Outbidding as Deterrence: Endogenous Demands in the Shadow of Group Competition

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Outbidding literature: groups use violence for recruitment and fundraising

Common claim: more groups $\Rightarrow$ more violence

Number of groups is becoming a common independent variable of interest/control in empirical papers (Chenoweth 2010; Clauset et al 2010; Findley and Young 2012; Stanton 2013; Nemeth 2014; Fortna 2015; Jaeger et al 2015; Conrad and Greene 2015)

Results are mixed

Issue: if more groups imply more violence, shouldn't this deter targets?

Which effect dominates: deterrence or competition?

It depends on the rate at which increasing policy demands increases the number of individuals wishing to join

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$\Rightarrow$ Yes, this is a paper about second derivatives!

Nonmonotonicities can result

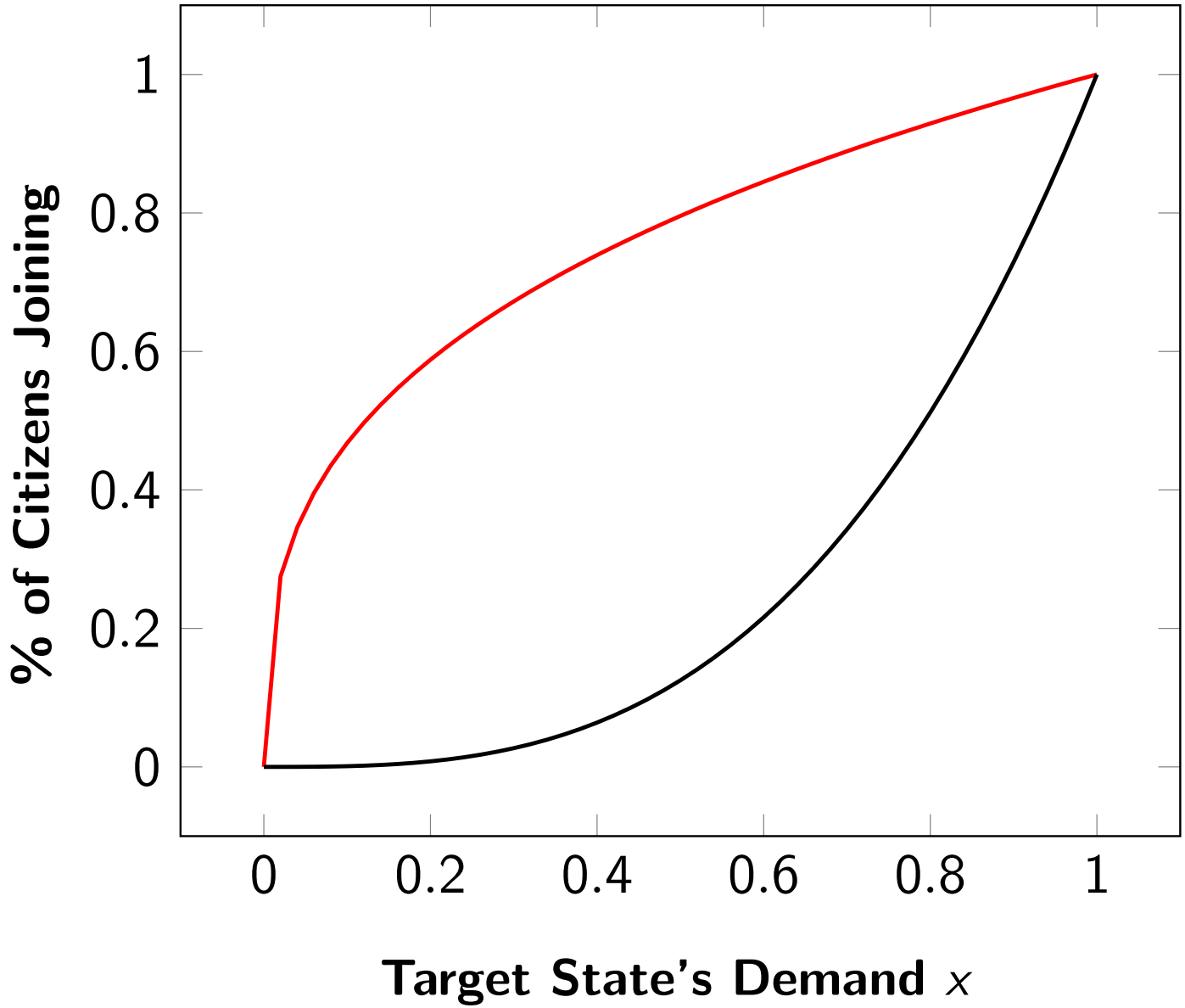
1) Target state/government makes a policy demand $x \in [0, 1]$

2) $n \geq 2$ groups each choose a level of violence $v_i \geq 0$

3) Unit mass of citizens decide whether to join a group

Citizens have unique payoff functions

Increasing policy demands increases utility of joining for everyone


% of Citizens Joining
1
0.8
0.6
0.4
0.2
0
0
0.2
0.4
0.6
0.8
1
Target State's Demand x

Suppose that citizens choose groups according to a contest success function, i.e., Group i captures $\frac{v_i}{v_1+...+v_n}$ portion of the individuals

Producing violence is costly

$F(x)\frac{v_i}{v_1+...+v_n} - v_i$, where $F(x)$ maps demand to portion of citizens who join

Target wants more of the policy but does not like violence or individuals joining an organization

$x - \alpha \left[\sum_{i=1}^{n} v_i + F(x)\right]$, where $\alpha > 0$ is a scalar

Endogenous Outbidding

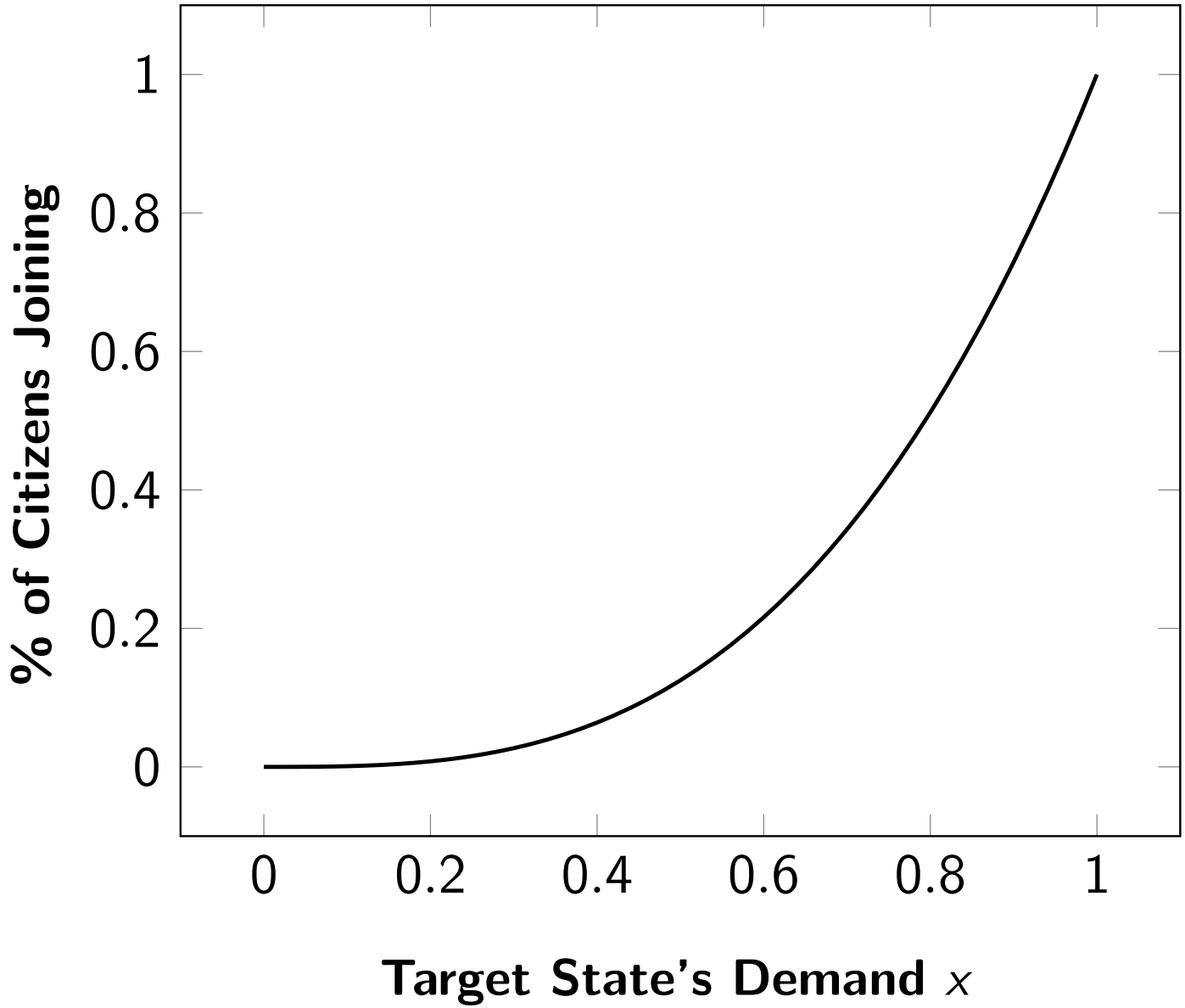
Holding fixed the target's policy demand, violence is increasing in the number of competing groups

More Pie, More Violence

Violence is increasing in the policy demand

Convex Cases

When the function mapping policy demands to switch points is sufficiently convex, violence is increasing in the number of groups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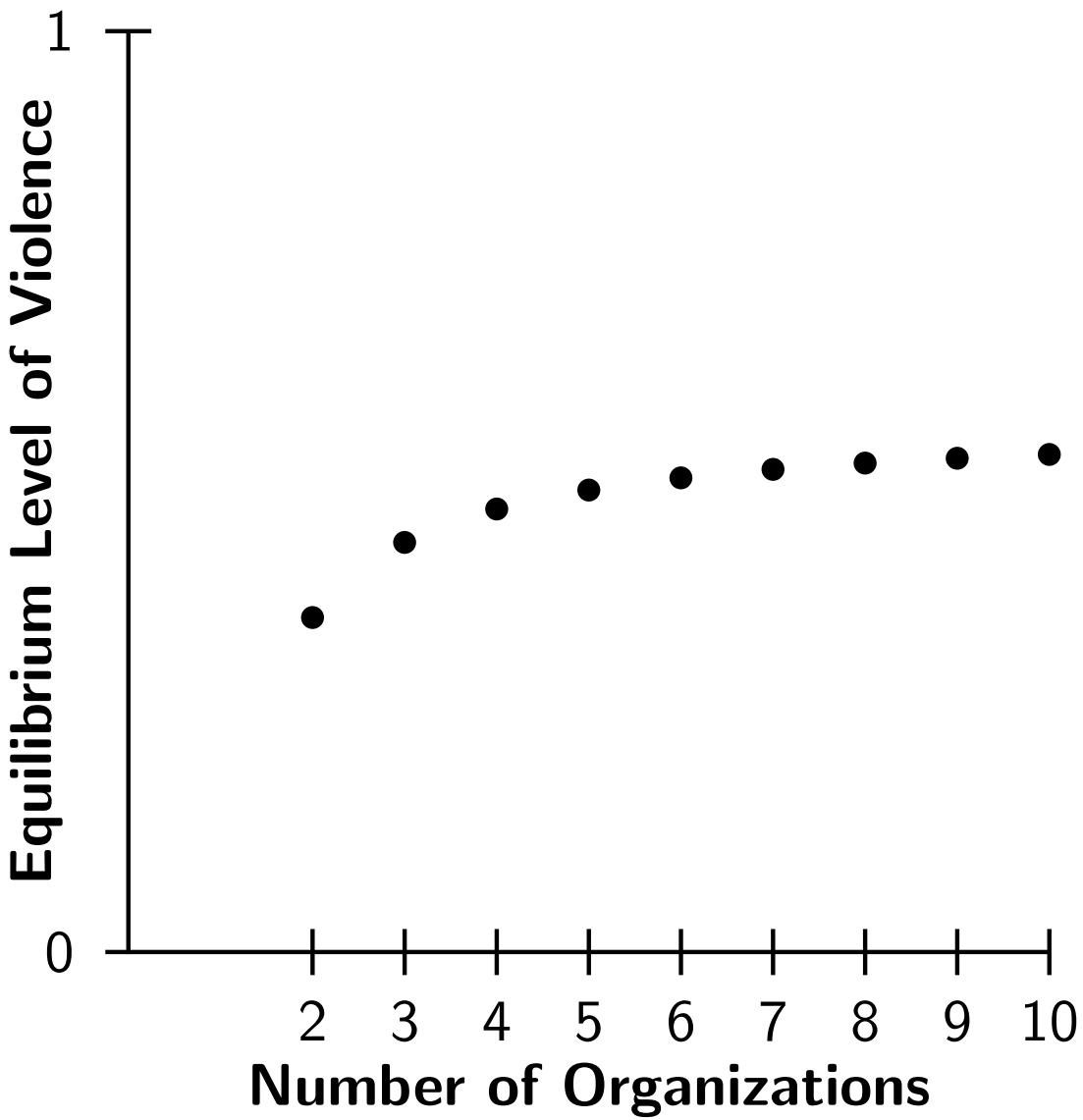
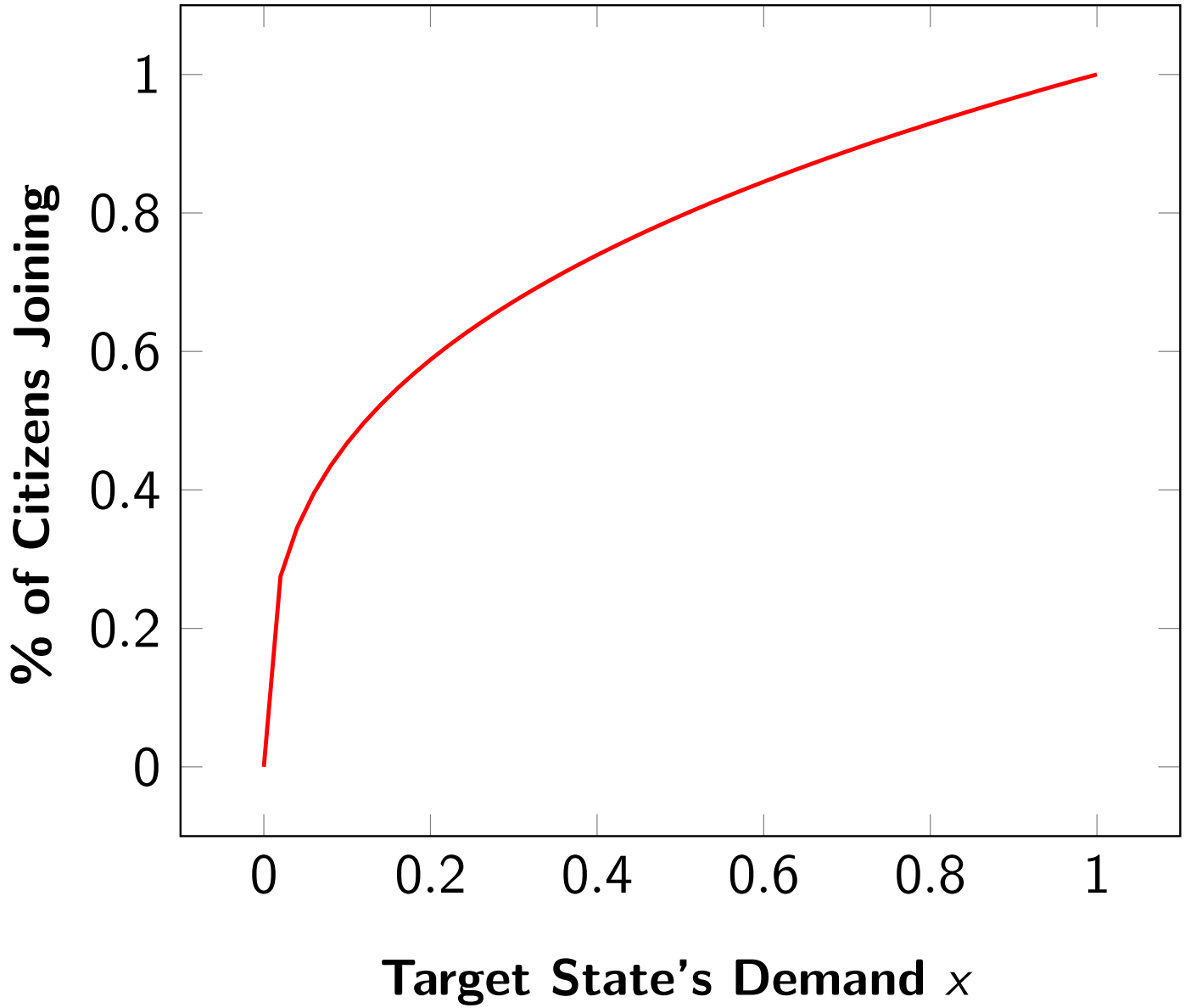
Target State's Demand x


1
0
Equilibrium Level of Violence
2
3
4
5
6
7
8
9
10
Number of Organizations

Concave Cases

When the function mapping policy demands to switch points is concave, the relationship between violence and number of groups is nonmonotonic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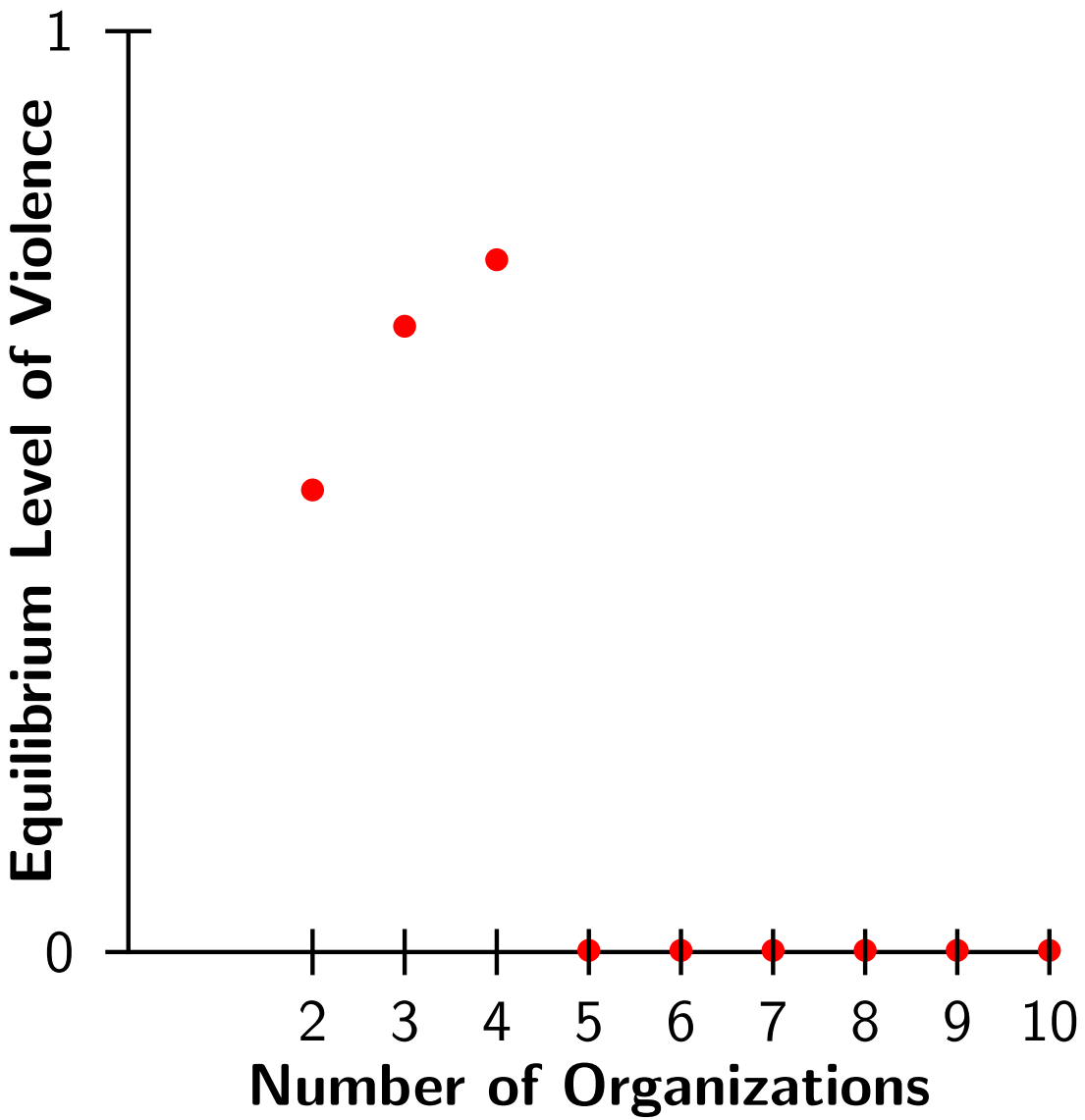
Target State's Demand x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More groups does not imply more violence

Two solutions:

1. Control for the shape of the citizen volunteer function
2. Find exogenous policy demands

Unclear what group number controls for; mixed empirical results are unsurprising

Thanks!

williamspaniel.com/papers