

Collaboratory for Research on Global Projects
at Stanford University



“Site fights”: Opposition to oil and gas pipeline projects in the developing world

Collaboratory for Research on Global
Projects

December 4, 2008



Project funded by Presidential Fund for Innovation,
Freeman Spogli Institute for International Studies

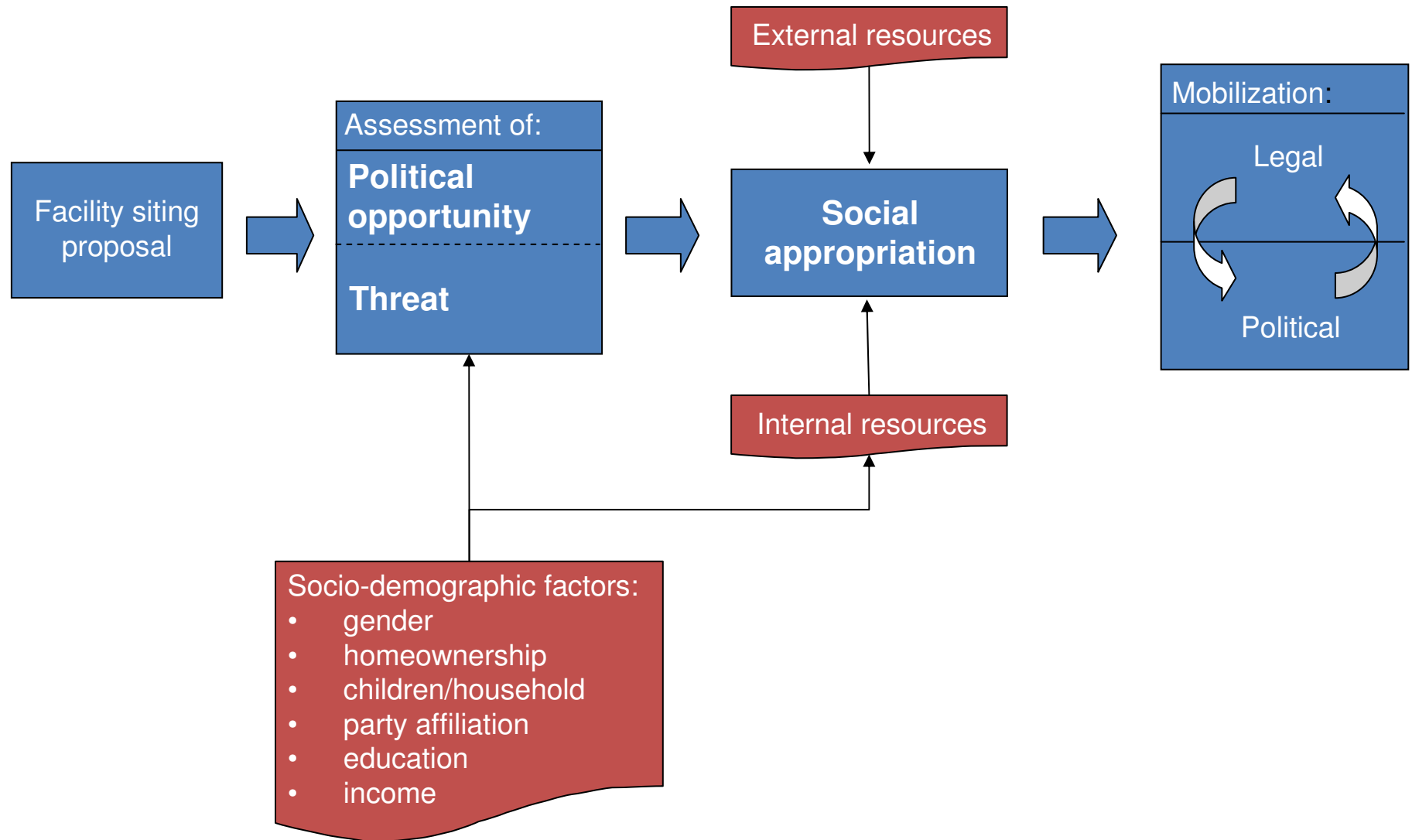
Agenda

- Research question
- Theory
- Oil and gas pipeline projects
- Fuzzy set/Qualitative Comparative Analysis (fs/QCA) method
- Results

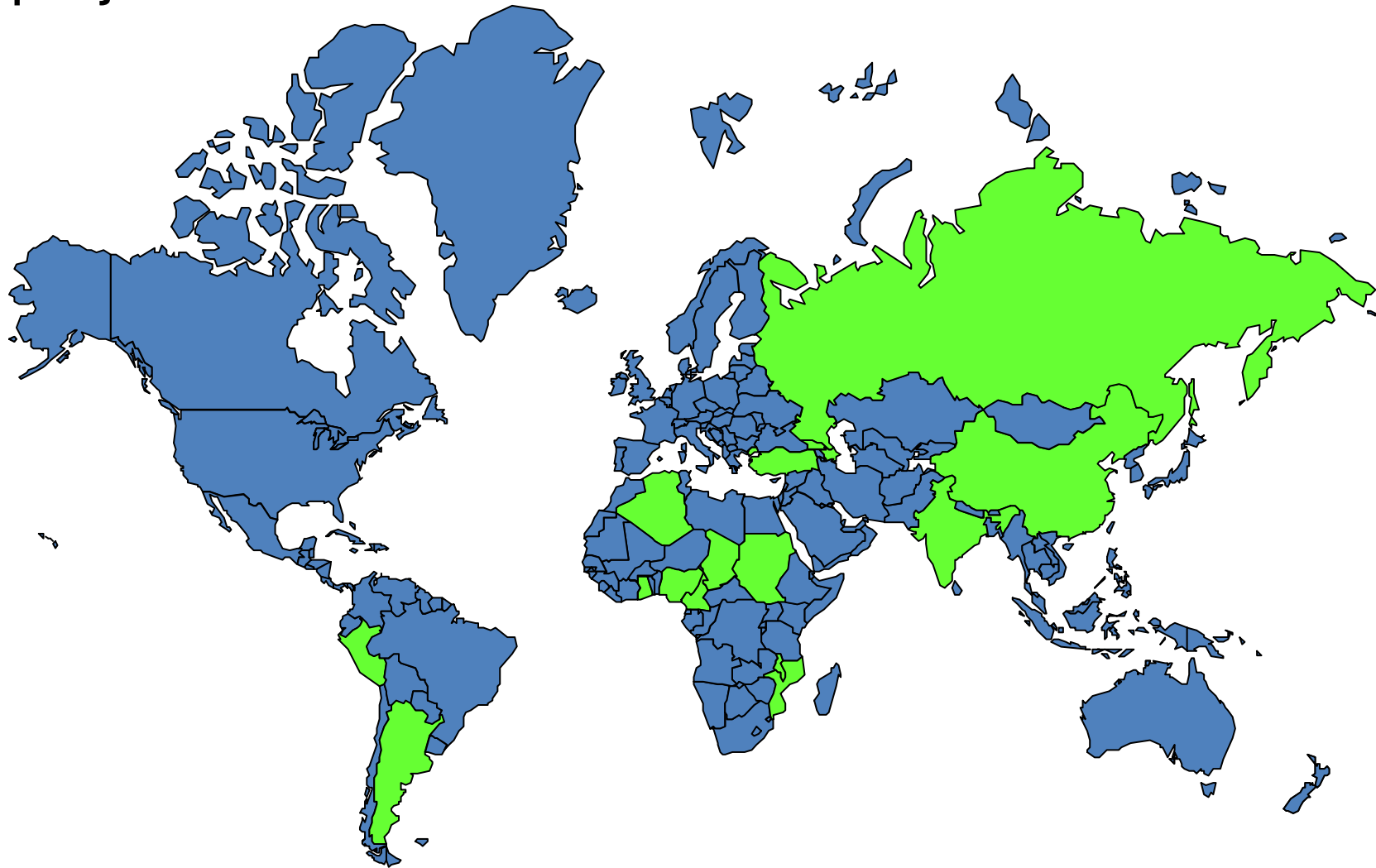
Research question

What factors shape opposition to oil and gas pipeline projects in the developing world?

Theory – Social movements, facility siting



11 projects across 16 countries



- BTC (Azerbaijan – Georgia – Turkey)
- Camisea (Peru)
- Chad-Cameroon
- Haoud El Hamra to Arzew Oil - OZ2 (Algeria)
- Khartoum Refinery to Port Sudan (Sudan)
- Manmad to Indore (India)
- Nacala to Liwonde (Malawi – Mozambique)
- Patagonia (Argentina)
- Sakhalin-II (Russia)
- West African Gas (Nigeria – Ghana)
- West-East China

fs/QCA allows research in a middle-N range of cases

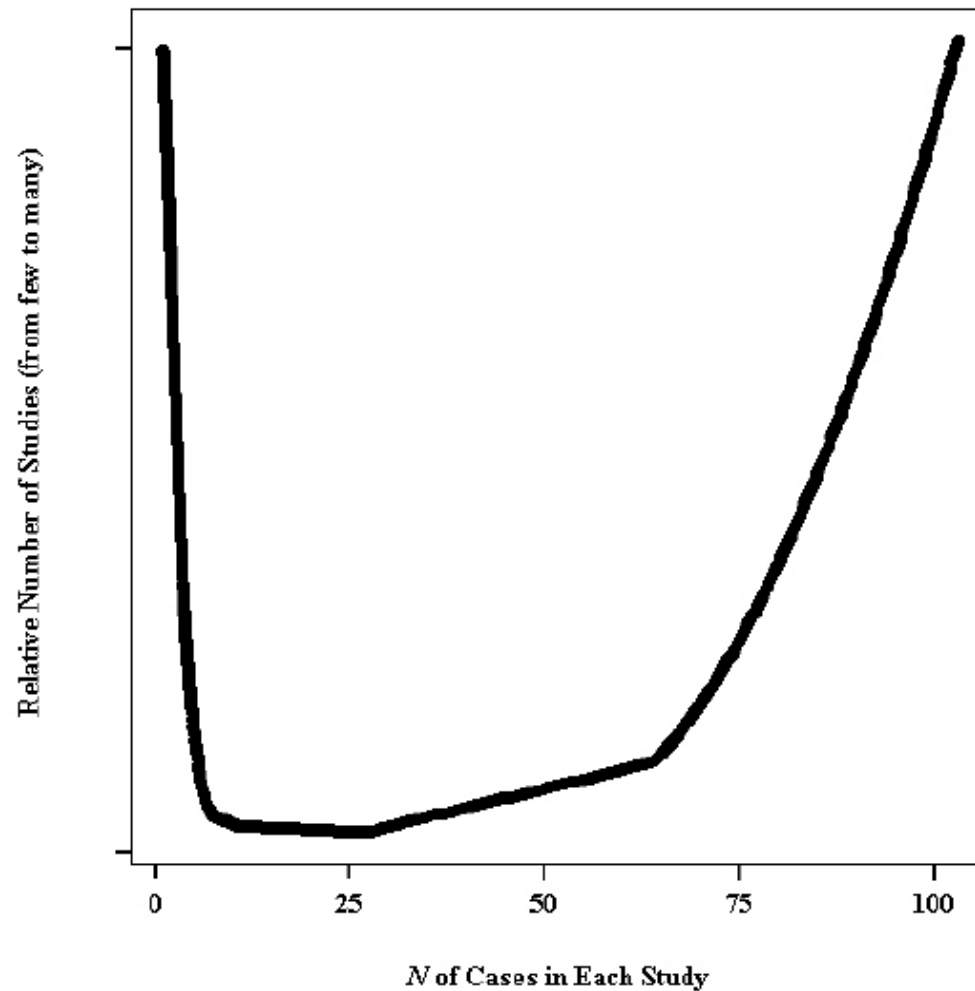
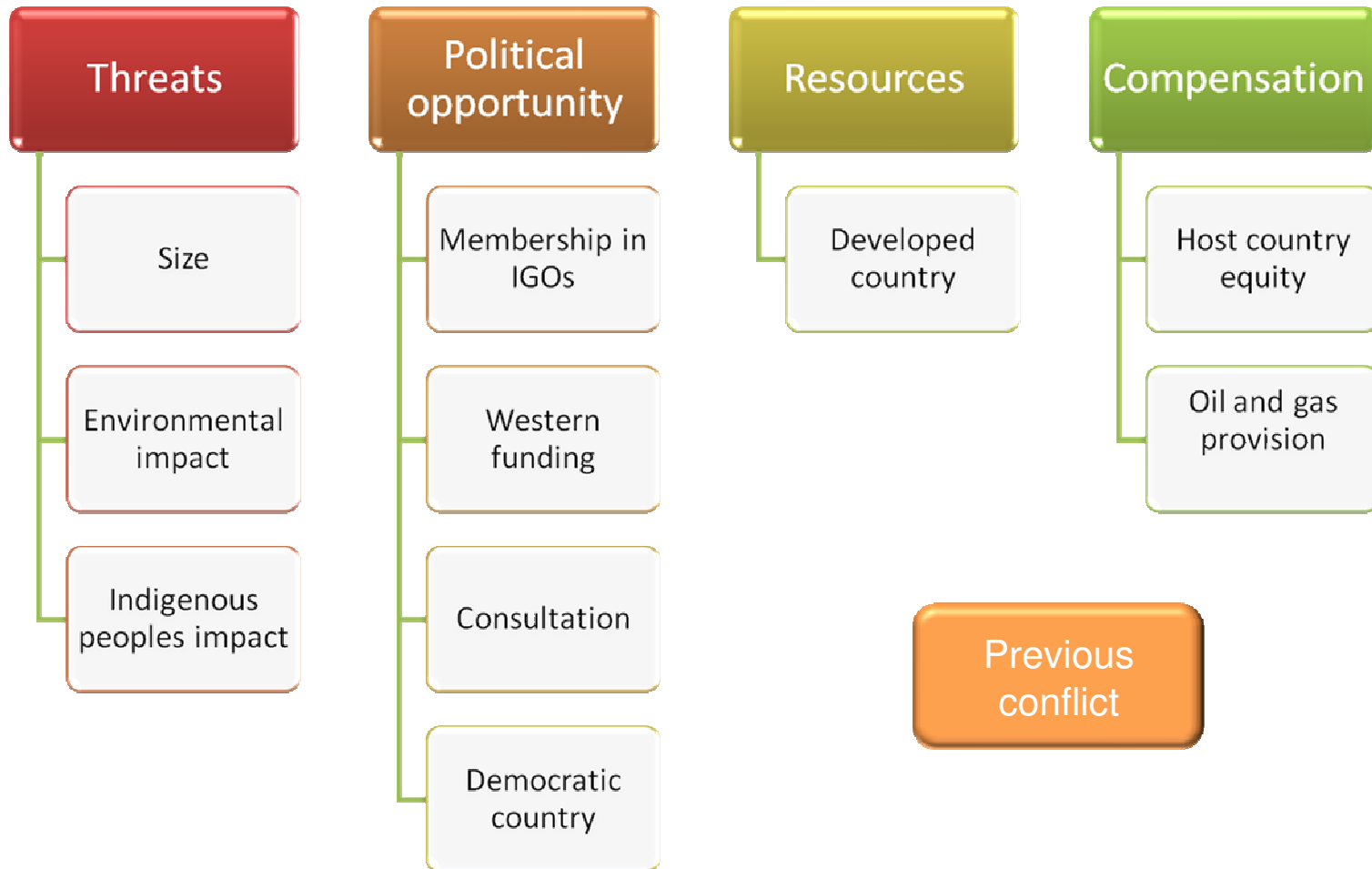


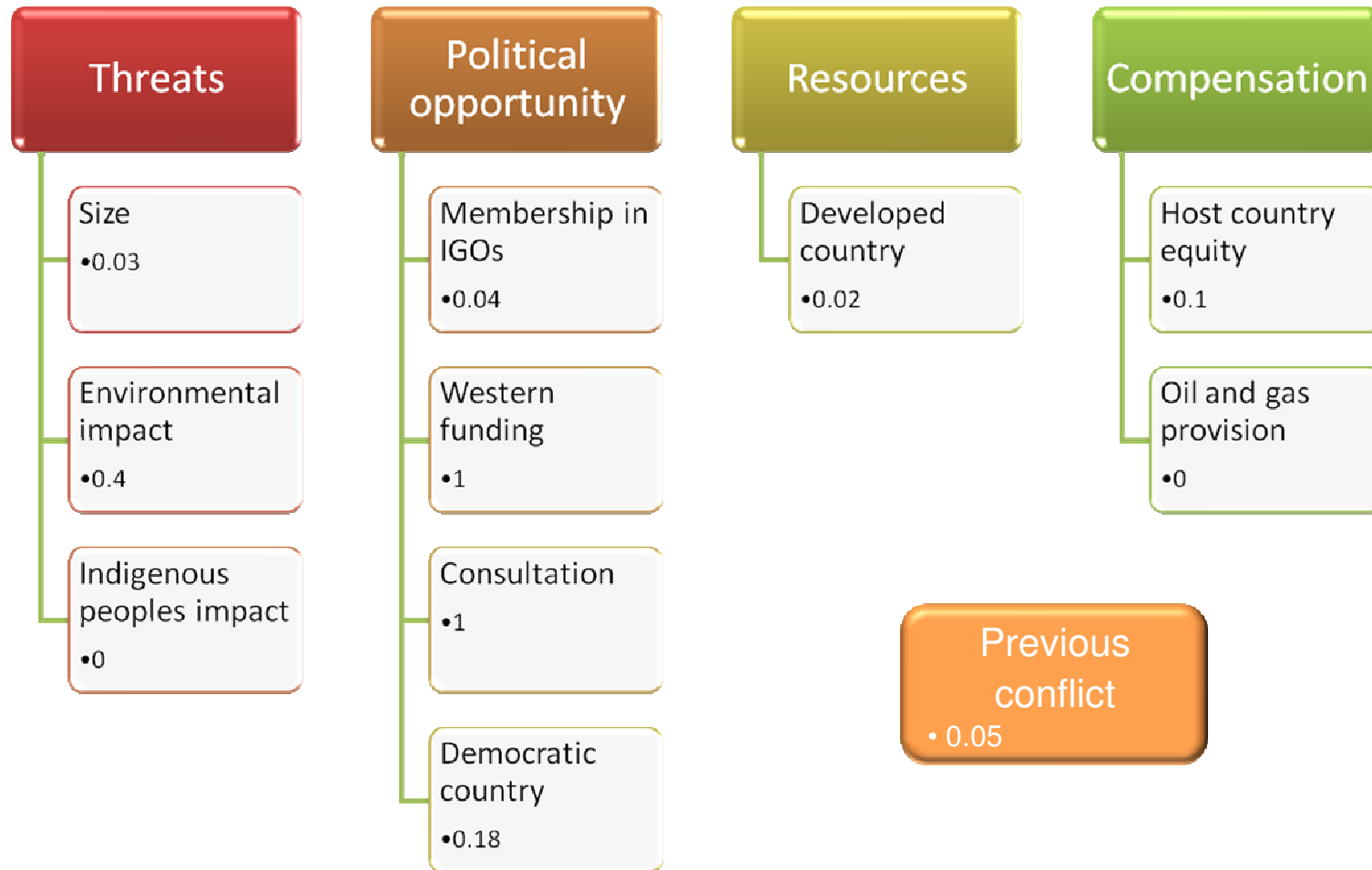
Figure 1.1 Plot of Relative Number of Studies against *N* of Cases in Each Study

Causal conditions





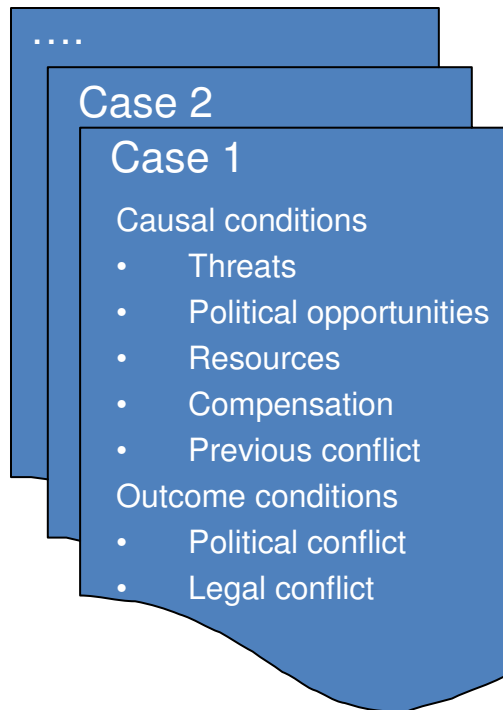
Causal conditions - Chad



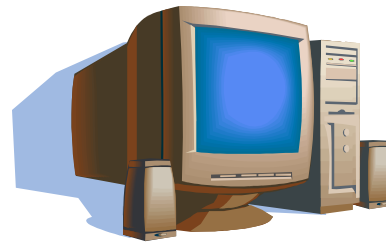
Outcome conditions

Political Conflict	
0	No evidence
0.2	Evidence of opposition groups
0.4	Few peaceful strikes/rallies/demonstrations (<5)
0.6	Moderate number of peaceful strikes/rallies/demonstrations (5-14) and/or a few arrests, injuries (<5)
0.8	Moderate number of strikes/rallies/demonstrations (5-14) with more arrests, injuries (>5) and damage to project OR Many peaceful strikes/rallies/demonstrations (>15) with significant attendance
1.0	Deaths as a result of activities

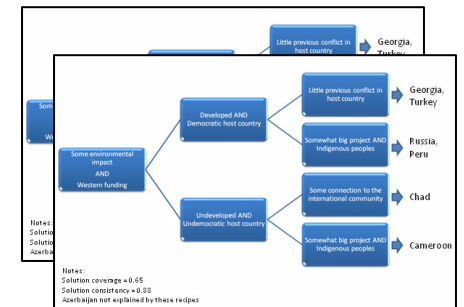
fs/QCA methodology overview



- Code each case individually across both causal and outcome conditions



- Enter all cases and scores in fs/QCA software



- Analyze for key “recipes” that explain outcomes of the cases

Results

- Political conflict
- Legal conflict
- Political and legal conflict

Political conflict - necessary conditions

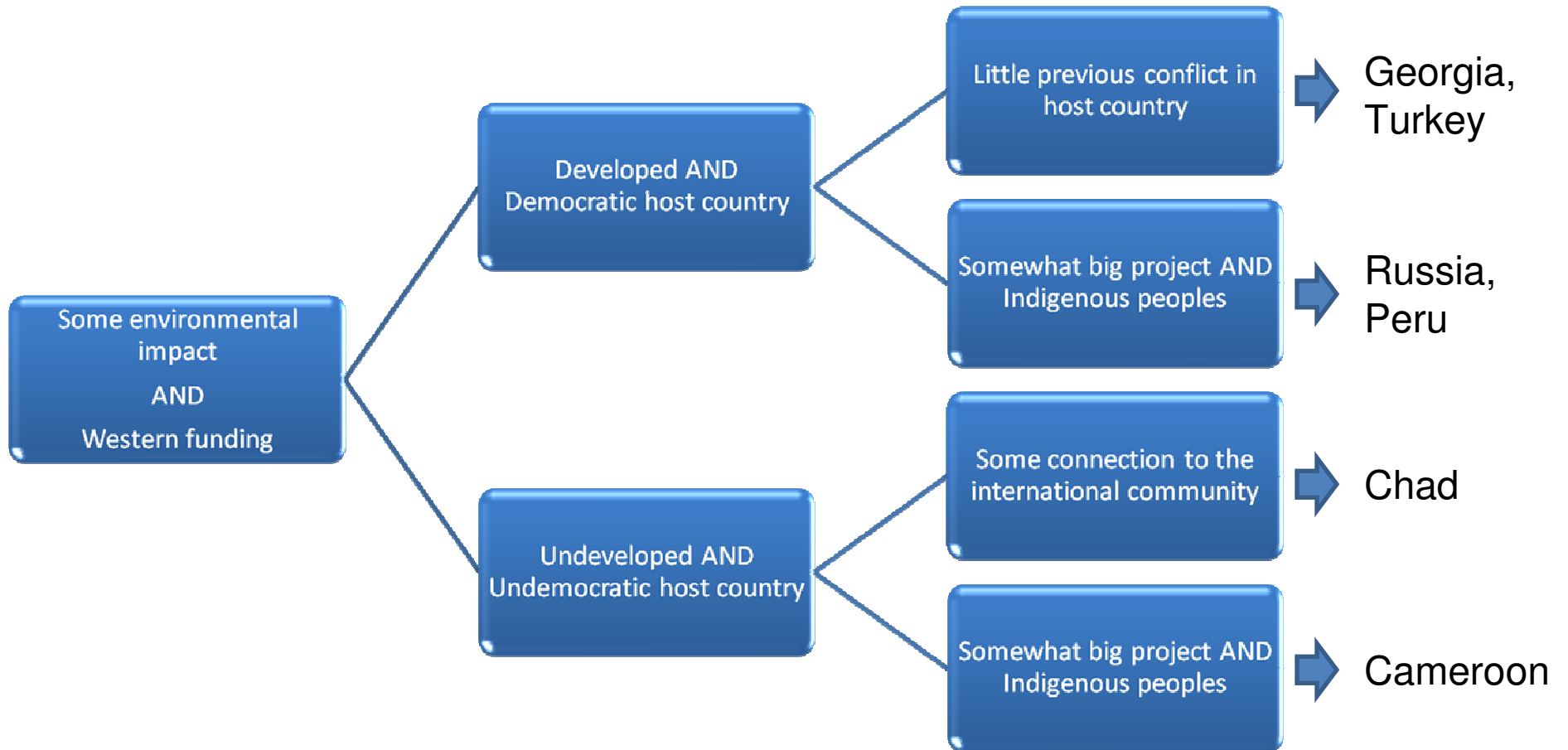
Little provision of oil and gas to host country

Insignificant role for the host country as an equity partner

Significant amount of proactive consultation

- *2 compensation* conditions; *1 opportunity* condition
- Relevant to the sufficiency recipes
- Generally shared by instances of the outcome

Political conflict – sufficient conditions



Notes:

Solution coverage = 0.65

Solution consistency = 0.88

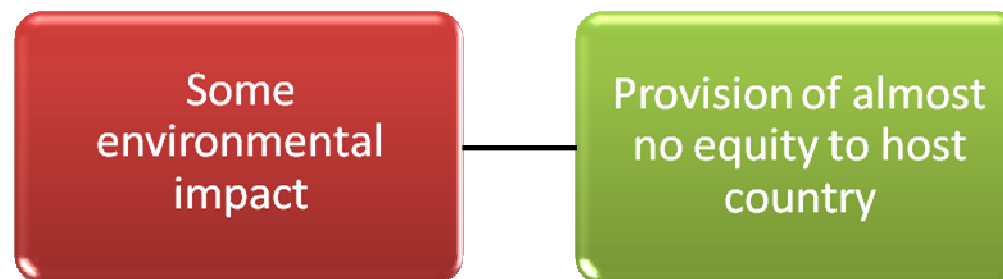
Azerbaijan not explained by these recipes

Legal conflict

- Necessary conditions



- Sufficient recipe



Notes:

Solution coverage = 0.58

Solution consistency = 0.92

Azerbaijan, Nigeria, China not explained by this recipe

Political *and* legal conflict

- Necessary conditions



- Sufficient recipe



Notes:

Solution coverage = 0.40

Solution consistency = 0.90

Georgia and Turkey not explained by this recipe

Key drivers of opposition

- Marginal role played by previous conflict and resource conditions
- Lack of compensation important in generating conflict
- Public consultation as political opportunity for conflict, not deterrent
- Political opportunities necessary; threats sufficient