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A. Veto Power (Romer - Rosenthal model) : Perfect Information

Legislature L : ideal point l

utility $u_l(x) = h(-|x-l|)$

President P : ideal point p

utility $u_p(x) = h(-|x-p|)$

x : policy outcome

$h(\cdot)$: strictly increasing

- Game

① L proposes bill b to change status quo policy q

② P decides to accept b or veto (resulting in q)

- Backward Induction

– P accept iff

$$u_p(b) \geq u_p(q)$$

$$-|b-q| \geq -|p-q|$$

$$\Rightarrow b \in \begin{cases} [q, 2p-q] & \text{if } p > q \\ [2p-q, q] & \text{if } p < q \end{cases}$$

denote by $P(q)$

– L decision:

if $l \in P(q)$, $b^* = l$

if $l < \min P(q)$, $b^* = \min P(q)$

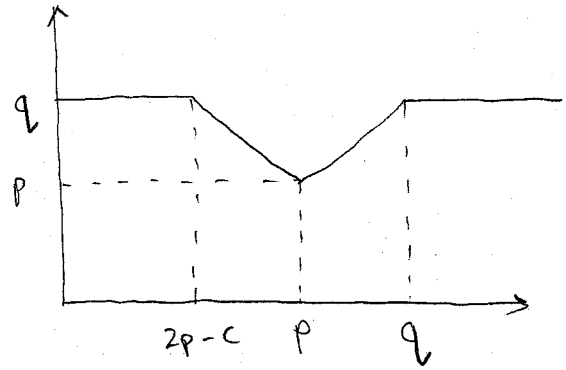
if $l > \max P(q)$, $b^* = \max P(q)$

Thus, if $l > p$

$$b^* = \begin{cases} 2p-q & \text{if } p > q \text{ and } l > 2p-q \\ l & \text{if } p > q \text{ and } l < 2p-q \\ l & \text{if } l < q \\ q & \text{if } l > q > p \end{cases}$$

if $p > l$

$$b^* = \begin{cases} 2p-q & \text{if } p < q \text{ and } l < 2p-q \\ l & \text{if } p < q \text{ and } l > 2p-q \\ l & \text{if } l > q \\ q & \text{if } p > q > l \end{cases}$$



- Comparative Statics
  1. L does better when status quo is far from p
  2. Influence given by veto is small
     when veto has impact ($b^* \neq l$), P indifferent ~~between~~ eqm proposal and status quo
  3. Because of perfect information, L perfectly predicts P's behavior and no vetoes occur in eqm

B. Veto Power (Baron & Ferejohn)

see McCarty, Nolan (AJPS 2000)
McCarty, Nolan (APSR 2000)

$N = 3$, $p = 1/3$

Suppose party B has veto player

- Since B has veto, any proposer must include B and at least one member of A in coalition s.t.
  - proper's share

$$z_A = 1 - \delta V_B$$
$$z_B = 1 - \delta V_A$$

  - continuation value

$$V_A = \frac{1}{3} z_A + \delta \frac{1}{3} V_A$$
$$V_B = \frac{1}{3} z_B + \delta \frac{2}{3} V_B$$
$$\Rightarrow V_A = \frac{3(1-\delta)}{\delta^2 - 9\delta + 9} \quad \text{and} \quad V_B = \frac{3 - 2\delta}{\delta^2 - 9\delta + 9}$$

- As long as $\delta > 0$, $V_A < V_B$

C. Veto Bargaining: Incomplete Information

L no longer has complete information about the preferences of P

Status quo q

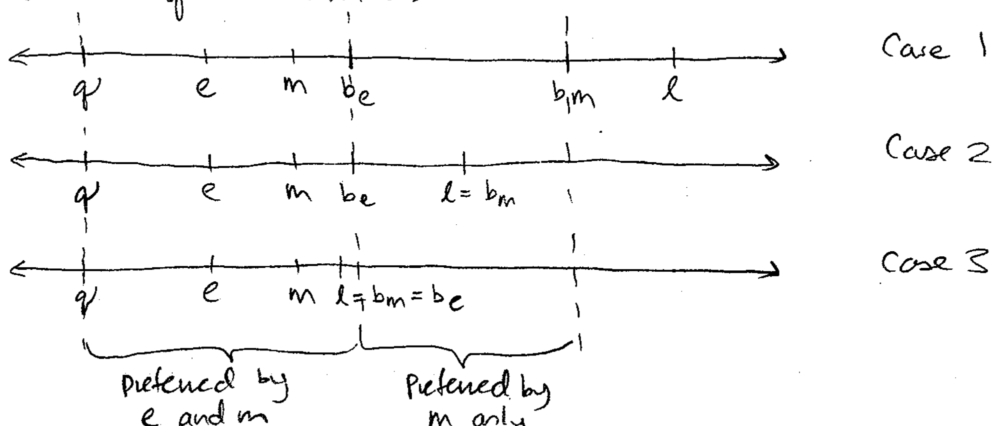
L believes P is of two types, moderate (ideal point m) or extremist (ideal point e)

Assume linear preferences: $-|x - i|$ for policy x and ideal point $i \in \{l, m, e\}$ where $e < m < l$

let π be prob (P is extreme)

- L no longer knows for sure which bills P accepts and which he vetoes

Assume $q < e < m < l$



b_e: L finds less attractive but both extreme and moderate accept

b_m: L finds more attractive but only moderate accepts

if π is high, more likely offer b_e

if π is low, more likely offer b_m but there is chance vetoed by extreme P

- Eqm with $q < e < m < l$

let $B_t(q)$ be set of bills each type $t \in \{e, m\}$ accepts

As in Part A, if $t > q$, $B_t(q) = [q, 2t - q]$

if $t < q$, $B_t(q) = [2t - q, q]$

Since $m > e > q$, $B_e(q) = [q, 2e - q] \subset B_m(q) = [q, 2m - q]$

so any bill e accepts m accepts, but not the converse

if L propose $2e - q$, both types accept

if L propose $2m - q$, e vetoes $\Rightarrow$ prob π is vetoed

Case 1: $l > 2m - q$

if $b = 2e - q$, $U_l(b) = 2e - q - l$

if $b = 2m - q$, $EU_l(b) = \pi q + (1-\pi)(2m - q) - l$

$\Rightarrow$ if $\pi_1 \leq (m-e)/(m-q)$, L prefers $b = 2m - q$

and veto occurs w/ prob π_1

Case 2: $2e - q < l < 2m - q$

if $b = 2e - q$, $U_l(b) = 2e - q - l$

however now m accepts $b = l$, $EU_l(b) = \pi(q - l)$

$\Rightarrow$ if $\pi_2 \leq (l + q - 2e)/(l - q)$, L prefers $b = l$

and veto occurs w/ prob π_2 but $\pi_2 < \pi_1$

so veto less likely

Case 3: $l < 2e - q$

both m and e accepts $b = l$

$\Rightarrow$ L proposes $b = l$ and no vetoes occur

- Result

vetoes less likely when l closer to m and e

- Empirical Testing

Are vetoes less likely during periods the Congress and presidency are controlled by the same party?