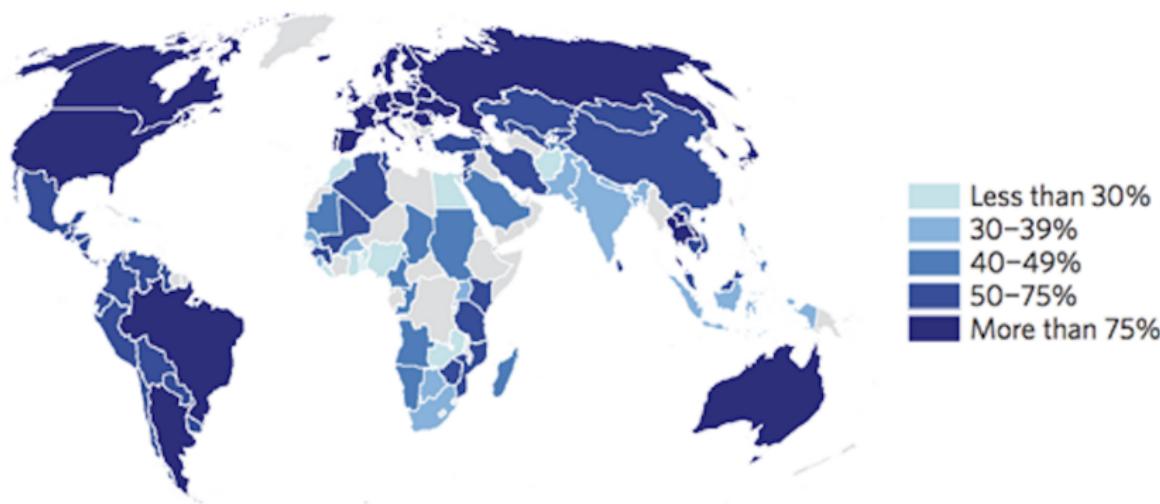
C-SPAN
c-span.org

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Knowledge/concern for climate change is still low

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Aware of climate change



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- Concern for climate change is low in the developed world!
- Unequal impacts creates costs for cooperation/redistribution.

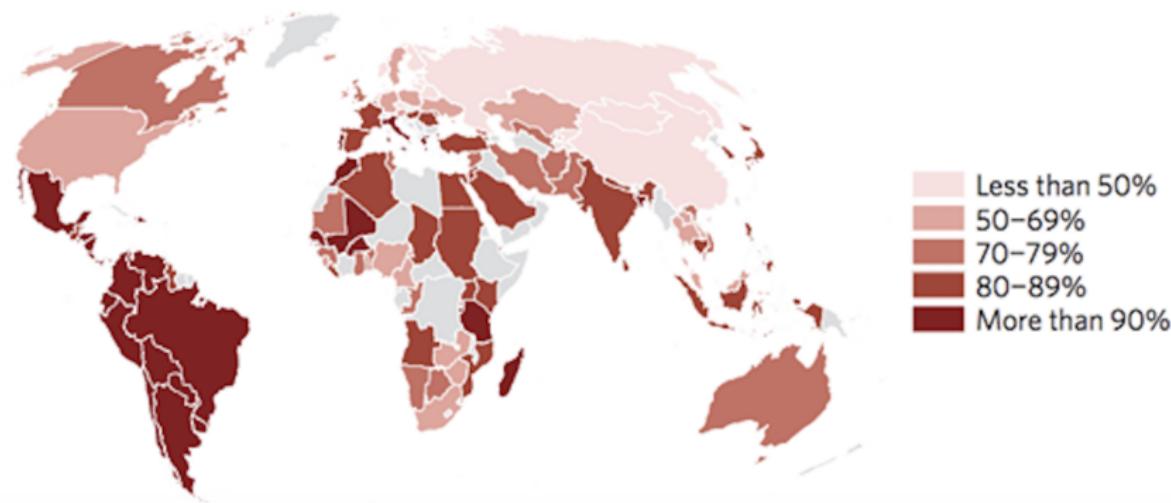
Knowledge/concern for climate change is still low

Rank (of 119)	Country	Awareness (%)	Rank (of 119)	Country	Awareness (%)
1	Japan	98.9%	110	Morocco	30.1%
2	United States	97.7%	111	Togo	29.6%
3	Finland	97.6%	112	Nigeria	27.8%
4	Norway	97.5%	113	Zambia	26.5%
5	United Kingdom	97.4%	114	Ghana	26.4%
6	Australia	97.3%	115	Afghanistan	25.4%
7	Sweden	96.1%	116	Egypt	25.0%
8	Germany	96.0%	117	Burundi	21.7%
9	Netherlands	95.6%	118	Benin	20.7%
10	Canada	95.4%	119	Liberia	20.6%

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- Of the 'Aware': climate change is a serious threat



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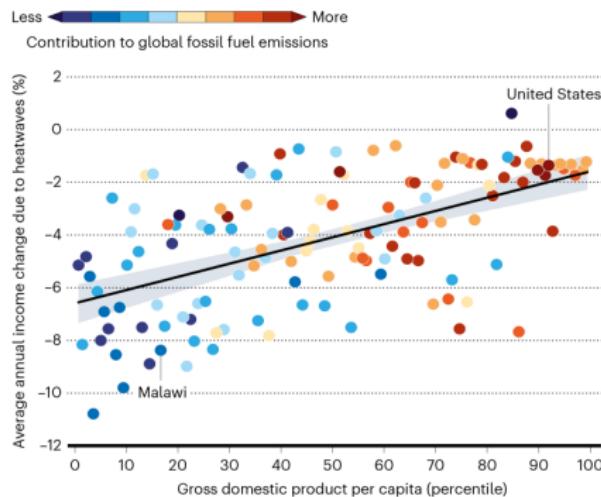
Rank (of 119)	Country	Concern (%)	Rank (of 119)	Country	Concern (%)
1	Ecuador	98.6%	110	Czech Republic	48.1%
2	Bangladesh	98.3%	111	Norway	45.4%
3	Trinidad & Tobago	98.2%	112	Denmark	45.4%
4	Venezuela	98.1%	113	Belarus	44.7%
5	Morocco	97.3%	114	Mongolia	42.9%
6	Costa Rica	96.9%	115	Latvia	42.2%
7	Colombia	96.8%	116	Finland	40.8%
8	Brazil	96.5%	117	Estonia	39.9%
9	Portugal	96.4%	118	Iceland	36.8%
10	Greece	96.3%	119	China	36.1%

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UNEQUAL BURDEN

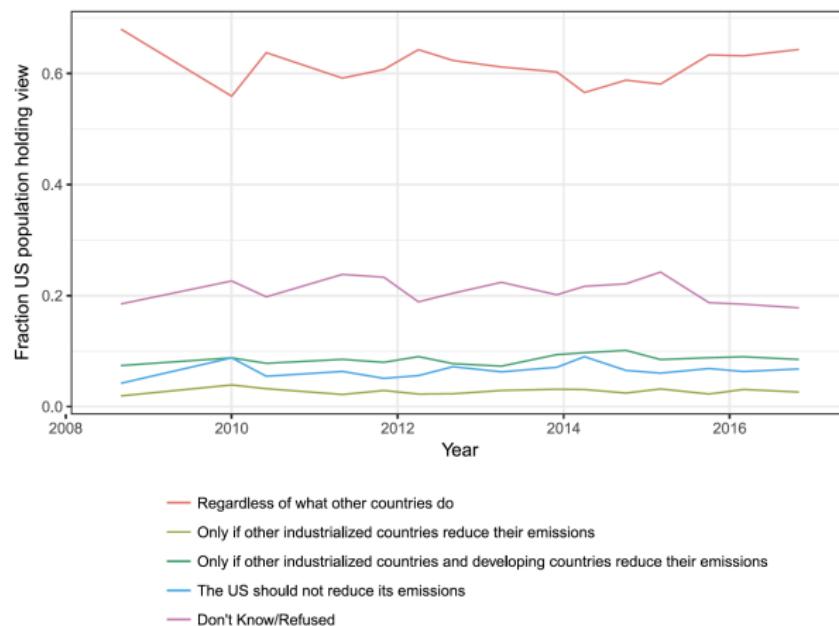
Despite contributing least to global emissions, tropical and low-income countries suffer the largest economic impacts as a result of heatwaves.



©nature

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Class exercise: how can we generate other regarding preferences?

- 1** Make groups of 2/3 people.
- 2** How can we help citizens internalize negative externalities?
- 3** Are other regarding preferences enough to address the climate impasse?
- 4** 5 minutes.
 - Feel free to use the Internet.

reset

To take home

Is being more informed about climate change sufficient to internalize negative externalities?