Political Uncertainty

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On Feb. 12, Sebastian and I agreed to focus efforts on finding a base model to facilitate empirical identification. I am pursuing Groseclose & Snyder (1996), "Buying Supermajorities," APSR

- For each legislator i, $v(i) = u_i(x) - u_i(s)$, measured in money; call this the reservation price of i
  - WLOG, label legislators so that $v(i)$ is a non-increasing function
  - Note legislators only have preferences over how they vote, not over which alternative wins
- There are two vote buyers; each prefers to minimize total bribes paid while passing his preferred policy, but each would prefer to concede the issue rather than pay more than his WTP
  - A prefers x; W_A is A's willingness to pay (WTP) for x measured in money
  - B prefers s; W_B is B's WTP for s
- Bribe offer functions: $a(i)$ and $b(i)$ are A and B's offers to i. Legislators take these bribe offers as given and then vote for the alternative that maximizes their payoff
- A moves first; $a(i)$ perfectly observable to B when he moves.
- Goal: characterize SPNE in pure strategies
  - Assume unbribed legislators who are indifferent vote for s; all bribed legislators who are indifferent vote for whoever bribed them last
- Assume continuum of legislators on $\left[-\frac{1}{2}, \frac{1}{2}\right]$
- Assume W_A large enough that x wins in equilibrium (no uncertainty case)
- $m + \frac{1}{2}$ is the fraction of legislators who vote for x, the new policy (as opposed to the status quo, s)
- Prop 1: three types of equilibria in which x wins; depend on size of W_B
- Prop 2: m^* (the optimal coalition size) is unique, and provides three cases parameterizing its size in terms of W_B, $v(-\frac{1}{2})$ and $v(m^*)$
- Prop 3/4: special case where $v(z) = \alpha - \beta v$

- I think, without uncertainty, you would estimate m^* as a function of the parameters of v and WTP
  - It's useful that m^* is unique. Not clear it would extend to case of uncertainty
- I'm pretty sure all this predicts that B should never pay anything.
  - Uncertainty should reverse this, right?
  - What is uncertainty? I think just make $v(z)$ stochastic