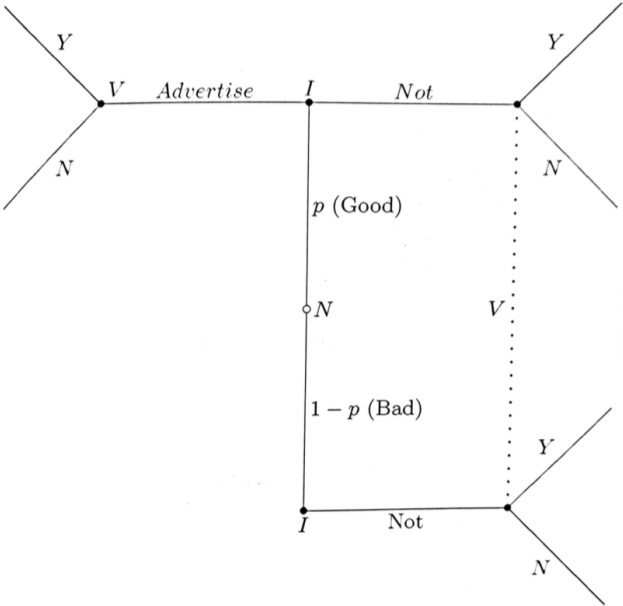


Formal Analysis: Special interest politics

Andy Eggers

Simple signaling game

Game form



Voter

The voter values:

- ▶ electing a good type
- ▶ electing a politician who is not encumbered by promises to special interests

Voter payoffs:

- ▶ $\frac{1}{2}\theta$ from electing the challenger
- ▶ $\theta - a\phi$ from electing a good incumbent
- ▶ $-a\phi$ from electing a bad incumbent where $a \in \{0, 1\}$ indicates whether the candidate advertised

Also, voter's payoff from electing the challenger augmented by $\epsilon \sim F(\epsilon)$, which is “strictly increasing on the real number line”

Incumbent

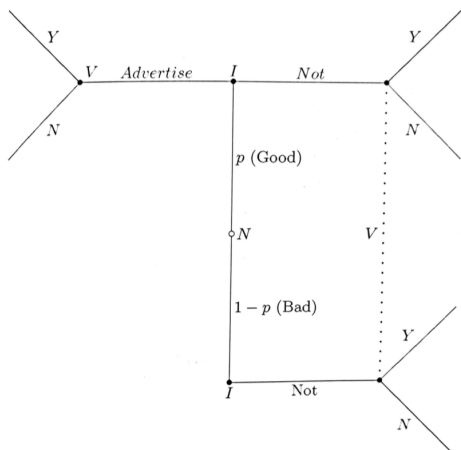
- ▶ knows own type
- ▶ faces a choice of whether to advertise or not
- ▶ wants to be elected
- ▶ does not want to advertise (all else equal).

Separating and pooling equilibria

What is a **separating equilibrium** in this context?

What is a **pooling equilibrium** in this context?

Let's work out conditions for separating equilibrium.



Process

- ▶ Denote by $\mu(a)$ the probability that the incumbent is good as a function of the advertising decision $a \in \{0, 1\}$.
- ▶ Write down the conditions under which the voter votes for the incumbent rather than the challenger in separating equilibrium
- ▶ (Check whether an incumbent of either type wants to deviate. What does deviation mean in this case?)