Yale

New Challenges to International Cooperation: Automation and Climate Change

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MacMillan Center

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Last class: PE of climate change

- Climate change has diffuse, long-term impacts hamstringing cooperation.
- Redistributive impacts difficult domestic coalitions.
- Standard solutions to problems of cooperation may be insufficient.
- Powerful actors may determine the possibility of cooperation.
- Ideological divide regarding climate change.

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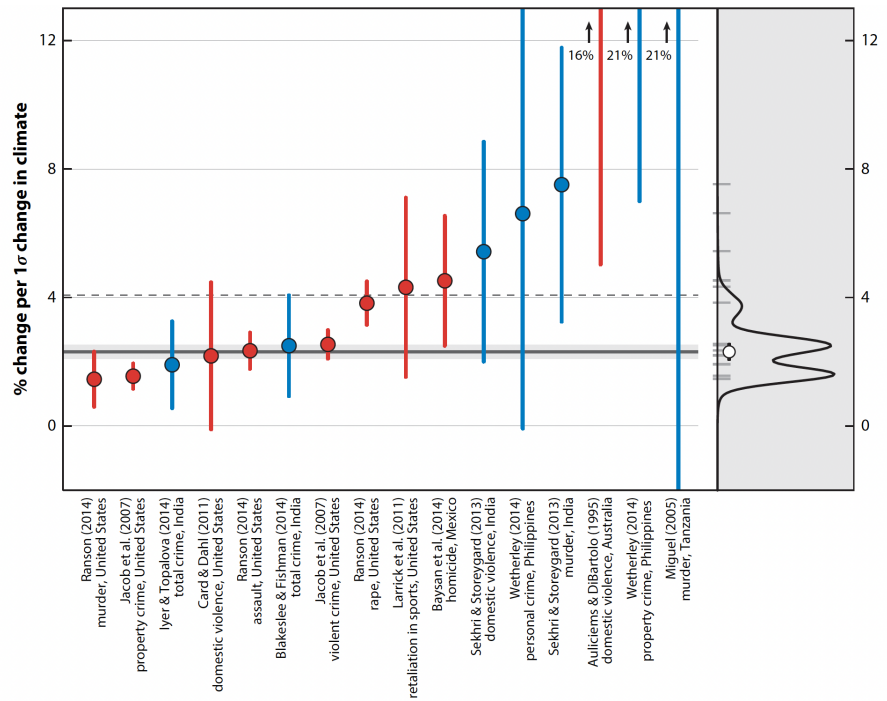
Climate change induces and aggressive response



- Criminal activity and aggression.
- Consistent findings across numerous studies.

Climate change induces and aggressive response

Study	Sample period	Sample region	Time unit	Spatial unit[a]	Independent variable	Dependent variable	Reject $\beta = 0$[b]
Interpersonal conflict (N = 18)							
Anderson et al. (2000)[c]	1950–1997	United States	Year	Country	Temperature	Violent crime	Yes
Auliciems & DiBartolo (1995)[d]	1992	Australia	Week	Municipality	Temperature	Domestic violence	Yes
Baysan et al. (2014)[d,e,f]	1990–2007	Mexico	Month	Province	Temperature	Murder and suicide	Yes (Yes)
Blakeslee & Fishman (2014)[d]	1971–2000	India	Year	District	Rain	Violent and property crime	No[g]
Card & Dahl (2011)[d,f]	1995–2006	United States	Day	Municipality	Temperature	Domestic violence	Yes (Yes)
Cohn & Rotton (1997)[h]	1987–1988	United States	Hours	Municipality	Temperature	Violent crime	Yes
Iyer & Topalova (2014)[d,h]	1971–2010	India	Year	District	Rain	Violent and property crime	Yes

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Jacob et al. (2007)[d,e,f]	1995–2001	United States	Week	Municipality	Temperature	Violent and property crime	Yes (Yes)
Kenrick & MacFarlane (1986)[i]	1985	United States	Day	Site	Temperature	Road rage	Yes
Larrick et al. (2011)[d,f]	1952–2009	United States	Day	Site	Temperature	Violent retaliation	Yes (Yes)
Mares 2013	1990–2009	United States	Month	Municipality	Temperature	Violent crime	Yes
Mehlum et al. (2006)	1835–1861	Germany	Year	Province	Rain	Violent and property crime	Yes
Miguel (2005)[d,e,f]	1992–2002	Tanzania	Year	Municipality	Rain	Murder	Yes (No)
Ranson (2014)[d,e,f]	1960–2009	United States	Month	County	Temperature	Violent crime	Yes (Yes)
Rotton & Cohn (2000)[h]	1994–1995	United States	Hours	Municipality	Temperature	Violent crime	Yes

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Physiological impacts of climate change

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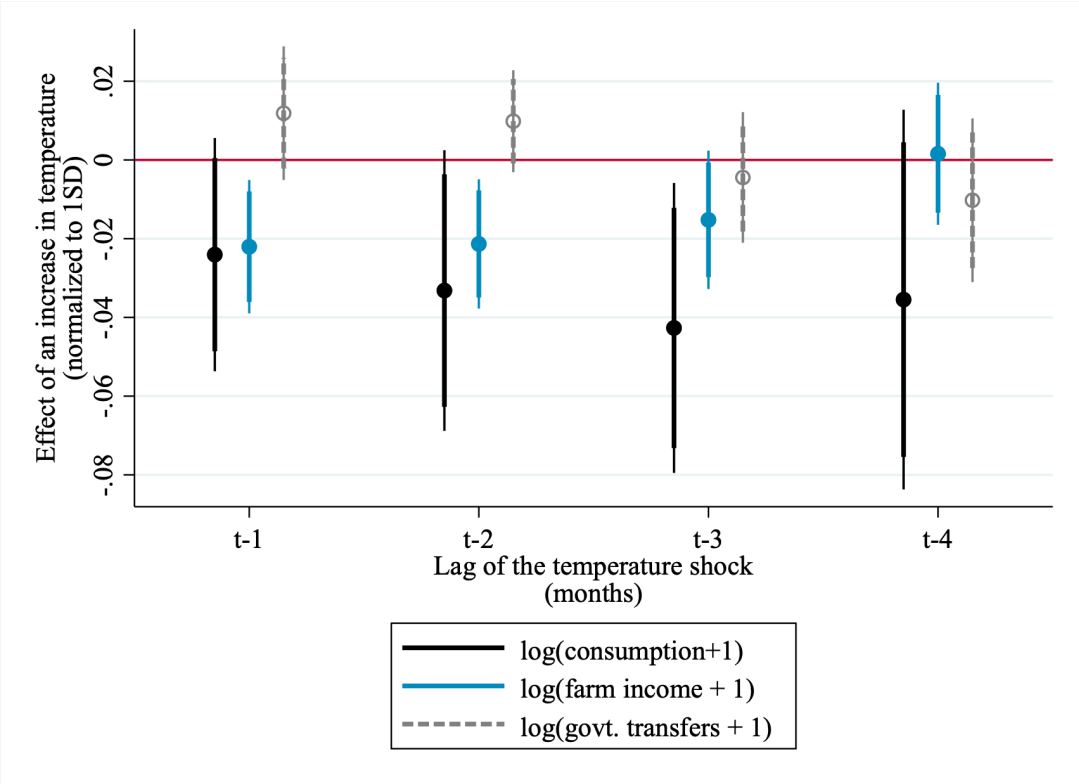
Climate change and the opportunity cost of violence



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- Climate shocks $\Rightarrow \Downarrow$ Wage/(insurgency net benefits).

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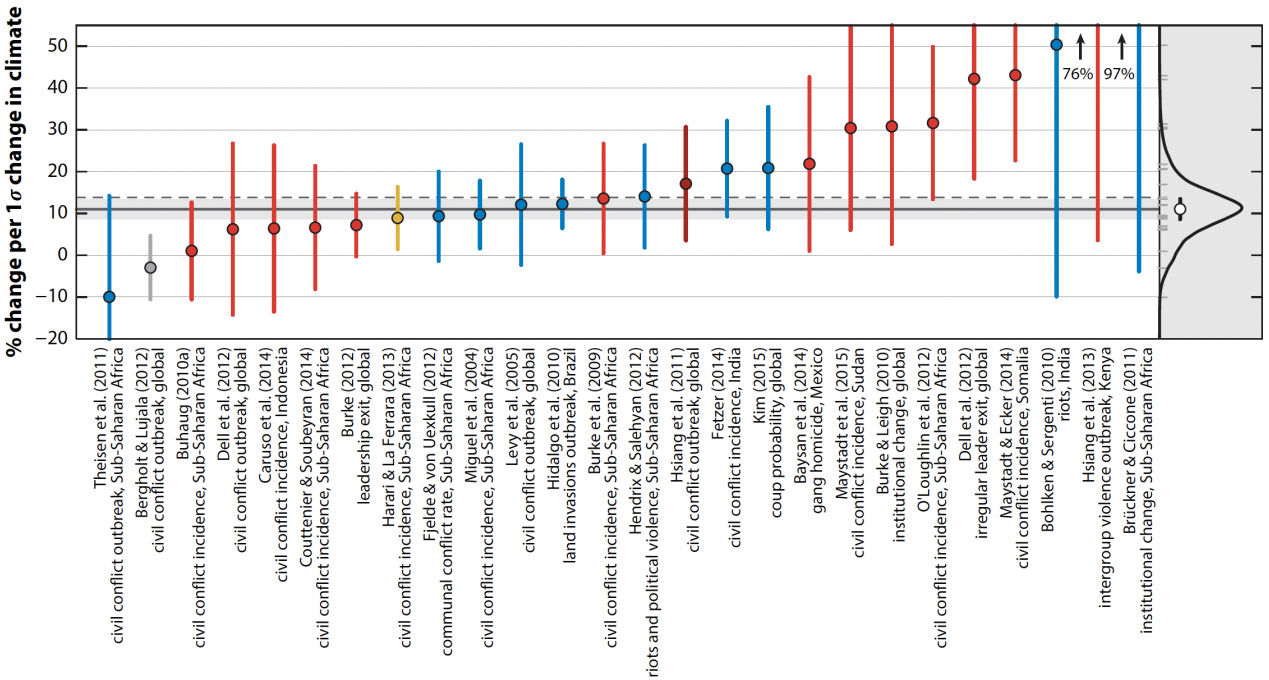

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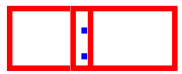
Class exercise: Why do citizens decide to rebel? Can something be done about it?

1. Make groups of 2/3 people.
2. How can governments reduce the likelihood of violence in response to climate change?
3. What is the mechanism connecting economic effect with violence? Can we do something about it?
4. 5 minutes.
   - Feel free to use the Internet.



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2017 Tamil Nadu farmers' protest

Tamil Nadu farmers had for 40 days held protests at Jantar Mantar in Delhi demanding drought relief and farm loan waivers from the central government. Photo: Reuters

- Karnataka declined to release water from the Cauvery River.
- Farmers expressed discontent with government response.
- Economic losses/inadequate compensation, sparked protests.
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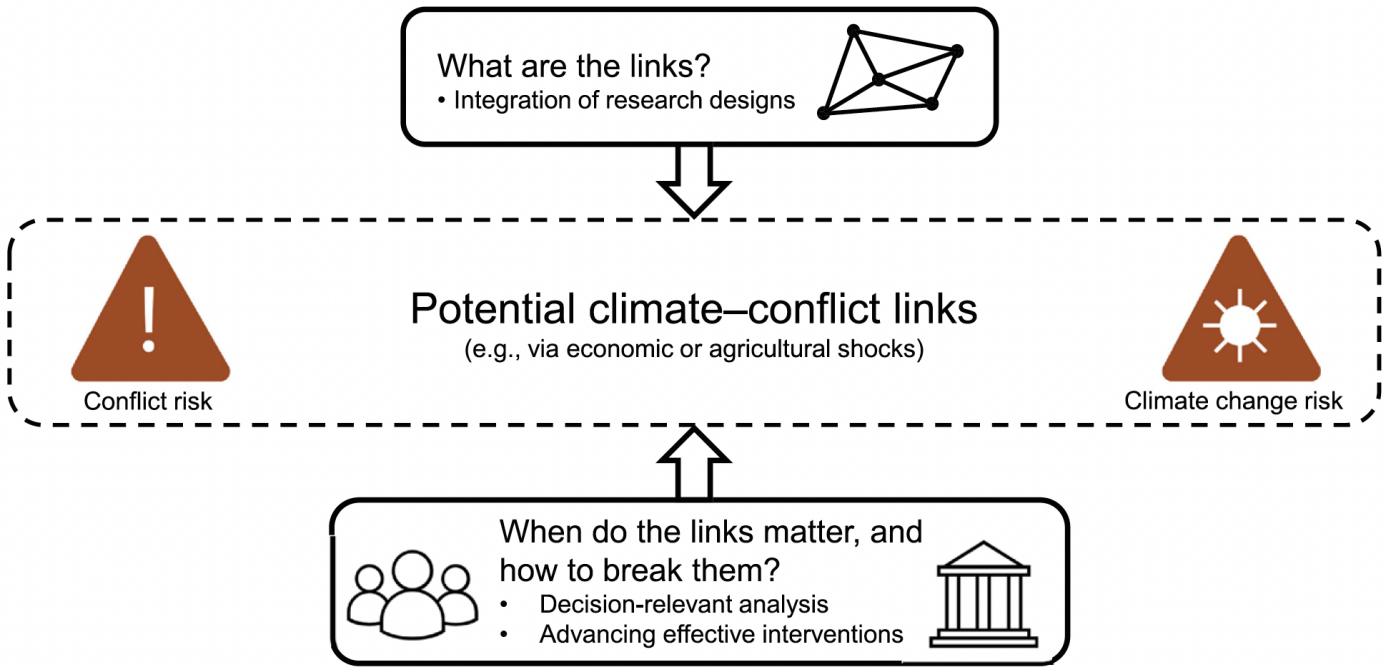
Climate change, cooperation and grievances



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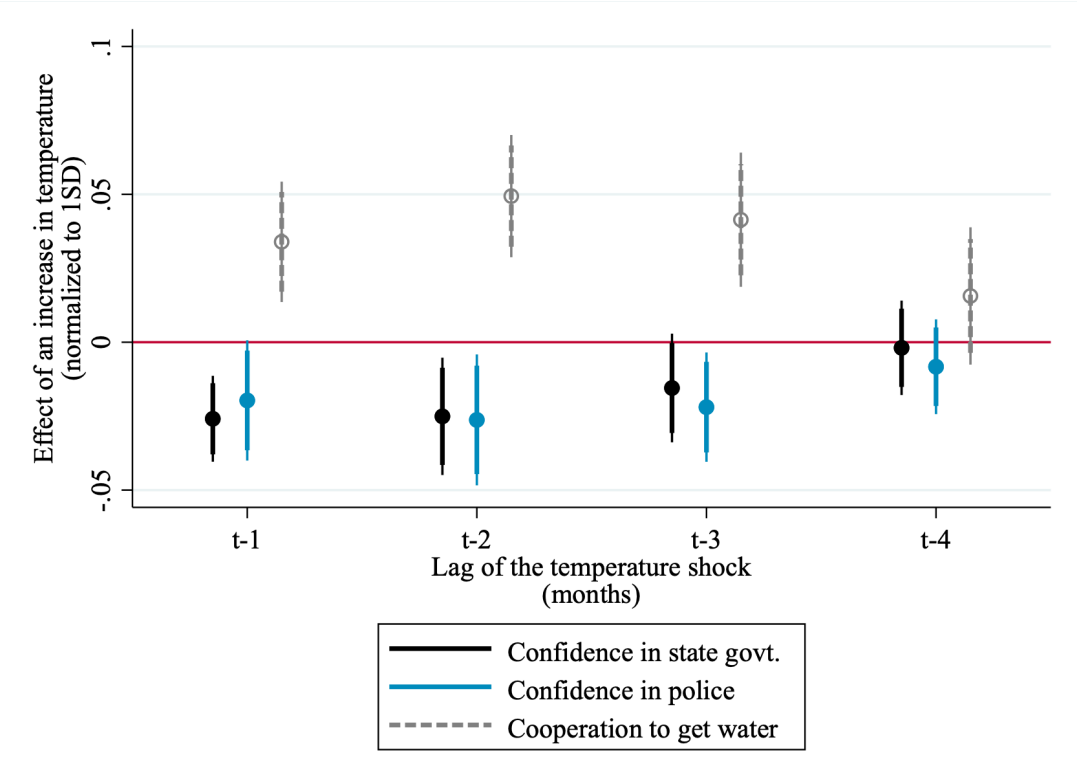

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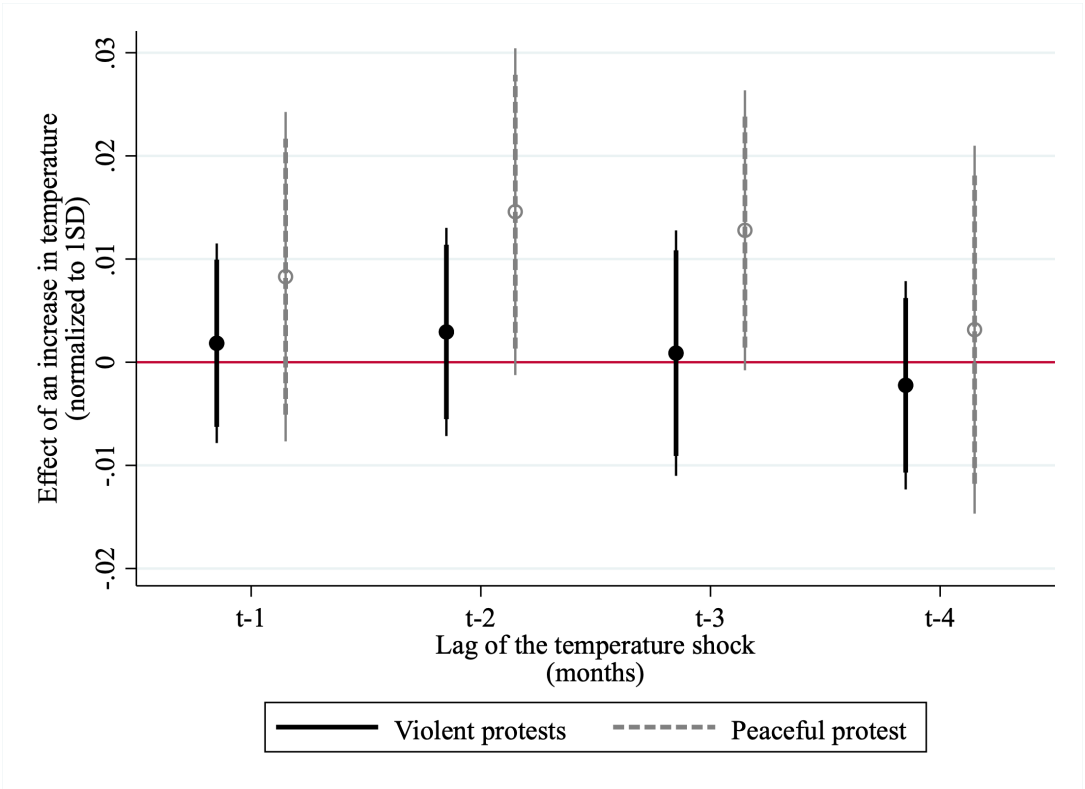

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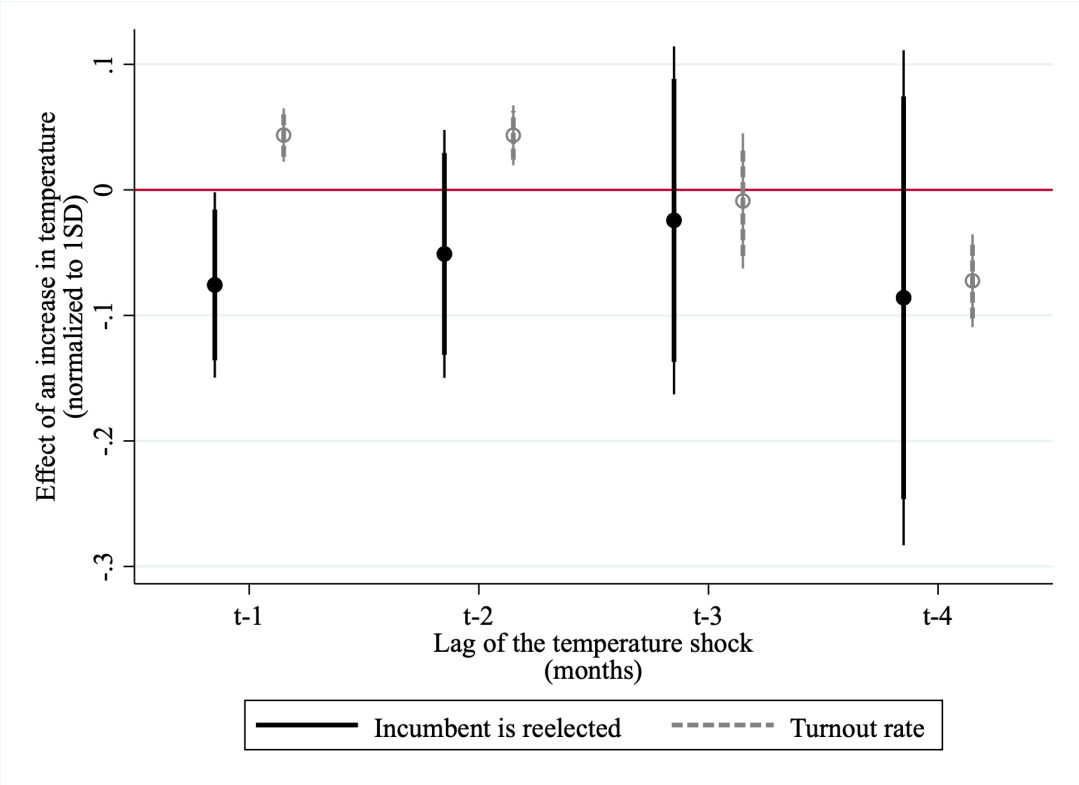

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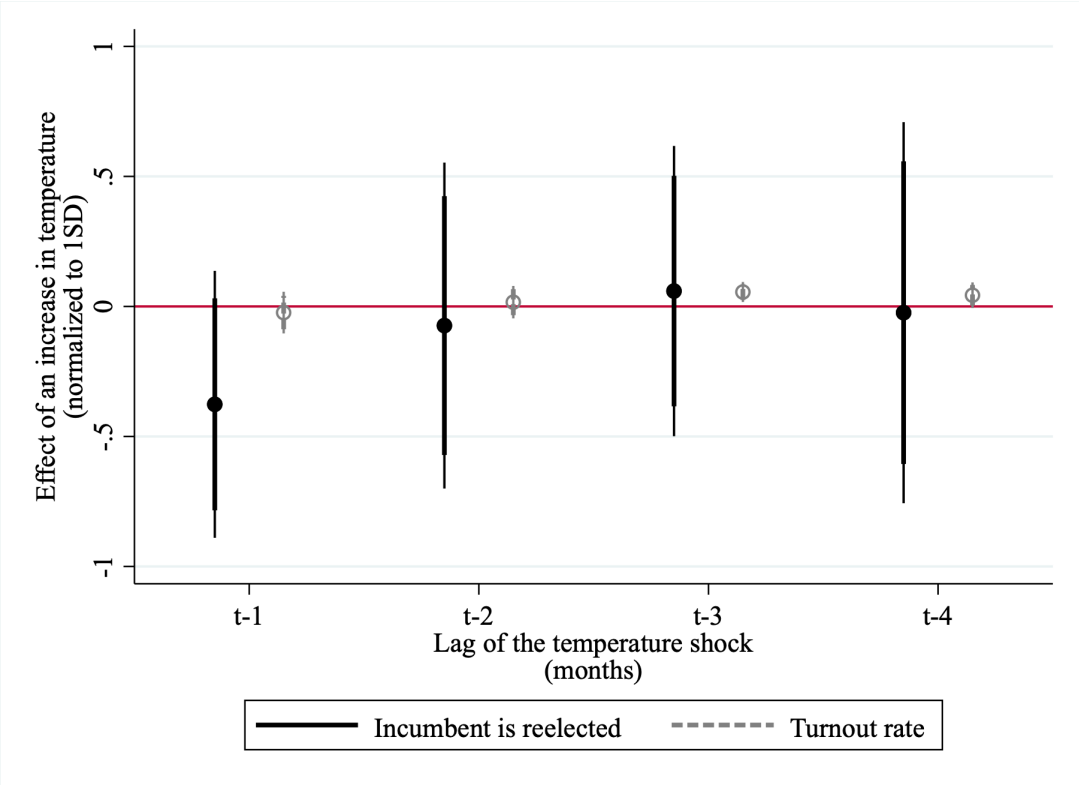

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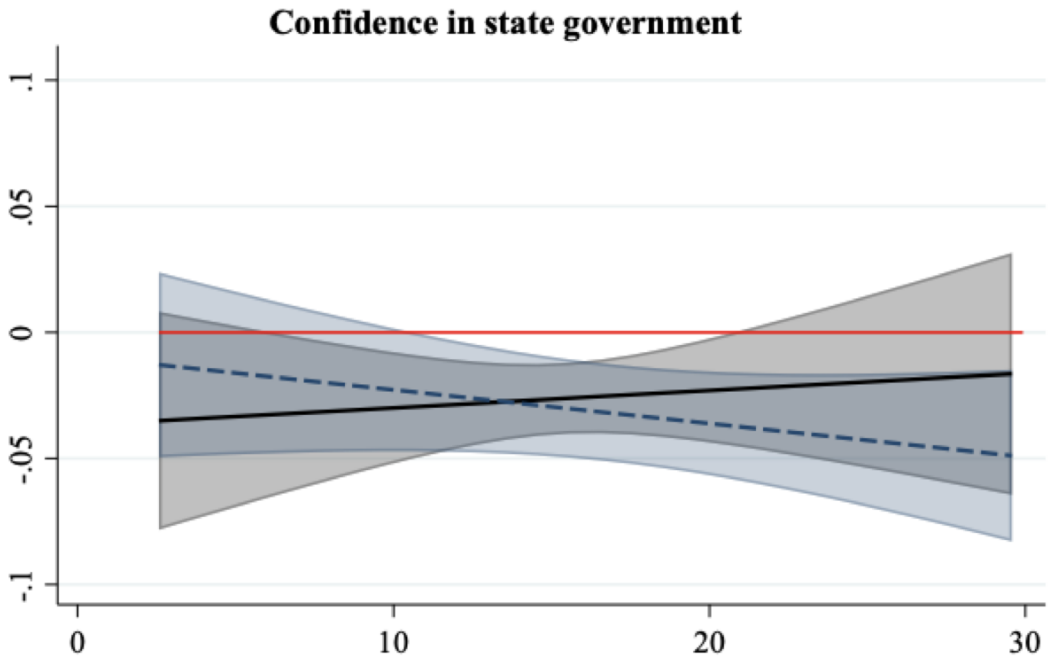
Governments face constraints to address the issue



- Lack of ex-ante climate preparedness/ex-post climate relief.
- Governments face capacity constraints (e.g., legibility).
- Rational to not provide relief to certain areas (not threatening).
- Other mechanisms may exist.

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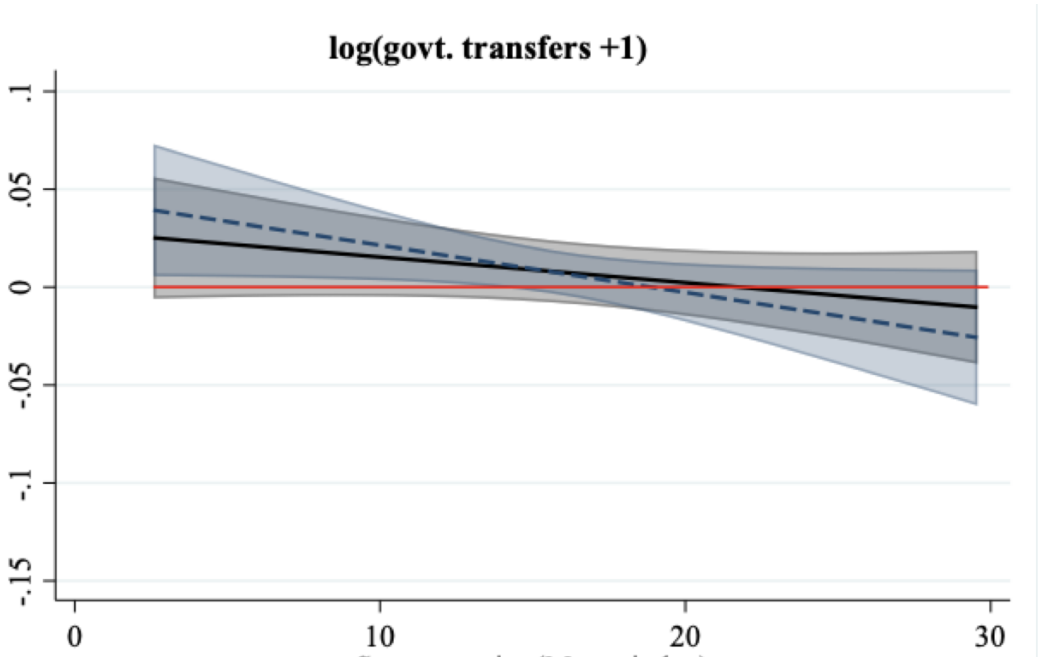

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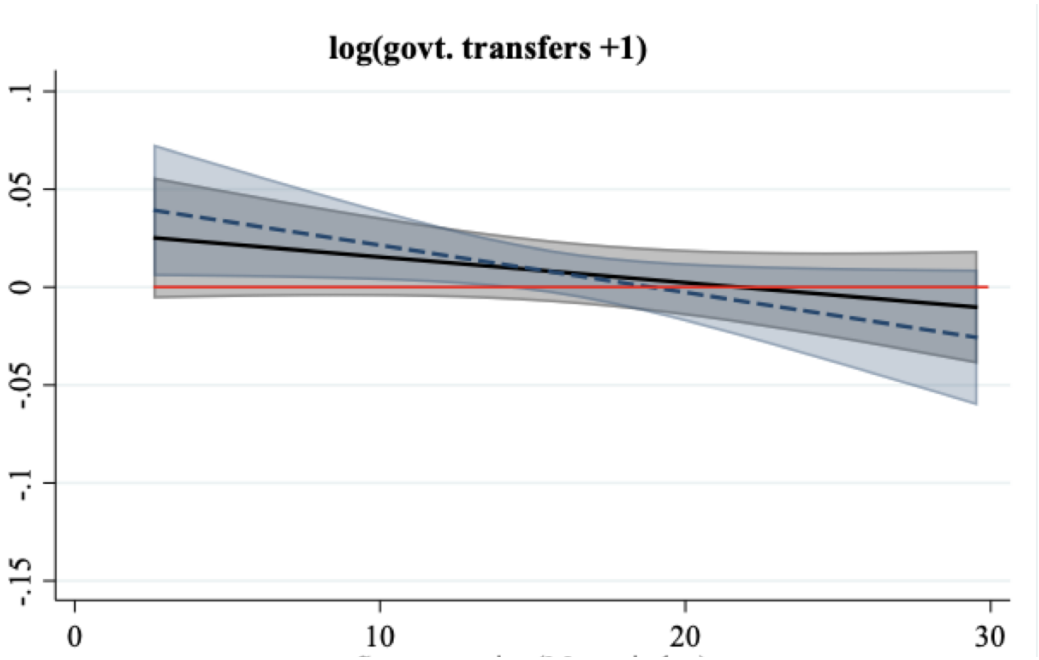

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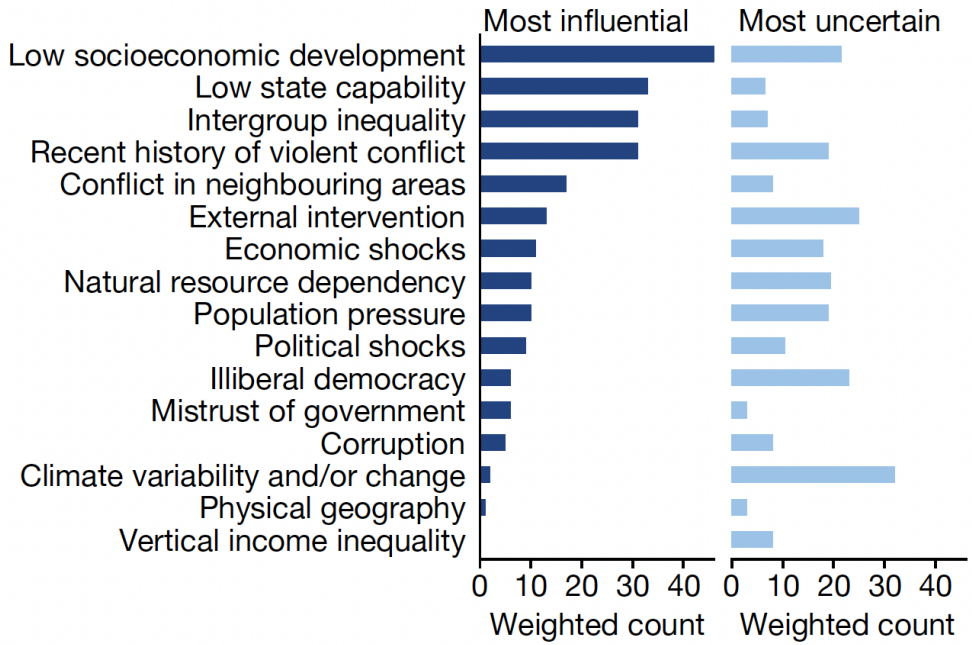

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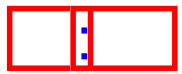
Class exercise: How can we increase state capacity? Is it enough?

1. Make groups of 2/3 people.
2. What options do we have to help countries increase state capacity? Is this incentive compatible?
3. Is state capacity enough to address reduce opportunity cost/grievances as a result of climate change?
4. 5 minutes.
   - Feel free to use the Internet.



Next class...

Climate change generates climate migrants and this is problematic!