



## Adapting to the uncertain

*Local administrations adapting to climate change  
through integrative and segregative institutions*

**Matteo Roggero**

Humboldt Universität zu Berlin  
Resource Economics Group

**Andreas Thiel**

Kassel University  
Department of Development Economics

## Theory



### Starting point

•Governance forms follow the attributes of the transaction:

- Complex System -> Integrative Institutions
- Simple System -> Segregative Institutions

(Hagedorn 2008, see also: Williamson 1985,  
Baldwin 2007, Thiel et al. 2012, Roggero 2015)

### Research question

- Complex System + CC -> ???
- Simple System + CC -> ???

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# (Set) Methods



## Sufficient conditions

	Only Y	Both X & Y
Outcome Y	<b>YES</b>	<b>YES</b>
	Neither X nor Y	Only X
	<b>YES</b>	<b>NO</b>
	Condition X	

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# (Set) Methods



## Necessary conditions

	Only Y	Both X & Y
Outcome Y	<b>NO</b>	<b>YES</b>
	Neither X nor Y	Only X
	<b>YES</b>	<b>YES</b>
	Condition X	

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# Empirics



- 19 case studies of local administrations in Germany
- 6 (of 22) descriptors
  - Formal/informal coordination structures
  - Actual vulnerability
  - Need to adapt
  - 2 types of adaptation process

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## Results 1/2



		"Integrative Institutions * Need2Adapt_Projected"	
		No	Yes
"Fine_Tuning"	Yes	LocAdm_06 LocAdm_10 LocAdm_11 LocAdm_15	LocAdm_03 LocAdm_04 LocAdm_05 LocAdm_09 LocAdm_14 LocAdm_18 LocAdm_19
	No	LocAdm_01 LocAdm_02 LocAdm_08 LocAdm_12 LocAdm_13 LocAdm_17	LocAdm_07 LocAdm_16

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**Table 3: "Integrative Institutions \* Need2Adapt\_ACTUAL" vs. "Fine\_Tuning"**

## Results 2/2



		"Vulnerability_ACTUAL * Need2Adapt_Projected"	
		No	Yes
"Ongoing_Process"	Yes	YES	YES LocAdm_02 LocAdm_11 LocAdm_12
	No	YES LocAdm_06 LocAdm_08 LocAdm_10 LocAdm_13	NO LocAdm_17

**Table 6: "Vulnerability\_ACTUAL \* Need2Adapt\_Projected" vs. "Ongoing\_Process". Since this analysis addresses segregative institutions only, the two-by-two matrix features only those eight local administrations characterized by segregative institutions.**

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## Conclusions



### Academia

- Institutions "adapt" and become integrative in a reactive way.
- Local administrations vary -> discussions on the "appropriate" level of adaptation maybe misleading.

### Practitioners

- "Preaching the converted" problem.

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Thank you!



[matteo.roggero@hu-berlin.de](mailto:matteo.roggero@hu-berlin.de)

This research was Funded by the German Ministry for Education and Research, grant no. 01LA1137