Fighting Climate Change: International Attitudes toward Climate Policies

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SOCIAL ECONOMICS LAB

Motivation: Understanding international attitudes toward climate change and climate policies

Climate change is an urgent issue with lots of political economy constraints

- Need to drastically reduce global emissions by 2050
- Climate neutrality targets announced by 140+ countries (90% of global GHG emissions)
- Given current policies, expect an average temperature rise of about 2.7°C by 2100

What drives support for/opposition to climate policies across the world?

- Lack of concern or knowledge?
- Effects on one's own budget and lifestyle?
- Broader concerns about the impact on others and the economy?
- Struggle to assess how a given policy affects climate change?

Address these questions using **social economics surveys and experiments**

Social Economics Surveys and Experiments

Surveys have been used for a long time for measurement & statistics

- Now mostly replaced by high-quality admin data

Yet, **some things remain invisible** in sources other than survey (even great data!):

- **"Perceptions, attitudes and beliefs, knowledge, and reasoning"**

Without this data, revealed preference approach—our holy grail—can be challenging

Surveys are more than a measurement tool. Control of data generating process

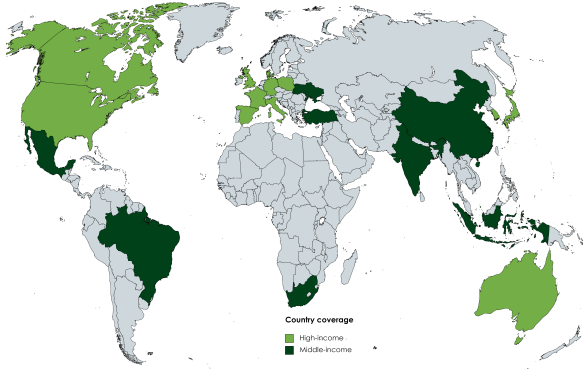
- **"Creating your own identifying variation and uncovering the invisible"**

Critical that these surveys are well-designed and carefully calibrated

An international survey in 20 countries

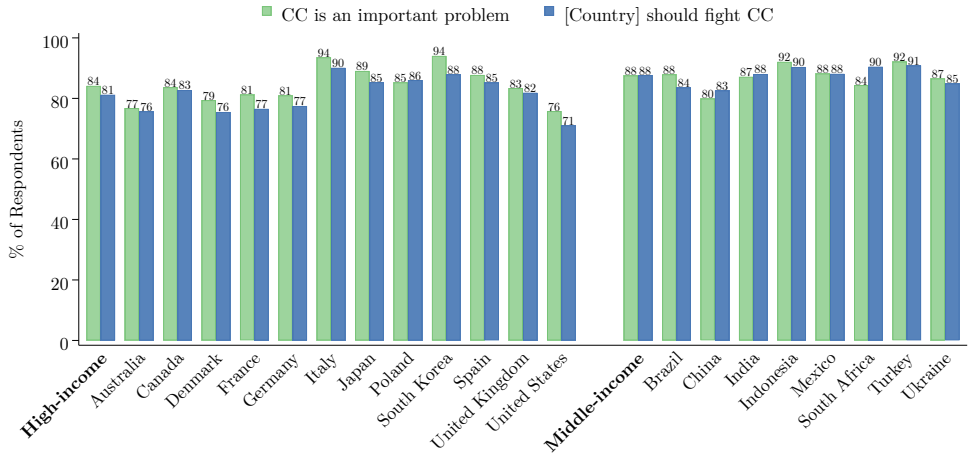
Large-scale, cross-country survey with +40,000 respondents

20 middle- and high-income countries (72% of global CO_2 emissions)[1]



[1] 18/21 largest emitters; the three missing countries are Russia, Iran, and Saudi Arabia

Share of respondents who agree (somewhat to strongly) that "Climate change is an important problem" or their country "should take measures to fight climate change"



Outline

1. The Survey
2. Knowledge about climate change
3. Which factors shape support for climate policies?
4. Support for climate action across and within countries
5. Experimental Effects

Outline

Sample

Sampling: Respondents are quota-sampled through commercial survey companies

Broad pools of respondents, variety of recruiting channels and rewards

Target dimensions: gender, age, income quartile, region, and urban vs. rural[1]

Representativity: Summary statistics

High-income countries samples are broadly nationally representative
Middle-income countries are "online" representative

Comparison to other high-quality surveys: Pew (2015, 2021); Gallup (2022)

[1] also: ethnicity/race in the U.S., and education in France

Questionnaire

Conceptual Framework

Background of respondent

Socio-economic characteristics, political views, energy use, consumption habits

Video information treatment

Control group	Climate impacts	Climate policies	Both treatments
No video information provided	Local impacts of climate change	• Ban on combustion-engine cars • Carbon tax w/ cash transfers • Green infrastructure program	Climate impacts + climate policies

Knowledge and understanding of climate change

- Climate change is real, anthropogenic, climate dynamics
- Factors causing climate change: gases, activities
- Impacts of climate change, prospects for the future

Views on climate policies

- **Three main policies**: ban on combustion-engine cars, green infrastructure program, carbon tax with cash transfers:
  - Policies' effectiveness: will the policies reduce emissions/pollution?
  - Distributional impacts: which groups will win or lose?
  - Self-interest concerns: will your household win or lose?
  - Perceived fairness
  - Support for policy (and variations of it)
- **Support for a range of other climate policies:** carbon taxes, emission standards, subsidies, mandatory insulation of buildings, policies to reduce beef consumption, global policies
- **Real-stake questions**: willingness to donate to reforestation cause, willingness to sign a petition for climate action

Data and Response Quality

Avoiding selection: Recruit respondents without revealing the topic; test for attrition

Careless responses: timer on each page; attention checks; flag suspicious patterns

Test for motivated reasoning: run a robustness survey with incentivized questions

Self-reported views vs. political behaviors: real stakes donation and petition

▸ Correlated with answers

Feedback post-survey: 15% thought it was left-wing biased; 11% right-wing

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Knowledge about climate change across countries: % correct

	High-income	Australia	Canada	Denmark	France	Germany	Italy	Japan	Poland	South Korea	Spain	United Kingdom	United States	**Middle-income**	Brazil	China	India	Indonesia	Mexico	South Africa	Turkey	Ukraine
CC is real, human-made, & its dynamics																						
CC exists, is anthropogenic	70	63	69	63	57	73	84	65	75	80	80	70	63	81	84	74	80	81	87	81	82	76
Cutting emissions by half insufficient to stop global warming	53	52	53	64	54	70	52	59	40	34	55	55	46	27	28	15	16	13	37	33	38	44
GHG emission ranking																						
GHG footprint of beef/meat is higher than chicken or pasta	80	81	81	86	73	85	82	73	78	85	74	85	76	58	65	49	50	53	55	74	60	58
GHG footprint of nuclear is lower than gas or coal	64	67	62	73	51	57	66	73	71	72	50	71	60	47	42	51	45	53	42	54	32	58
GHG footprint of plane is higher than car or train/bus	55	56	57	71	63	74	52	38	55	30	61	65	41	29	25	36	24	18	36	38	32	28
Total emissions of China are higher than other regions	71	71	69	67	62	69	81	83	65	86	73	69	61	58	64	34	56	44	69	62	72	62
Per capita emissions of the US are higher than other regions	49	38	48	64	49	59	61	35	53	27	52	46	55	44	53	34	42	33	49	44	55	45
CC gases																						
Hydrogen is not a greenhouse gas	85	80	75	89	85	91	92	93	89	91	85	81	77	76	84	70	82	77	75	71	63	87
CO_2 is a greenhouse gas	83	68	77	93	79	86	88	95	88	77	88	85	77	75	79	86	82	82	72	71	49	77
Particulate matter is not a greenhouse gas	66	71	60	75	53	46	69	83	71	54	70	71	66	68	65	61	78	80	60	73	55	64
Methane is a greenhouse gas	60	77	72	62	46	63	36	41	48	68	68	75	64	51	57	42	42	34	60	61	71	48
CC impacts if CC goes unabated																						
Severe droughts and heatwaves are likely	87	84	90	88	85	88	91	90	89	90	86	87	77	86	81	89	84	93	79	89	91	86
Sea-level rise is likely	86	83	84	93	83	87	90	91	86	90	85	90	78	84	77	87	84	92	82	86	82	78
More frequent volcanic eruptions are unlikely	44	42	37	63	38	59	49	52	31	31	41	41	43	26	33	23	21	19	33	26	22	36

Most believe climate change is real and anthropogenic

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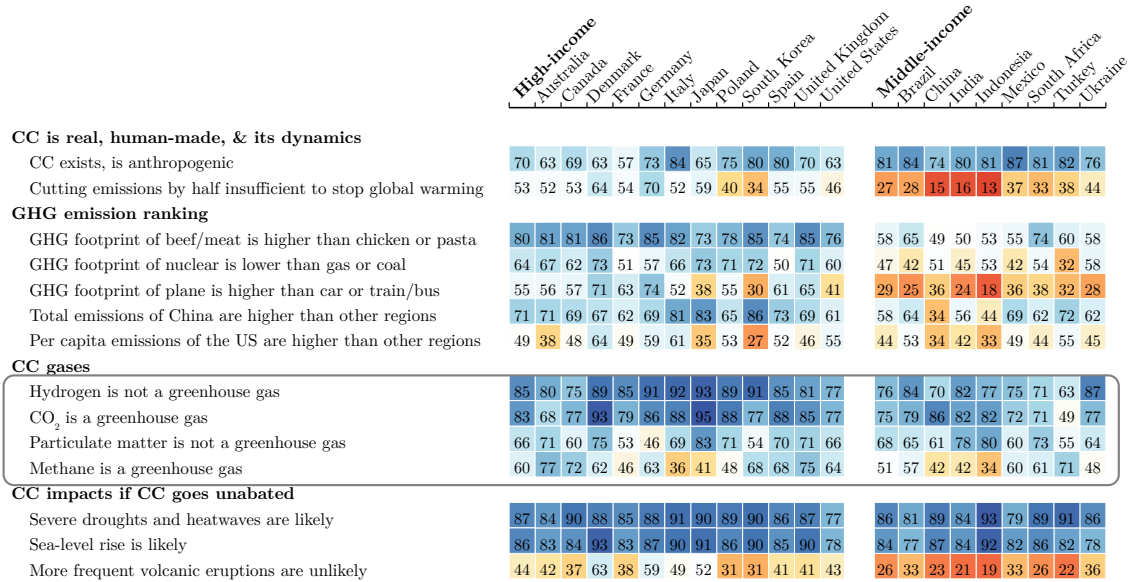
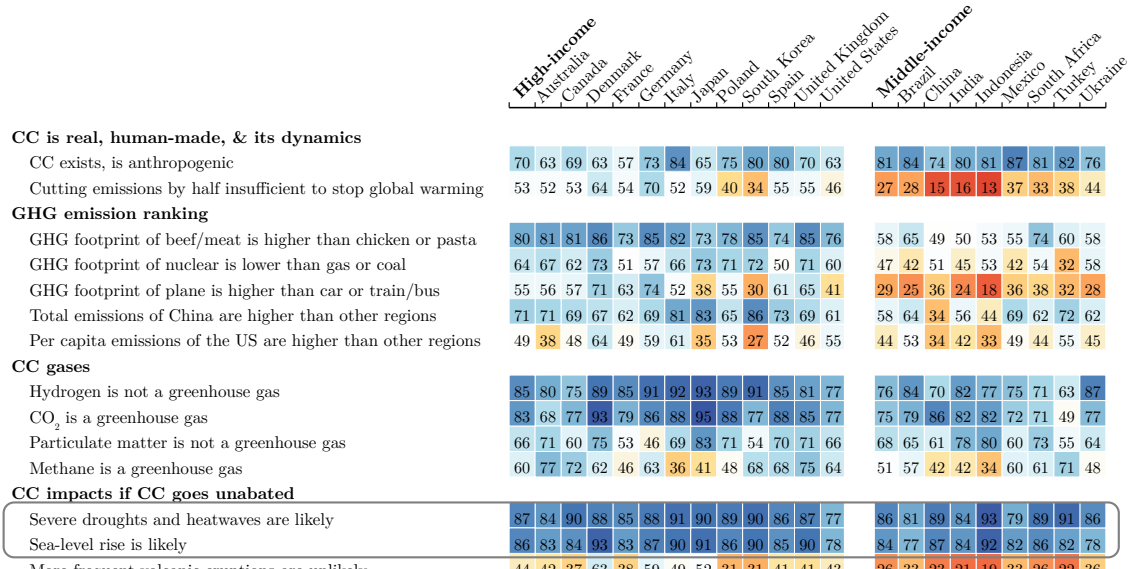
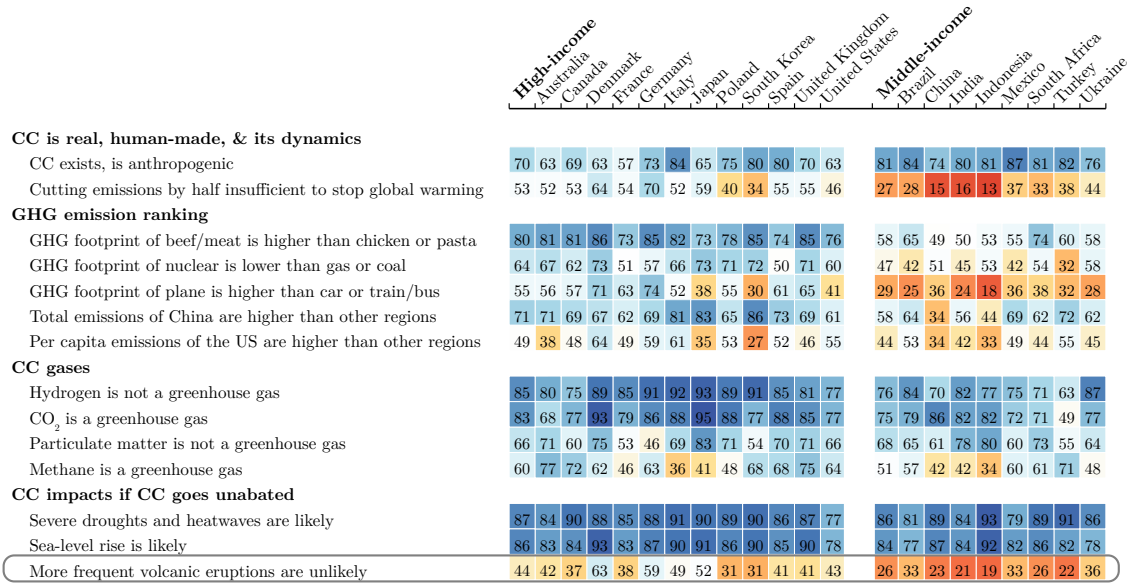
Most people are aware of the factors that cause climate change



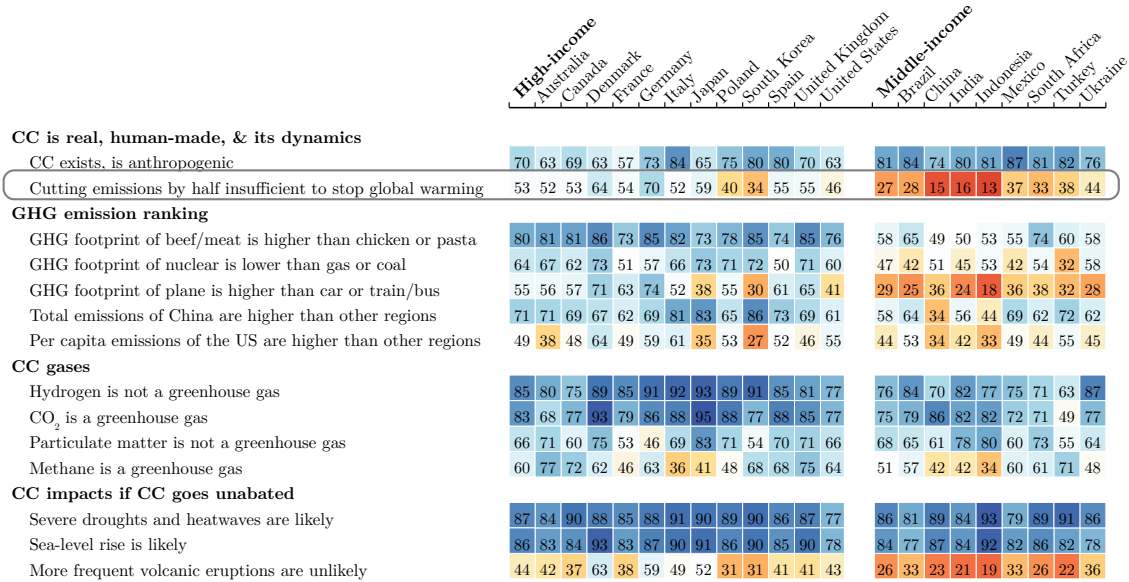
People correctly foresee many consequences of climate change . . .



… but also expect some unlikely disastrous consequences



People are overly optimistic about needed decarbonization levels



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3. **Which factors shape support for climate policies?**

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Measuring support for climate action

Challenge: policy's support may vary based on **the bundle** the policy is part of

Spending/investment: Sources of funding matter
Tax tools: how revenues are spent
Regulations: modalities matter (e.g., bans on polluting cars overall or in dense areas?)

Our strategy:

1) **Provide in-depth evidence for three main types of policies**

Tax (carbon tax with equal transfers)
Investment (debt-financed green infrastructure program)
Regulation (ban on combustion engine cars)
$\Rightarrow$ Analyze **fundamental factors shaping support** for policies

2) **Test variations** on possible uses of revenue, revenue sources, or policy bundles

Perceived characteristics of the main policies

Perceptions vs. Reality

	Green Infrastructure Program		Carbon Tax w. Cash Transfers		Ban on Combustion-Engine Cars	
	High Income	Middle Income	High Income	Middle Income	High Income	Middle Income
Effectiveness of Main Climate Policies						
Reduce air pollution	76	82	68	77	79	83
Reduce GHG emissions/Reduce CO_2 emissions from cars			64	71	73	77
Make electricity production greener	70	77				
Encourage insulation of buildings			64	67		
Increase the use of public transport/Encourage less driving	60	67	51	64		
Positive effect on economy and employment	37	45	31	41	35	39
Costless way to fight climate change	30	38	27	34	39	37
Distributional Impacts of Main Climate Policies						
Believes the following groups would gain						
Those living in rural areas	25	41	21	32	16	24
Low-income earners	21	40	22	31	12	24
The middle class	22	43	21	31	15	26
High-income earners	39	50	33	37	40	47
Self-Interest						
Believes own household would gain	23	40	20	28	15	24
Perceived Fairness and Support						
Support main climate policies	57	76	37	50	43	60
Main climate policies are fair	51	67	35	47	39	53

People recognize the environmental benefits of climate policies...

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... and also believe these come at economic costs

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Three main policies often considered regressive

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People are generally pessimistic about impact on own household

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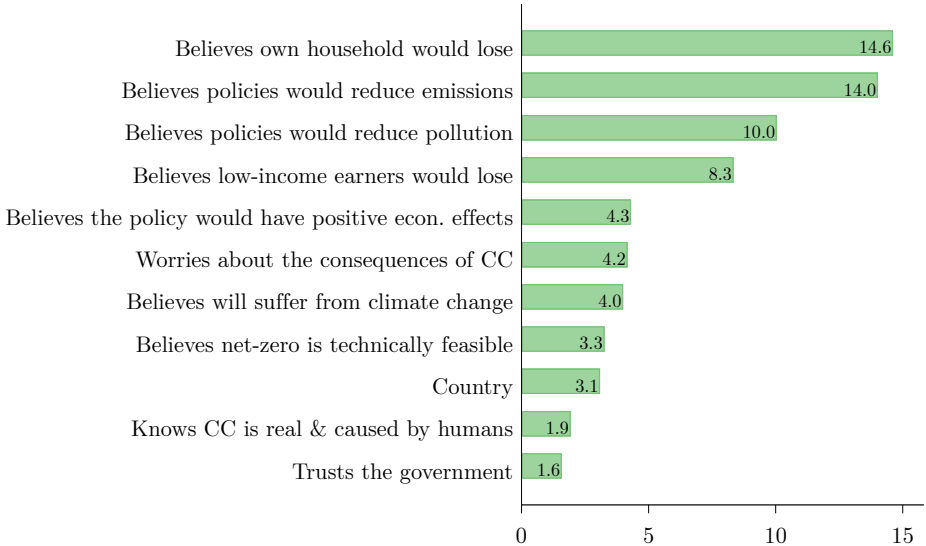
What explains support for climate action? ▸ Perceptions by groups

1. **Self-interest:** the policy will not financially hurt my household ▸ Regression results
2. **Effectiveness belief:** the policy is helpful in reducing emissions
3. **Equity concern:** the policy will not disproportionately hurt vulnerable HHs

Not very predictive: knowledge or concerns about climate change ▸ Details

Share of the variation in support explained by different beliefs



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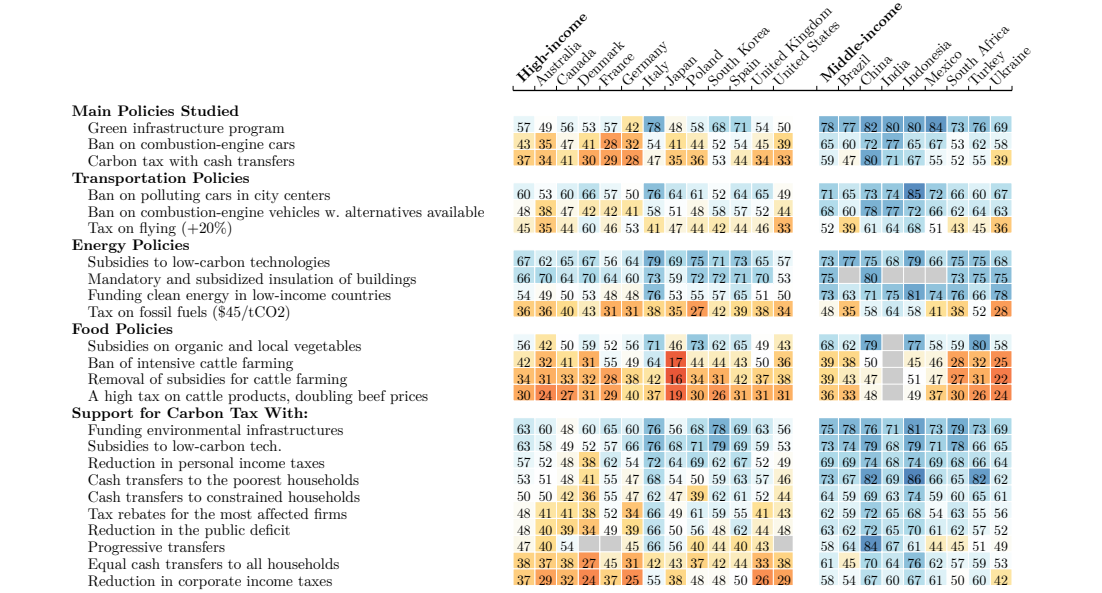
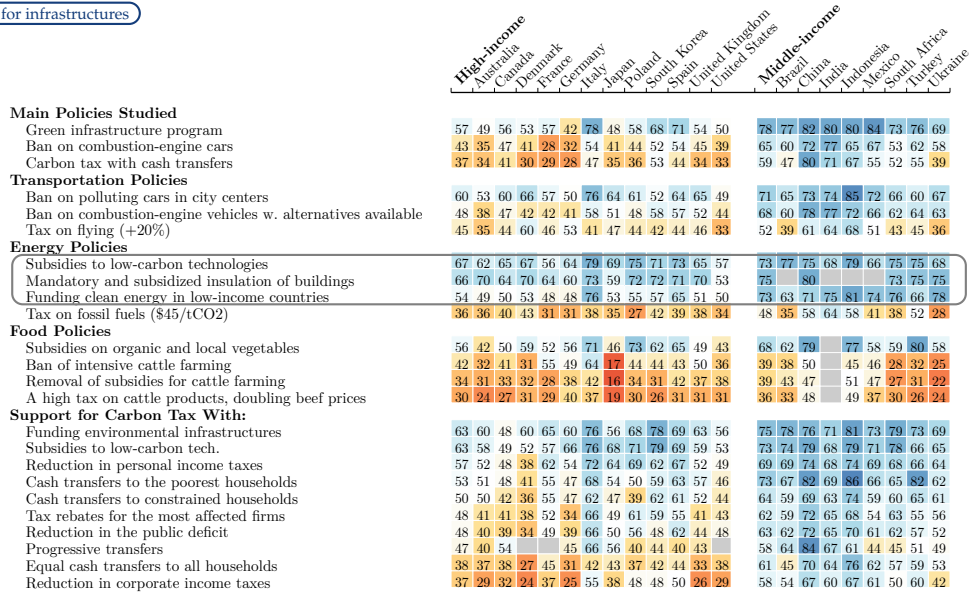
Share of respondents who support climate change policies

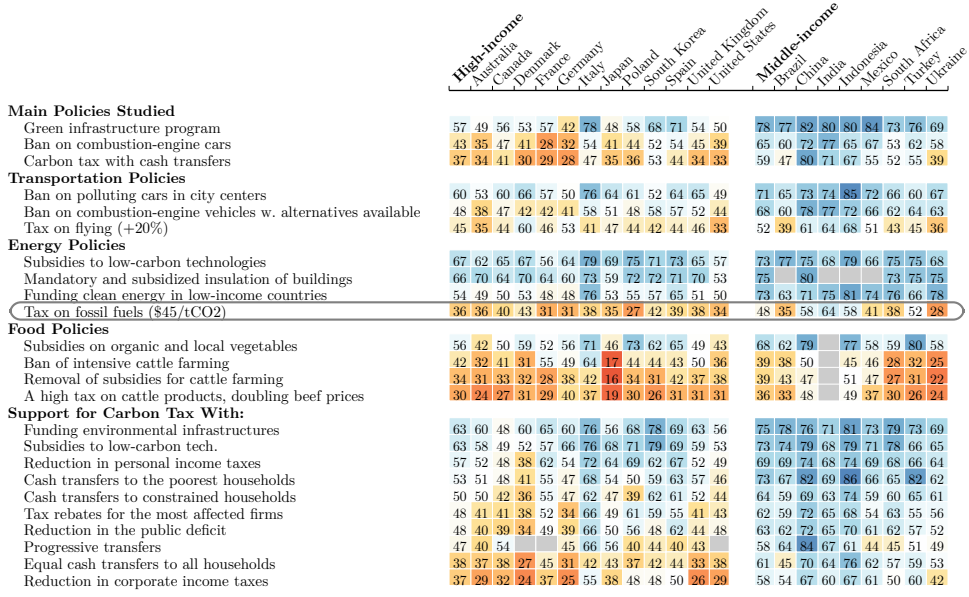


High support for subsidies for low-carbon tech & infrastructure

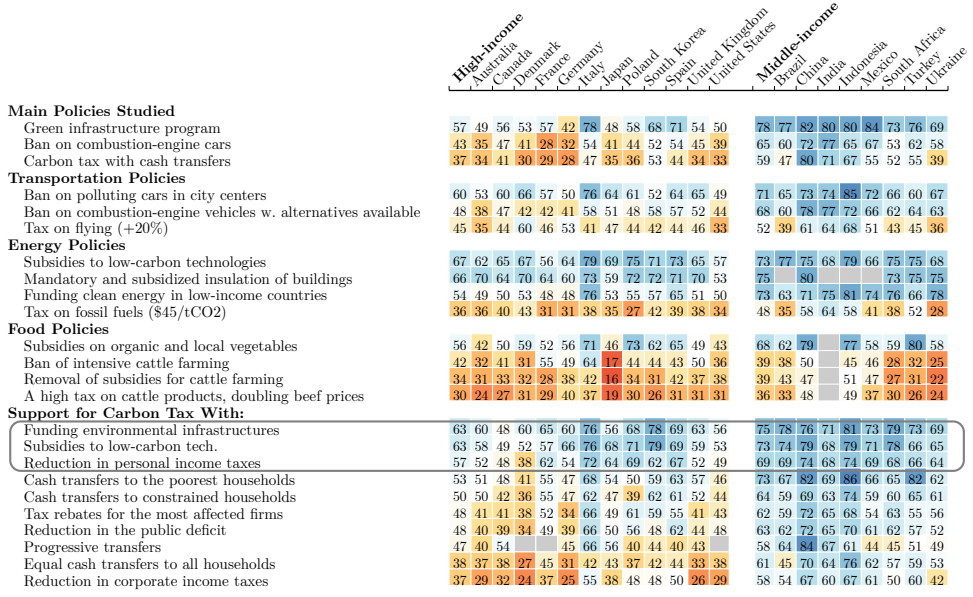
▸ Funding for infrastructures



Carbon taxes appear to be least popular at first glance...



... but use of revenue matters substantially for their support



Who supports more climate action? ▸ Regression results

Those whose **lifestyle** allows them to bear the costs and adapt ("Self-interest"):

i) high-quality public transportation access; ii) rely less on a car; iii) lower gas expenses

Left-leaning respondents (in all countries)

Those with higher levels of **education** (even conditional on income)

Income mostly insignificant

Age has mixed effects: higher support of younger people only in FR, AU, and U.S.

$\Rightarrow$ Policy views cannot be explained based on socioeconomic characteristics alone ($R^2 = 0.09$ without country FE; $R^2 = 0.18$ with them)

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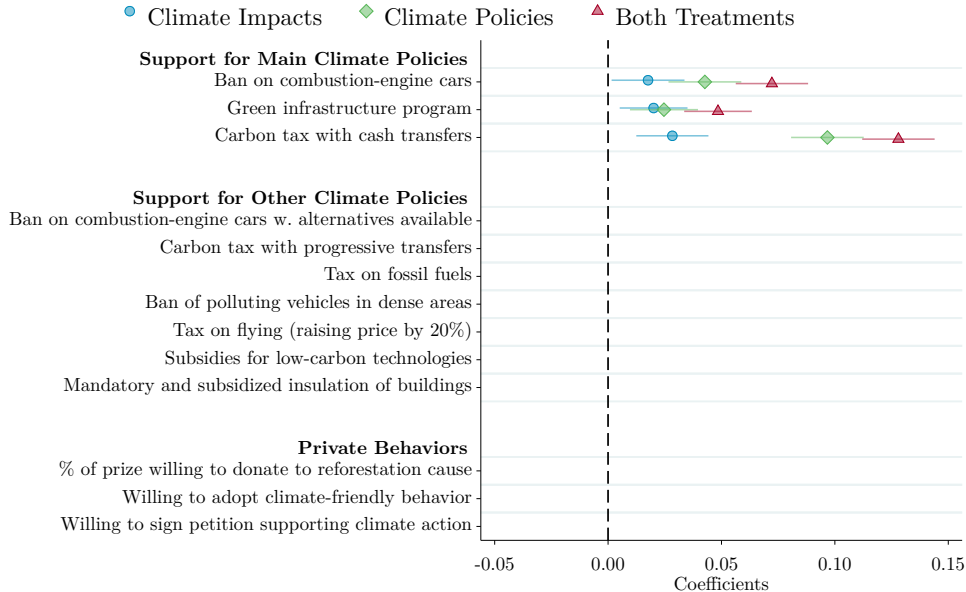
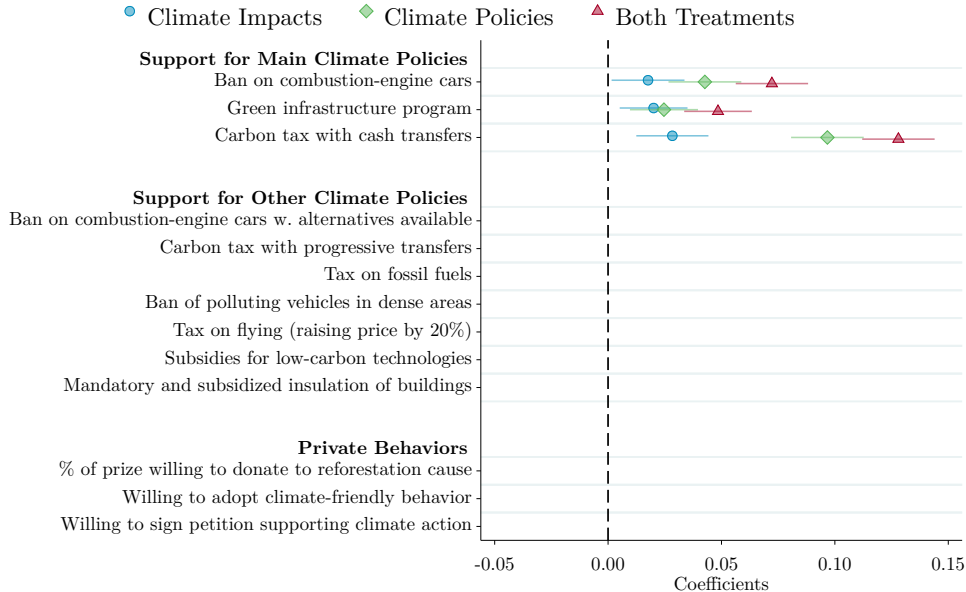
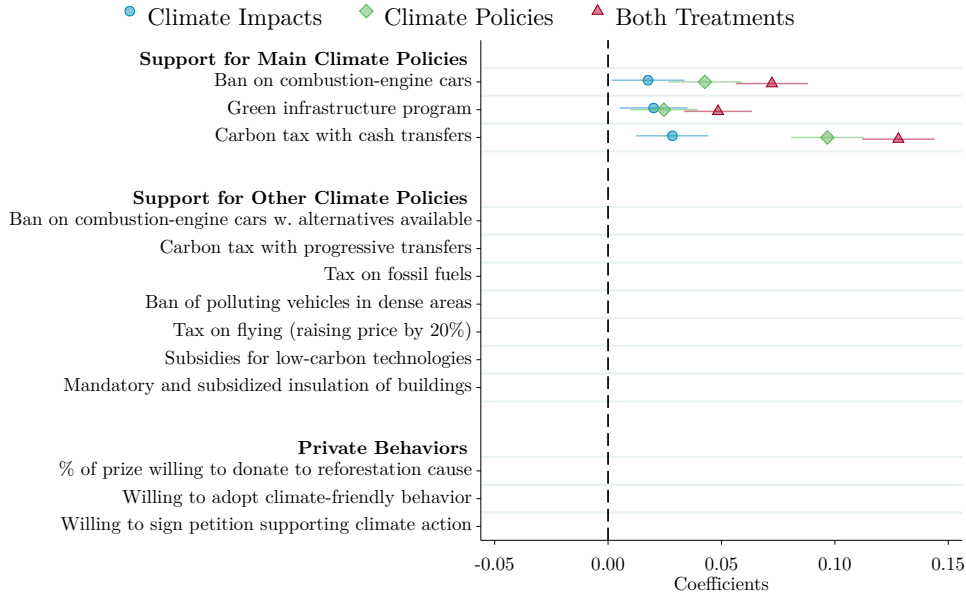
Effects of the treatments on support for climate action



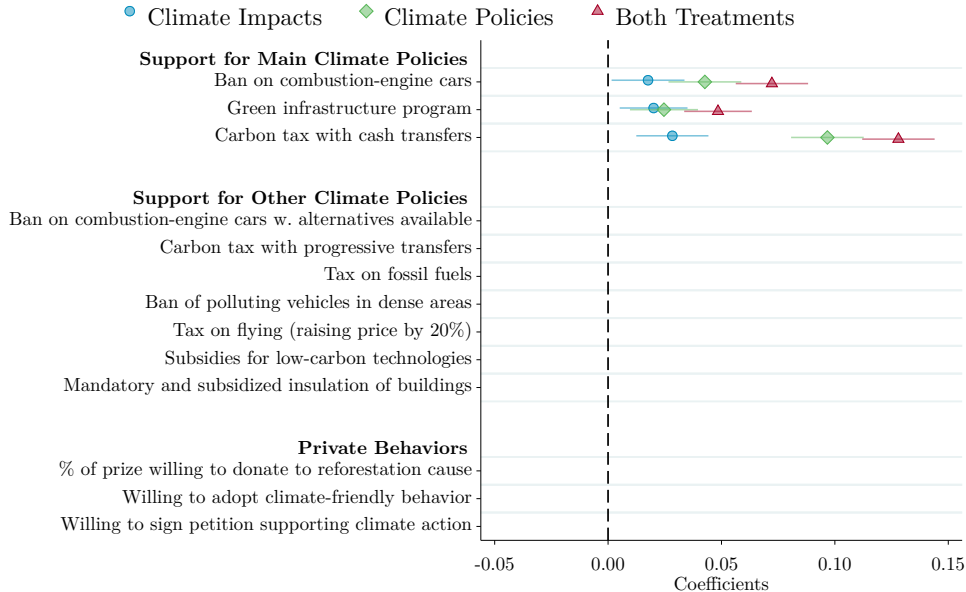
Climate impacts treatment has smallest effects on support



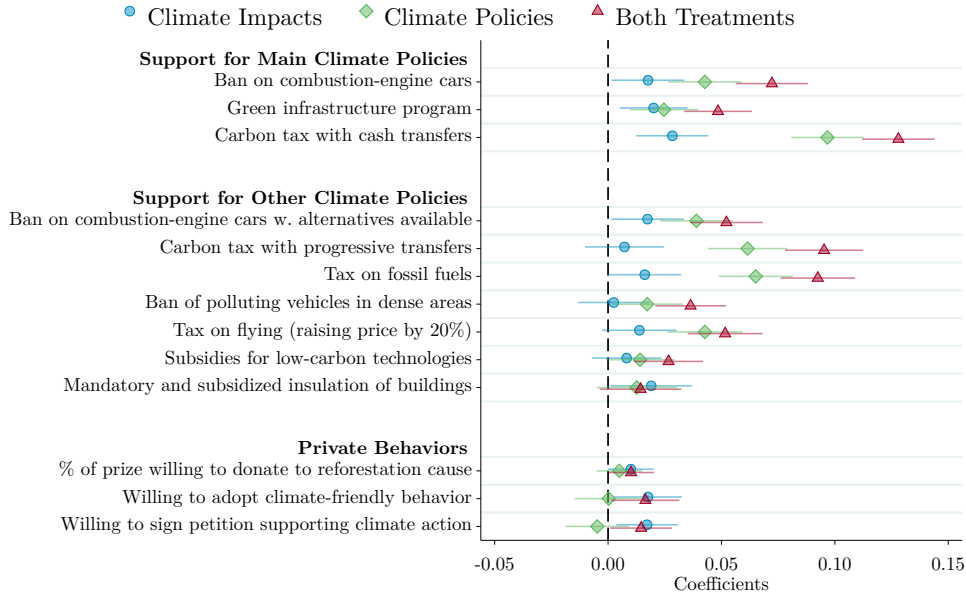
Climate Policies treatment has larger effects



Combined treatment has strongest effects



Similar effects on closely related policies



Interpretation of the treatment effects

Climate impact treatment increases knowledge and concern about climate change

- However, these concerns and knowledge are not strong predictors of support
- Thus, the treatment does not shift key mechanisms

Climate policies and combined treatment shift exactly the most predictive beliefs

- Perceived impacts on oneself and others and the effectiveness of policies
- Also has an effect on related policies

$\Rightarrow$ **Explaining how each policy works and who benefits or can be compensated**

Simply making people more concerned is not effective

Conclusion

Large majority understands CC is real & human caused, but disagrees about how to fight it

Socioeconomic and lifestyle factors are sig. correlated with views and beliefs…

…but it is difficult to predict beliefs or policy views based on these characteristics alone

Support for a given climate policy depends on three fundamental beliefs:

1. **Effectiveness** belief: policy reduces emissions
   ⇒ Scope for information
2. **Equity** concern: policy will not disproportionately hurt vulnerable HHs
   ⇒ Progressivity of policies & understanding of it is key
3. **Self-interest:** policy will not financially hurt my household
   ⇒ Provide alternatives & means to substitute

Concern or knowledge about climate change does not predict policy support well

Need to explain policies' effectiveness & distributional impacts, not just CC impacts

THANK YOU!

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Appendix slides

Private action vs. public policy

"*Willingness to change behaviors*" and "*Support for climate policies*" only correlated of 0.6

⇒ Positive but discrepancy between private behavior and support of public policies

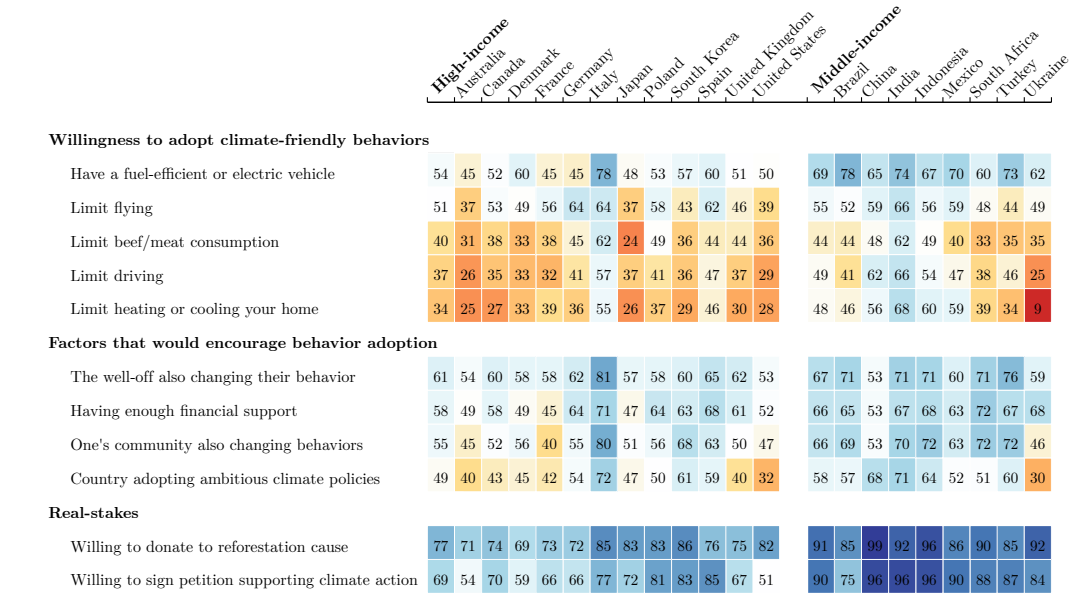
Under current incentives:

about half willing to buy fuel-efficient or electric car or to limit flying
except in Italy and India, generally unwilling to limit beef/meat consumption
few willing to limit driving or cooling/heating their homes by much

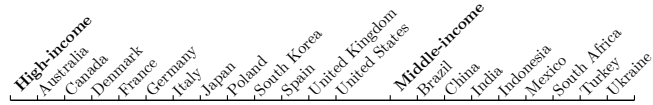
Under different circumstances:

willing to change behavior if they receive enough financial support
willing to change behavior if others, especially rich, also change behavior

Share of people willing to adopt climate-friendly behaviors



Around half are willing to buy fuel-efficient car or to limit flying



Willingness to adopt climate-friendly behaviors

Have a fuel-efficient or electric vehicle	54	45	52	60	45	45	78	48	53	57	60	51	50	69	78	65	74	67	70	60	73	62
Limit flying	51	37	53	49	56	64	64	37	58	43	62	46	39	55	52	59	66	56	59	48	44	49
Limit beef/meat consumption	40	31	38	33	38	45	62	24	49	36	44	44	36	44	44	48	62	49	40	33	35	35
Limit driving	37	26	35	33	32	41	57	37	41	36	47	37	29	49	41	62	66	54	47	38	46	25
Limit heating or cooling your home	34	25	27	33	39	36	55	26	37	29	46	30	28	48	46	56	68	60	59	39	34	9

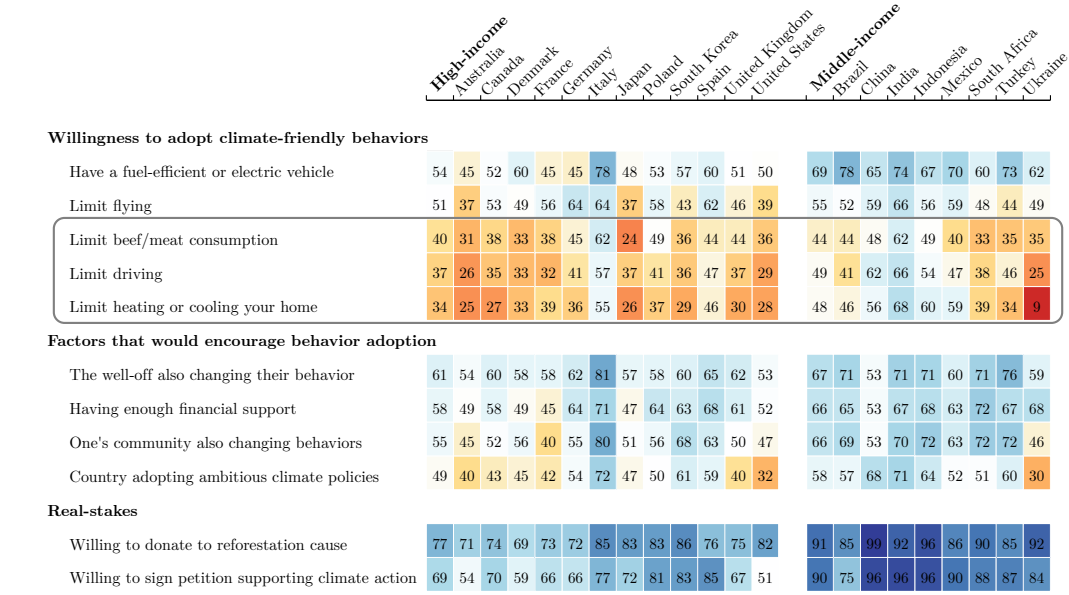
Factors that would encourage behavior adoption

The well-off also changing their behavior	61	54	60	58	58	62	81	57	58	60	65	62	53	67	71	53	71	71	60	71	76	59
Having enough financial support	58	49	58	49	45	64	71	47	64	63	68	61	52	66	65	53	67	68	63	72	67	68
One's community also changing behaviors	55	45	52	56	40	55	80	51	56	68	63	50	47	66	69	53	70	72	63	72	72	46
Country adopting ambitious climate policies	49	40	43	45	42	54	72	47	50	61	59	40	32	58	57	68	71	64	52	51	60	30

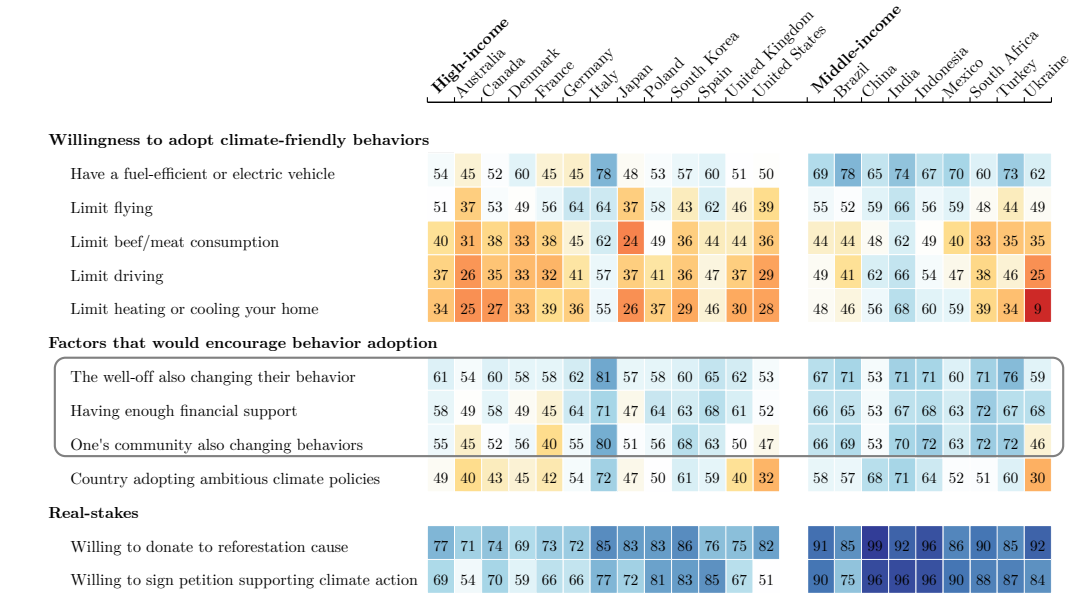
Real-stakes

Willing to donate to reforestation cause	77	71	74	69	73	72	85	83	83	86	76	75	82	91	85	99	92	96	86	90	85	92
Willing to sign petition supporting climate action	69	54	70	59	66	66	77	72	81	83	85	67	51	90	75	96	96	96	90	88	87	84

People are unwilling to limit some behaviors



Willing to change behavior with financial support and if others do



Summary Statistics – High-income countries 1

Back

	Australia		Canada		Denmark		France	
	Population	Sample	Population	Sample	Population	Sample	Population	Sample
Sample size	NA	1,978	NA	2,022	NA	2,013	NA	2,006
Man	0.49	0.56	0.49	0.45	0.50	0.50	0.48	0.44
18-24 years old	0.11	0.10	0.10	0.09	0.11	0.09	0.12	0.10
25-34 years old	0.19	0.19	0.17	0.14	0.16	0.12	0.15	0.15
35-49 years old	0.26	0.27	0.24	0.25	0.23	0.25	0.24	0.25
More than 50 years old	0.44	0.44	0.48	0.52	0.50	0.54	0.49	0.50
Income Q1	0.25	0.22	0.25	0.25	0.26	0.29	0.25	0.31
Income Q2	0.25	0.21	0.25	0.28	0.23	0.25	0.25	0.31
Income Q3	0.25	0.33	0.25	0.28	0.28	0.26	0.25	0.23
Income Q4	0.25	0.24	0.25	0.20	0.22	0.19	0.25	0.14
Region 1	0.33	0.30	0.07	0.06	0.32	0.30	0.19	0.19
Region 2	0.20	0.23	0.06	0.07	0.23	0.23	0.22	0.24
Region 3	0.07	0.10	0.26	0.23	0.10	0.10	0.20	0.22
Region 4	0.28	0.28	0.39	0.39	0.14	0.16	0.25	0.20
Region 5	0.11	0.09	0.23	0.24	0.21	0.21	NA	NA
Urban	0.72	0.76	0.83	0.89	0.53	0.53	0.60	0.59
College education (25-64)	0.49	0.46	0.60	0.56	0.42	0.44	0.40	0.42
Vote: Candidate/Party 1	0.41	0.41	0.34	0.27	0.26	0.28	0.24	0.12
Vote: Candidate/Party 2	0.33	0.36	0.33	0.36	0.23	0.17	0.21	0.21
Vote: Candidate/Party 3	NA	NA	0.18	0.18	NA	NA	0.20	0.29
Vote: Candidate/Party 4	NA	NA	NA	NA	NA	NA	0.20	0.14
Unemployment rate (15-64)	0.07	0.12	0.10	0.12	0.06	0.12	0.08	0.10
Home ownership rate	0.66	0.59	0.66	0.59	0.59	0.59	0.65	0.56

Summary Statistics – High-income countries 2

Back

	Germany		Italy		Japan		Poland	
	Population	Sample	Population	Sample	Population	Sample	Population	Sample
Sample size	NA	2,006	NA	2,088	NA	1,990	NA	2,053
Man	0.49	0.48	0.48	0.49	0.48	0.54	0.48	0.44
18-24 years old	0.09	0.06	0.08	0.09	0.08	0.08	0.09	0.09
25-34 years old	0.15	0.16	0.12	0.13	0.12	0.13	0.17	0.18
35-49 years old	0.22	0.22	0.24	0.26	0.24	0.27	0.28	0.30
More than 50 years old	0.54	0.56	0.56	0.52	0.56	0.53	0.46	0.42
Income Q1	0.25	0.25	0.25	0.28	0.25	0.27	0.25	0.22
Income Q2	0.25	0.25	0.25	0.28	0.25	0.27	0.25	0.27
Income Q3	0.25	0.23	0.25	0.23	0.25	0.27	0.25	0.27
Income Q4	0.25	0.27	0.25	0.21	0.25	0.19	0.25	0.25
Region 1	0.10	0.10	0.20	0.20	0.17	0.18	0.12	0.10
Region 2	0.15	0.16	0.11	0.12	0.18	0.19	0.14	0.13
Region 3	0.18	0.16	0.19	0.17	0.35	0.38	0.23	0.21
Region 4	0.29	0.27	0.27	0.30	0.11	0.10	0.29	0.33
Region 5	0.28	0.31	0.23	0.21	0.20	0.16	0.22	0.23
Urban	0.80	0.76	0.83	0.89	0.70	0.76	0.57	0.66
College education (25-64)	0.31	0.32	0.29	0.38	0.53	0.59	0.33	0.46
Vote: Candidate/Party 1	0.37	0.28	0.36	0.20	0.35	0.44	0.44	0.31
Vote: Candidate/Party 2	0.25	0.20	0.20	0.27	0.20	0.16	0.30	0.39
Vote: Candidate/Party 3	NA	NA	0.19	0.17	0.14	0.10	0.14	0.12
Vote: Candidate/Party 4	NA	NA	NA	NA	NA	NA	NA	NA
Unemployment rate (15-64)	0.04	0.07	0.09	0.17	0.03	0.05	0.03	0.09
Home ownership rate	0.49	0.39	0.74	0.75	0.55	0.72	0.87	0.71

Summary Statistics – High-income countries 3

Back

	South Korea		Spain		U.K.		U.S.	
	Population	Sample	Population	Sample	Population	Sample	Population	Sample
Sample size	NA	1,932	NA	2,268	NA	2,025	NA	2,218
Man	0.50	0.56	0.49	0.49	0.50	0.52	0.49	0.47
18-24 years old	0.10	0.09	0.08	0.10	0.10	0.09	0.12	0.12
25-34 years old	0.16	0.19	0.12	0.14	0.17	0.19	0.18	0.18
35-49 years old	0.27	0.31	0.28	0.29	0.24	0.24	0.24	0.25
More than 50 years old	0.47	0.40	0.51	0.48	0.49	0.48	0.46	0.45
Income Q1	0.25	0.27	0.25	0.25	0.25	0.27	0.20	0.26
Income Q2	0.25	0.28	0.25	0.27	0.25	0.25	0.24	0.28
Income Q3	0.25	0.32	0.25	0.23	0.25	0.21	0.24	0.26
Income Q4	0.25	0.13	0.25	0.25	0.25	0.27	0.31	0.20
Region 1	0.25	0.24	0.19	0.21	0.21	0.21	0.21	0.20
Region 2	0.34	0.37	0.30	0.28	0.13	0.13	0.17	0.18
Region 3	0.19	0.23	0.11	0.10	0.24	0.23	0.38	0.39
Region 4	0.22	0.17	0.13	0.15	0.11	0.10	0.24	0.23
Region 5	NA	NA	0.28	0.26	0.31	0.33	NA	NA
Urban	0.92	0.95	0.70	0.75	0.82	0.84	0.73	0.72
College education (25-64)	0.51	0.74	0.40	0.57	0.49	0.51	0.61	0.60
Vote: Candidate/Party 1	0.41	0.59	0.28	0.30	0.44	0.45	0.51	0.57
Vote: Candidate/Party 2	0.24	0.12	0.21	0.16	0.32	0.28	0.47	0.36
Vote: Candidate/Party 3	0.21	0.11	0.15	0.09	0.12	0.11	NA	NA
Vote: Candidate/Party 4	NA	NA	NA	NA	NA	NA	NA	NA
Unemployment rate (15-64)	0.04	0.08	0.16	0.14	0.05	0.09	0.08	0.13
Home ownership rate	0.57	0.65	0.76	0.71	0.63	0.64	0.66	0.67

Summary Statistics – Middle-income countries 1

Back

	Brazil		China		India		Indonesia	
	Population	Sample	Population	Sample	Population	Sample	Population	Sample
Sample size	NA	1,860	NA	1,717	NA	2,472	NA	2,488
Man	0.49	0.45	0.51	0.54	0.51	0.58	0.50	0.52
18-24 years old	0.15	0.16	0.10	0.12	0.18	0.23	0.17	0.19
25-34 years old	0.22	0.23	0.20	0.26	0.24	0.27	0.23	0.26
35-49 years old	0.30	0.32	0.28	0.35	0.29	0.24	0.31	0.31
More than 50 years old	0.34	0.29	0.42	0.27	0.28	0.26	0.29	0.24
Income Q1	0.25	0.24	0.25	0.13	0.25	0.27	0.25	0.28
Income Q2	0.25	0.30	0.25	0.25	0.25	0.24	0.25	0.24
Income Q3	0.25	0.24	0.25	0.29	0.25	0.25	0.25	0.23
Income Q4	0.25	0.22	0.25	0.32	0.25	0.24	0.25	0.25
Region 1	0.08	0.07	0.29	0.31	0.27	0.20	0.08	0.07
Region 2	0.09	0.04	0.12	0.17	0.26	0.25	0.30	0.31
Region 3	0.27	0.28	0.08	0.05	0.13	0.15	0.13	0.11
Region 4	0.14	0.15	0.29	0.23	0.20	0.24	0.21	0.20
Region 5	0.42	0.45	0.22	0.24	0.14	0.17	0.27	0.31
Urban	0.69	0.77	0.63	0.53	0.36	0.46	0.57	0.62
Master or higher (25-64)	0.01	0.19	0.01	0.03	0.03	0.30	0.07	0.04
Vote: Candidate/Party 1	0.46	0.47	NA	NA	0.37	0.59	0.19	0.42
Vote: Candidate/Party 2	0.29	0.22	NA	NA	0.20	0.16	0.13	0.18
Vote: Candidate/Party 3	NA	NA	NA	NA	NA	NA	0.12	0.05
Vote: Candidate/Party 4	NA	NA	NA	NA	NA	NA	NA	NA
Unemployment rate (15-64)	0.14	0.11	0.03	0.01	0.09	0.04	0.06	0.05
Home ownership rate	0.72	0.72	0.90	0.83	0.87	0.79	0.84	0.89

Summary Statistics – Middle-income countries 2

Back

	Mexico		Turkey		South Africa		Ukraine	
	Population	Sample	Population	Sample	Population	Sample	Population	Sample
Sample size	NA	2,045	NA	1,932	NA	2,003	NA	1,564
Man	0.48	0.49	0.49	0.43	0.49	0.46	0.45	0.61
18-24 years old	0.18	0.18	0.16	0.18	0.21	0.21	0.08	0.12
25-34 years old	0.23	0.24	0.21	0.24	0.28	0.29	0.18	0.25
35-49 years old	0.30	0.31	0.30	0.34	0.28	0.28	0.28	0.40
More than 50 years old	0.29	0.27	0.33	0.24	0.22	0.22	0.46	0.24
Income Q1	0.25	0.26	0.25	0.14	0.25	0.16	0.25	0.17
Income Q2	0.25	0.27	0.25	0.28	0.25	0.24	0.25	0.24
Income Q3	0.25	0.24	0.25	0.28	0.25	0.32	0.25	0.24
Income Q4	0.25	0.22	0.25	0.30	0.25	0.27	0.25	0.36
Region 1	0.33	0.38	0.25	0.28	0.12	0.09	0.31	0.37
Region 2	0.22	0.18	0.18	0.12	0.24	0.29	0.21	0.17
Region 3	0.10	0.10	0.30	0.34	0.18	0.17	0.22	0.26
Region 4	0.13	0.12	0.26	0.26	0.33	0.26	0.25	0.20
Region 5	0.23	0.22	NA	NA	0.13	0.18	NA	NA
Urban	0.64	0.81	0.87	0.96	0.49	0.63	0.70	0.88
Master or higher (25-64)	0.02	0.08	0.02	0.09	0.01	0.08	0.27	0.25
Vote: Candidate/Party 1	0.36	0.39	0.43	0.42	0.58	0.35	0.31	0.60
Vote: Candidate/Party 2	0.19	0.20	0.23	0.28	0.21	0.32	0.16	0.19
Vote: Candidate/Party 3	0.18	0.10	NA	NA	NA	NA	NA	NA
Vote: Candidate/Party 4	NA	NA	NA	NA	NA	NA	NA	NA
Unemployment rate (15-64)	0.04	0.07	0.13	0.12	0.29	0.16	0.10	0.10
Home ownership rate	0.80	0.70	0.58	0.63	0.70	0.47	0.93	0.72

Conceptual Framework

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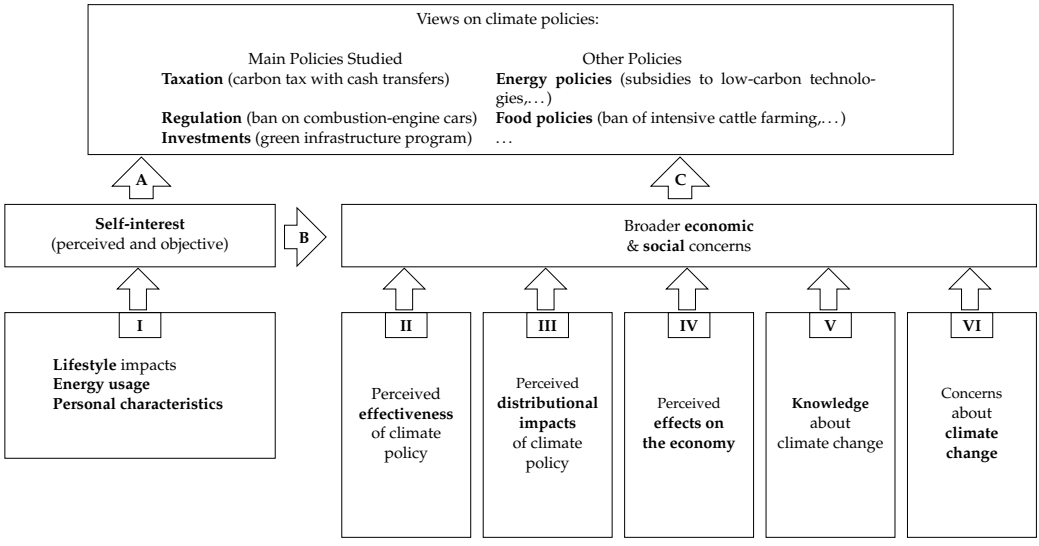

Do Survey Responses Reflect Actual Behaviors? Correlation between self-reported support and actual behaviors

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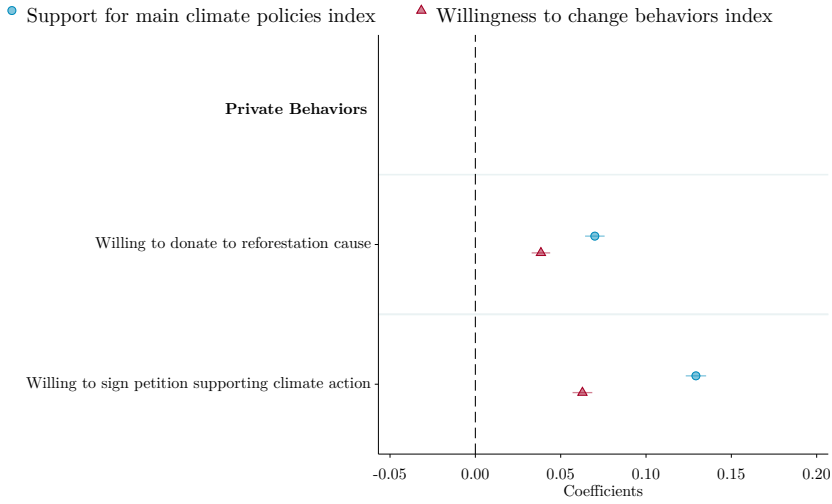

Real-stakes questions

Back

By taking this survey, you are automatically entered into a lottery to win $100. In a few days you will know whether you have been selected in the lottery. The payment will be made to you in the same way as your compensation for this survey, so no further action is required on your part.

You can also donate a part of this additional compensation (should you be selected in the lottery) to a reforestation project through the charity The Gold Standard. This charity has already proven effective to reduce 151 million tons of CO2 to fight climate change and has been carefully selected by our team. The Gold Standard is highly transparent and ensures that its projects feature the highest levels of environmental integrity and contribute to sustainable development.

Should you win the lottery, please enter your donation amount using the slider below:

0 20 40 60 80 100

Donation amount (in U.S. dollars)

Finally, are you willing to sign a petition to "stand up for real climate action"?

As soon as the survey is complete, we will send the results to the U.S. President's office, informing him what share of people who took this survey were willing to support the following petition.

"I agree that immediate action on climate change is critical. Now is the time to dedicate ourselves to a low-carbon future and prevent lasting damage to all living things. Science shows us we cannot afford to wait to cut harmful carbon emissions. I'm adding my voice to the call to world leaders in the U.S. and beyond -- to act so we do not lose ground in combating climate change."

Do you support this petition (you will NOT be asked to sign, only your answer here is required and remains anonymous)?

Yes ○ No ○

Real-stakes questions

Back

Finally, are you willing to sign a petition to "stand up for real climate action"? As soon as the survey is complete, we will send the results to the [head of state's] office, informing him what share of people who took this survey were willing to support the following petition. "I agree that immediate action on climate change is critical. Now is the time to dedicate ourselves to a low-carbon future and prevent lasting damage to all living things. Science shows us we cannot afford to wait to cut harmful carbon emissions. I'm adding my voice to the call to world leaders in [country] and beyond – to act so we do not lose ground in combating climate change." Do you support this petition (you will NOT be asked to sign, only your answer here is required and remains anonymous)?

Yes; No

By taking this survey, you are automatically entered into a lottery to win [$100]. In a few days you will know whether you have been selected in the lottery. The payment will be made to you in the same way as your compensation for this survey, so no further action is required on your part. You can also donate a part of this additional compensation (should you be selected in the lottery) to a reforestation project through the charity The Gold Standard. This charity has already proven effective to reduce 151 million tons of CO_2 to fight climate change and has been carefully selected by our team. The Gold Standard is highly transparent and ensures that its projects feature the highest levels of environmental integrity and contribute to sustainable development. Should you win the lottery, please enter your donation amount using the slider below:

Slider going from 0 to [100]

Perception vs. Reality: Support for Climate Policies

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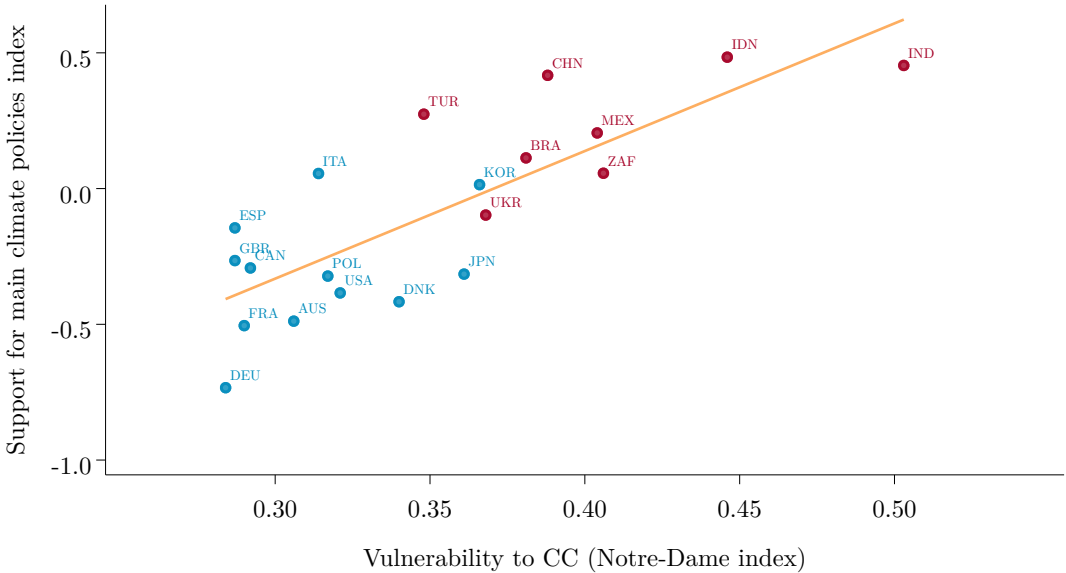

Perception vs. Reality: Concerns about CC

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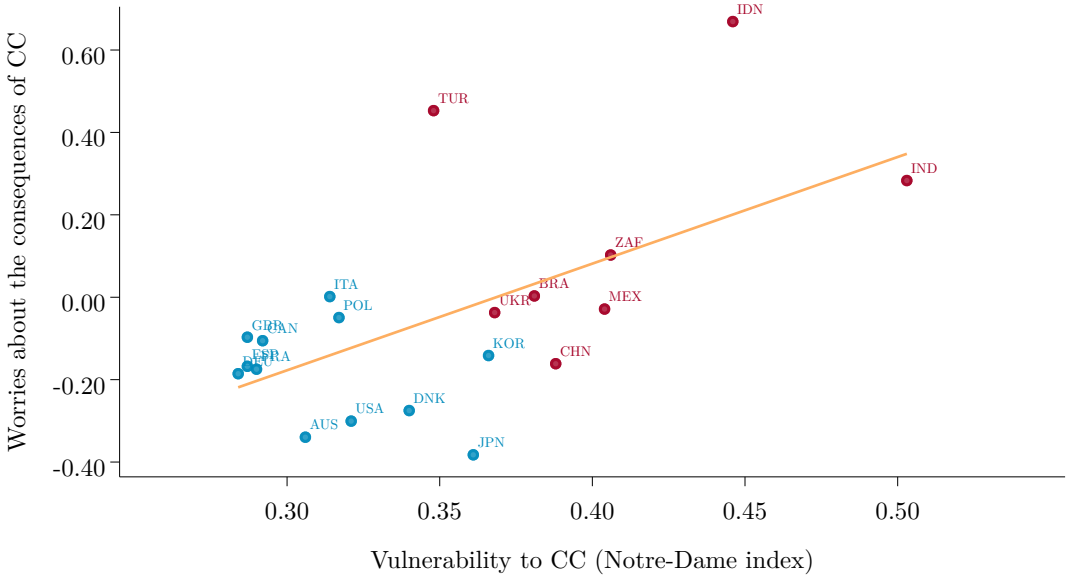

Perception vs. Reality: Perceived personal effects

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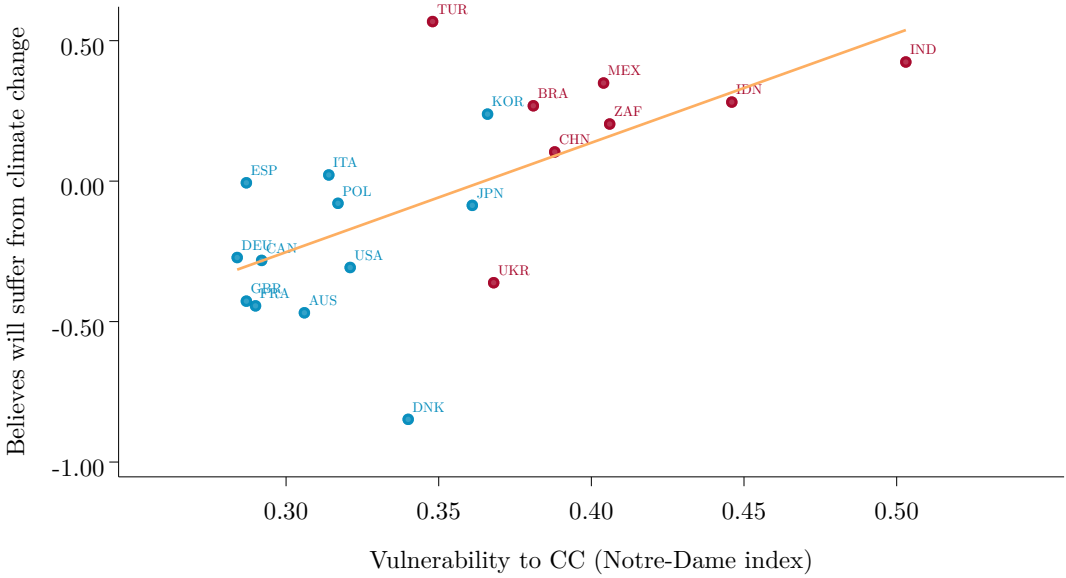
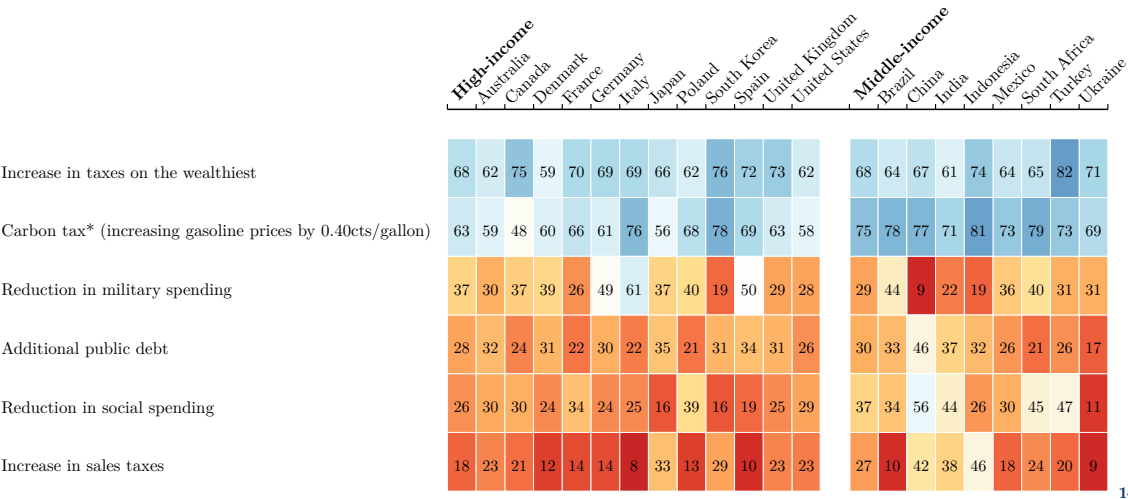


Share of respondents who find the following sources of funding appropriate for public investments in green infrastructure? (Multiple answers possible)

Back



Support for main policies and individual characteristics

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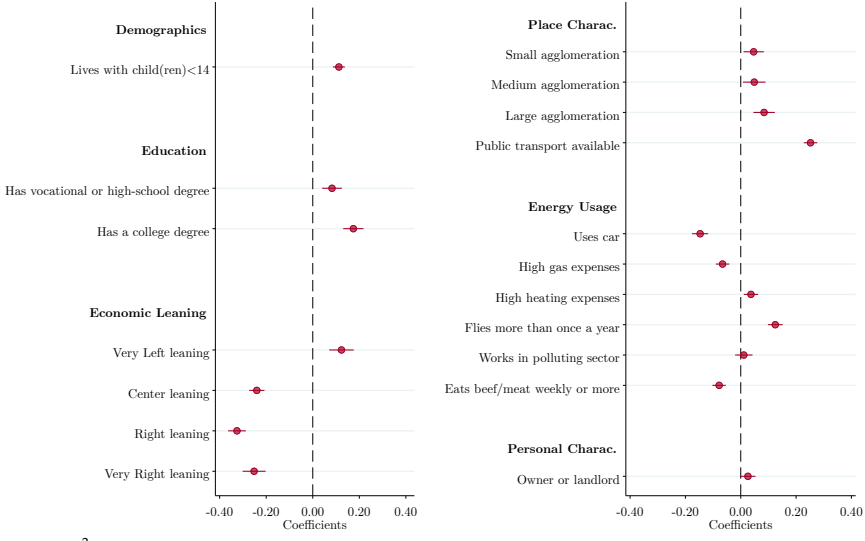

R^2 is 0.18 (0.09 without country fixed effects). Increases to 0.24 with large set of interactions (0.12 without country fixed effects)

Political leaning one of strongest predictors of views on CC

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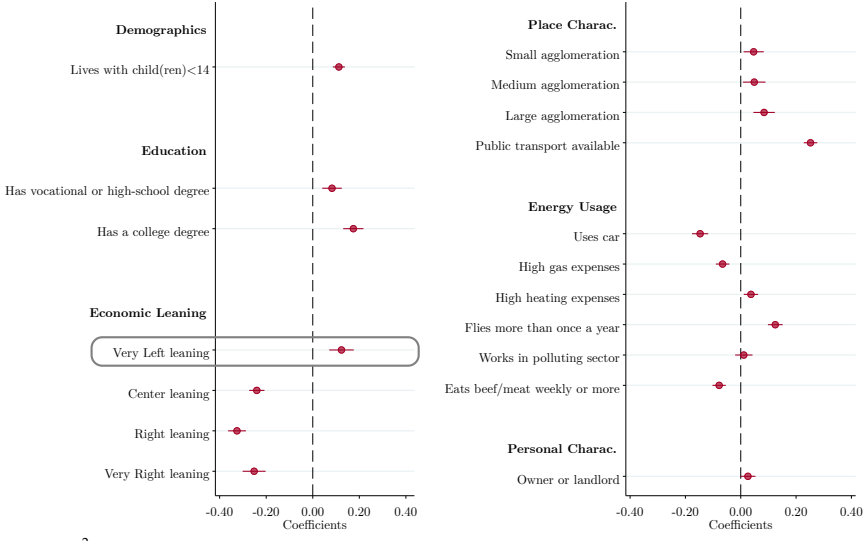

R^2 is 0.18 (0.09 without country fixed effects). Increases to 0.24 with large set of interactions (0.12 without country fixed effects)

College-educ. support more climate action in most countries

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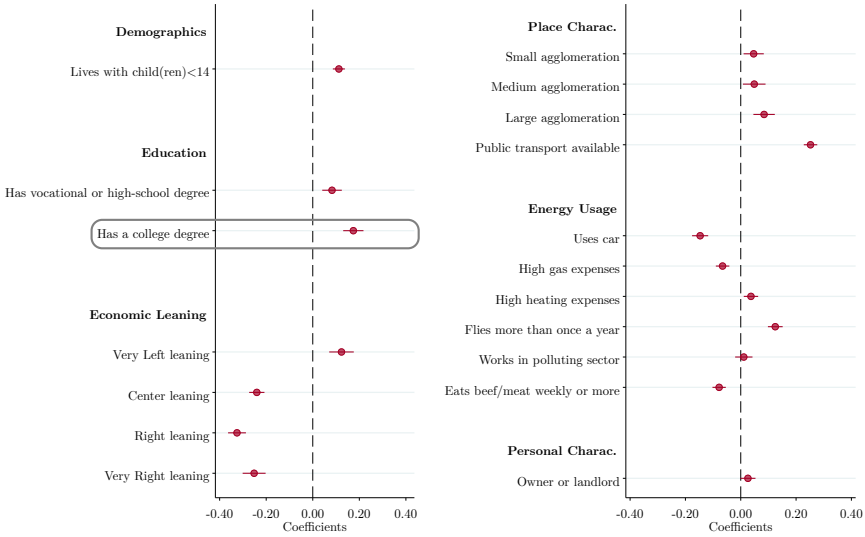

R^2 is 0.18 (0.09 without country fixed effects). Increases to 0.24 with large set of interactions (0.12 without country fixed effects)

Access to public transport strongly correlated with support

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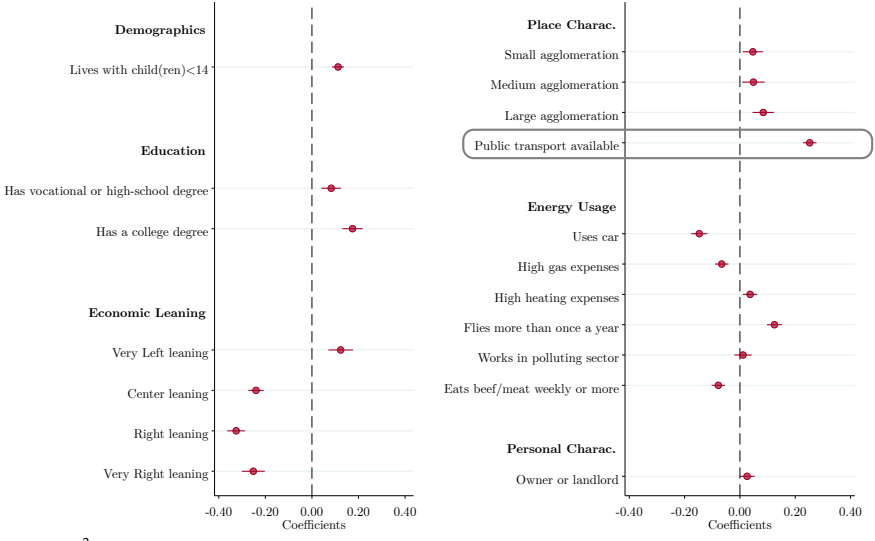

R^2 is 0.18 (0.09 without country fixed effects). Increases to 0.24 with large set of interactions (0.12 without country fixed effects)

Heterogeneous effects of gender, age, & income by country

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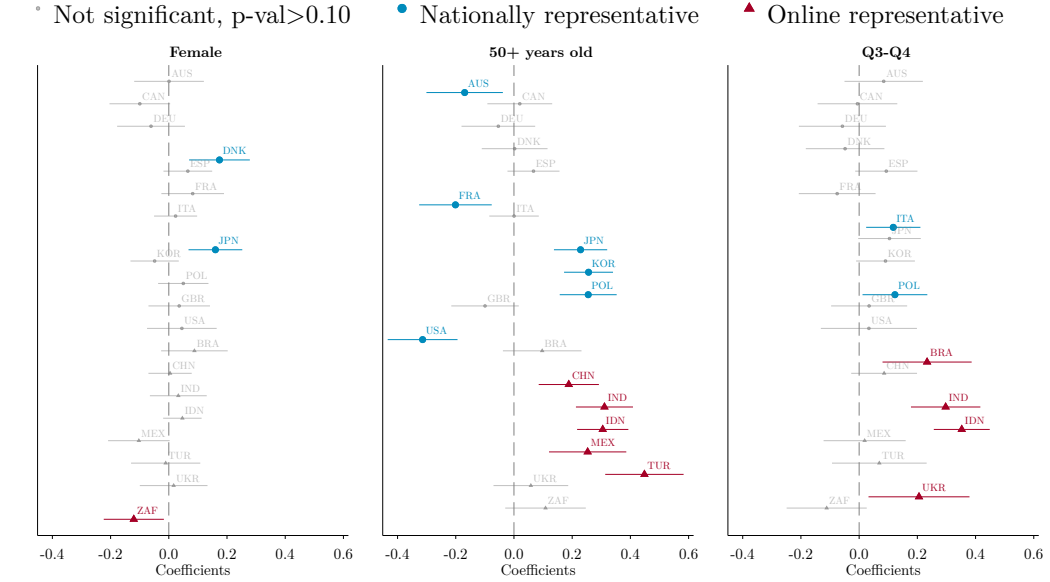

How do different respondents reason about climate policies?

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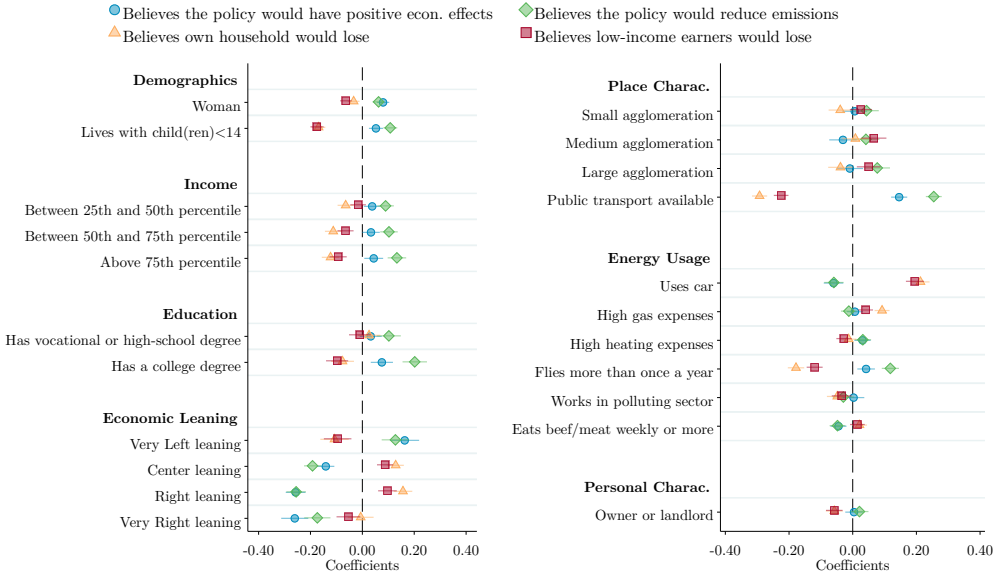

Correlation between support for three main policies and beliefs

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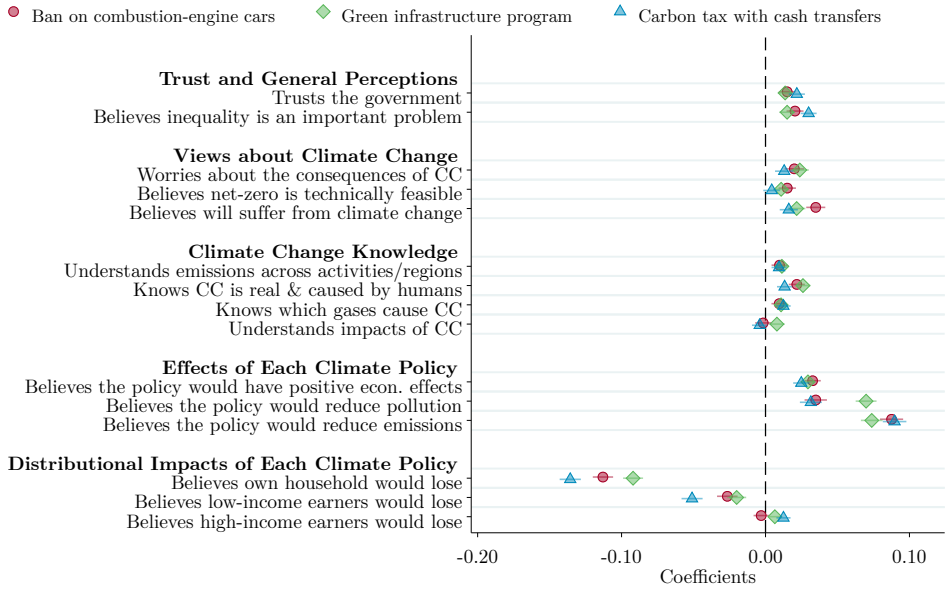

Beliefs in effectiveness explain 24% of variation in policy views

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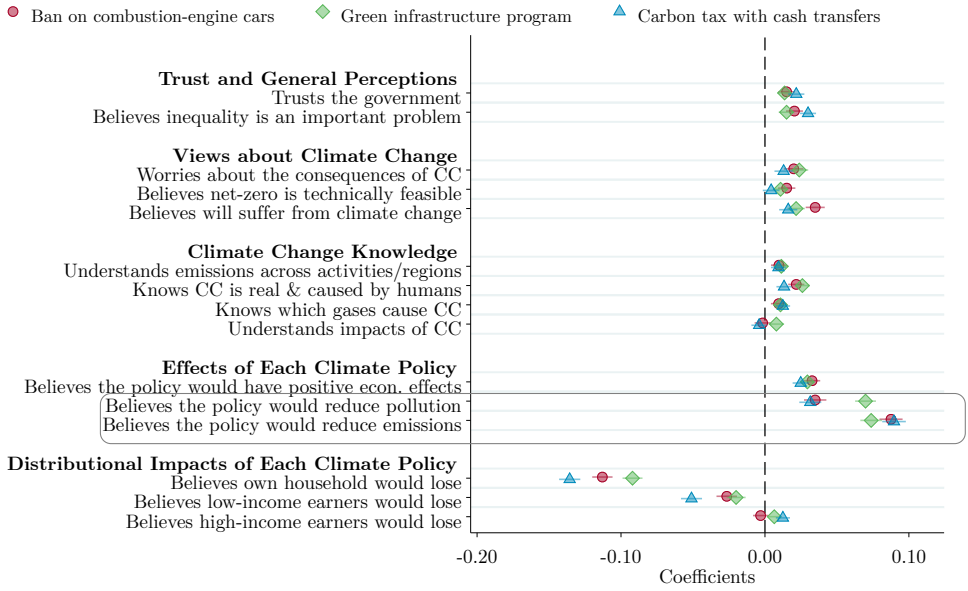

Belief in one's own loss explains 15% of variation in policy views

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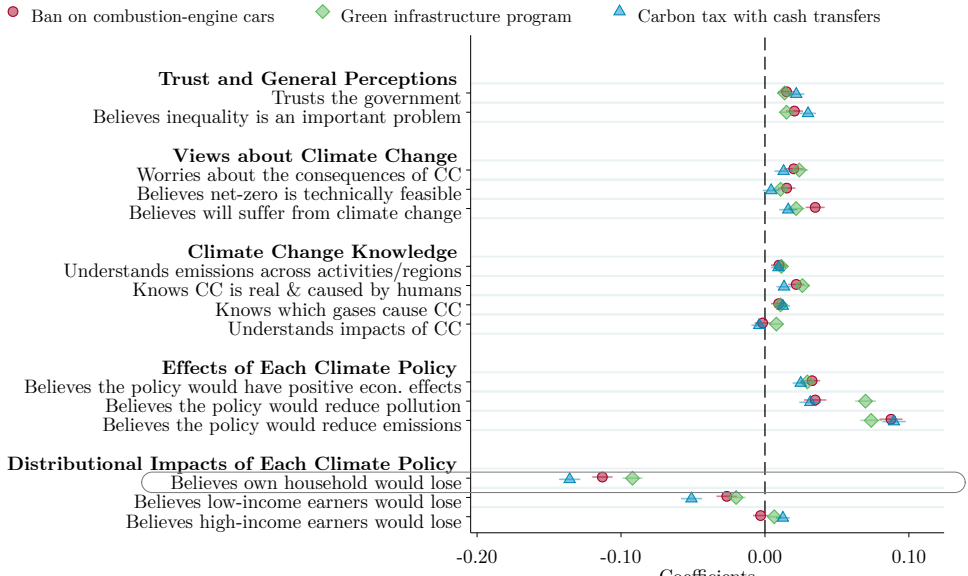

Perceived progressivity explains 8% of variation in policy views

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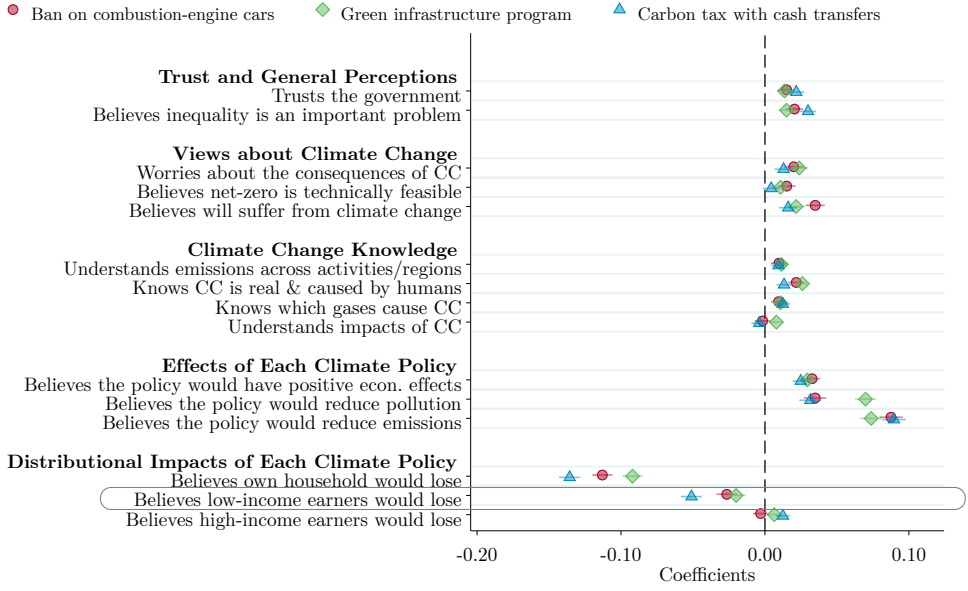

Correlation between knowledge and socioeco-characteristics

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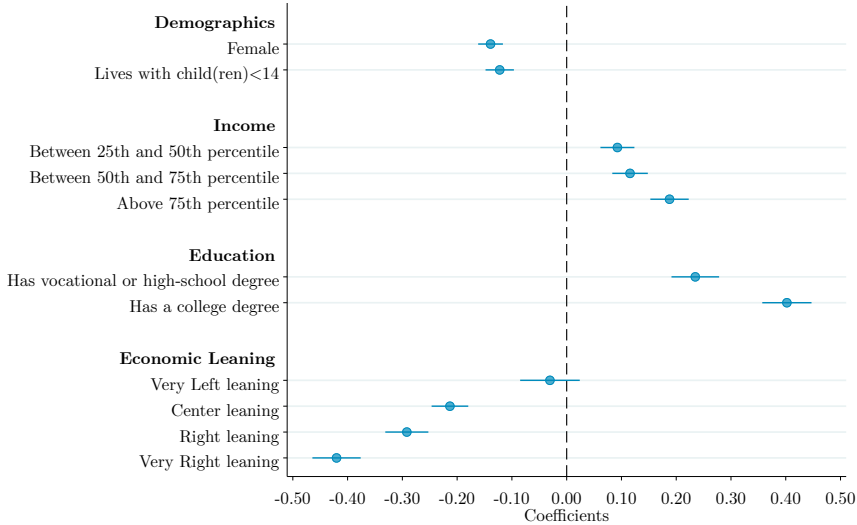

Educated and left-leaning have better knowledge about CC

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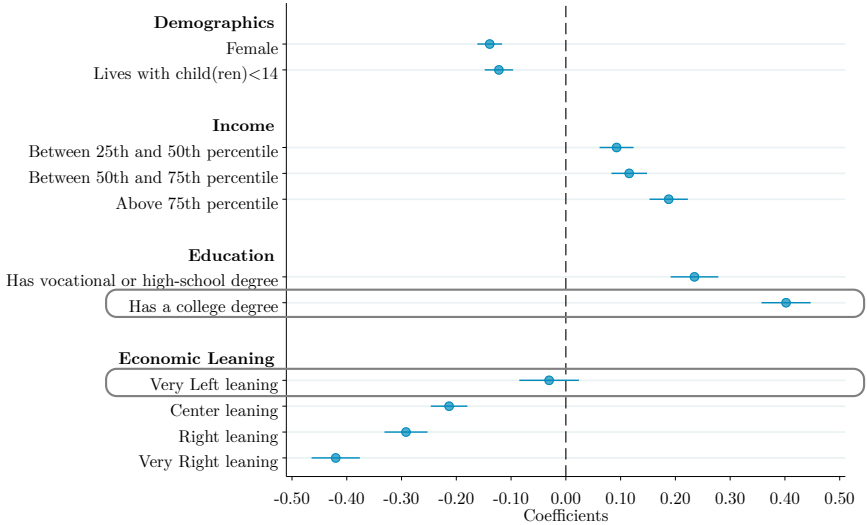

Heterogeneous effect of age on knowledge across countries

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