

# Legislative Bargaining with Reconsideration

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## The Point of Departure

- Romer and Rosenthal (1978, 1979): An agenda setter makes a policy proposal, which is then pitted against a default alternative in an up-or-down majority vote.
- Implications:
  - The power to propose
  - The role of the status quo
- Implicit assumption:
  - Decision-making on a given issue ends when a majority approves a proposal.

## Dynamic Extensions

- Exogenously given default policy, with the possibility of counteroffers:
  - Baron and Ferejohn (1989)
  - Banks and Duggan (2000, 2006)
- Endogenously evolving default policy:
  - Baron (1996)
  - Bernheim, Rangel and Rayo (2006)
  - Kalandrakis (2004, 2007)
  - Duggan and Kalandrakis (2007)
  - Baron, Diermeier and Fong (2008)
  - Anesi (2009), Penn (2009), and others.

## The Power to Propose

- Theory
  - Romer and Rosenthal (1978)
  - Baron and Ferejohn (1989)
  - Kalandrakis (2004; 2007)
  - Bernheim, Rangel and Rayo (2006)
- Evidence?
  - Experiments
  - Congressional Data: Knight (2005)

## A Single Persistent Agenda Setter

- So far all the literature of legislative bargaining assumes alternating proposers.
- Yet there are various institutional contexts where a model with persistent proposal power seems like a better formal representation of the political institution.
  - Multiparty presidential democracies in Latin America: Cheibub (2007) and Robinson and Torvik (2008).
  - Some policy issues in the U.S. Congress: Knight (2005)
  - Decision-making in central banks (Riboni 2008)
  - Nondemocratic Institutions

## The Goal of the Paper

	Take-It-Or-Leave-It Offer	Fixed Status Quo with Counteroffers	Endogenously Evolving Status Quo
Single, Persistent Proposer	Romer & Rosenthal (1978, 1979)		Diermeier & Fong (2011, 2012), Duggan & Ma (2017)
Alternating Proposers		Baron and Ferejohn (1989),	Baron (1996), Kalandrakis (2004, 2007), Duggan & Kalandrakis (2007), Battaglini and Palfrey (2007), Bernheim et al (2006), Anesi (2009), etc.

## What Do We Do?

- We develop a dynamic theory in which:
  - 1) An authority effectively and persistently holds agenda control, yet its power is nonetheless checked by the requirement of majority approval.
  - 2) Passage of a bill does not prevent the legislature from coming back to the same issue on a later date. Rather, it changes the default (Bernheim, Rangel and Rayo 2006).
  - 3) Policymaking proceeds until any legislator with proposal power has no more incentive to make a new proposal to replace a previously passed bill.

## A Related Big Question

- A new theoretical mechanism that accounts for endogenous constraints on proposal power.
- Assume self-interests, risk neutral, no externality, no commitment, and no long-term relationship.

## The Model

## The Setup

- $1+2m$  players.
- One Setter (player  $A$ ) and  $2m$  voters.
- An arbitrary, discrete policy space.
- An arbitrary preference profile.

## The Political Process

- A legislative session consists of potentially multiple rounds of proposal making and voting.
- In every proposal round, a *default* is the policy to be implemented at the end of the session if no new law is made in the rest of the session.
- The initial default  $x_1$  is exogenously given.
- The default evolves; activities prior to round  $t$  establish a prevailing default  $x_t$ .

## The Political Process

- In each proposal round, once reached, the Setter can choose to make a proposal  $y_t \neq x_t$  to replace the prevailing default or "pass" the proposal round.
- A proposal, once made, is put to an immediate vote against the default by simple majority rule.
- If the proposal is approved, it replaces the prevailing default so that  $x_{t+1} = y_t$ . Otherwise, the prevailing default remains and  $x_{t+1} = x_t$ .
- The policy that survives as default till the end of the session is implemented.

## The Political Process

- How does the session end?
- The session may end *endogenously* if the prevailing default is such that the setter will choose to pass any subsequent proposal round.
- The session may also be terminated *exogenously* after any proposal round with probability  $1 - \delta$ .
- The probability for reconsideration,  $\delta$ , is an institutional parameter.
  - Romer and Rosenthal:  $\delta = 0$ .
  - Our focus:  $\delta < 1$  is sufficiently large.

## Equilibrium

- Assumption: Any player votes against a policy proposal if and only if passage of the proposal makes him strictly worse off.
- Stationary Markov perfect equilibrium.
- Pure Strategies.
- We further restrict attention to equilibria in which the policy converges in the long run.

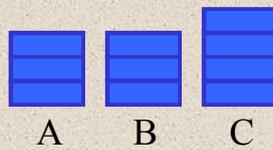
## Example: A Distributive Model

## Example: A Distributive Model

- Policy: Dividing  $\pi$  units of benefits.
- "Discreteness": Every unit is indivisible.
- The initial default, exogenously given, is a feasible way to divide the benefits.
- Each player derives utility only from his own share of the benefits.

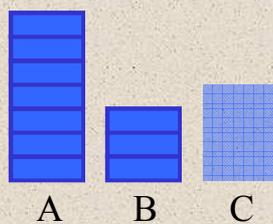
## A Legislature with Three Players

- Total Benefits:  $\pi = 10$ .
- Initial Default:  $x_0 = (3,3,4)$ .



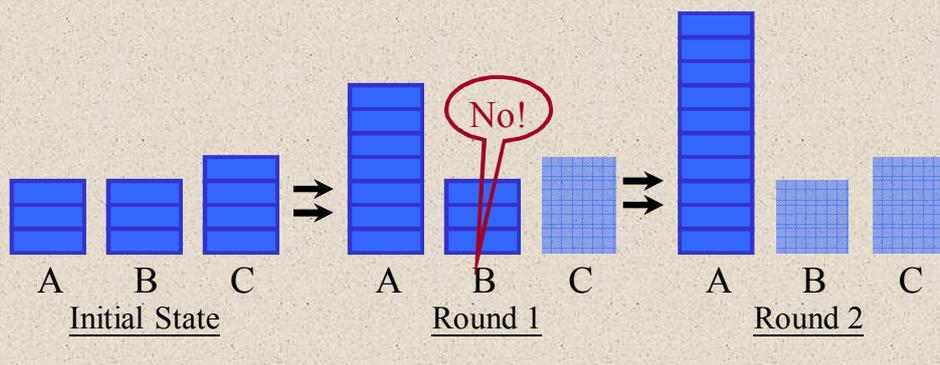
## A Legislature with Three Players

- Institution: Reconsideration Not Allowed.
- Policy Outcome:  $x^* = (7,3,0)$ .



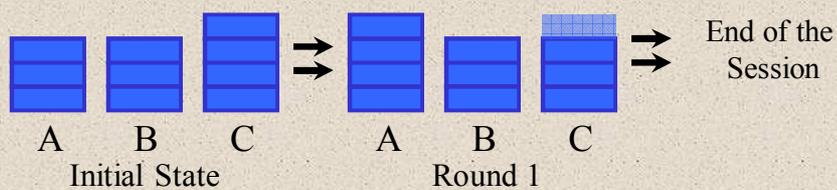
## A Legislature with Three Players

- Institution: High Possibility of Reconsideration.
- Player B won't accept  $x^* = (7,3,0)$ .



## A Legislature with Three Players

- Institution: High Possibility of Reconsideration.
- Player B won't allow the Setter to expropriate Player C too much.
- Policy Outcome:  $x^* = (4,3,3)$ .



## Pure-Strategy Equilibrium: Properties

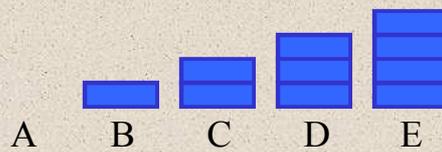
- There exists a pure-strategy equilibrium:
  - Given any initial default, the policy outcome is such that Players B and C receive the same amount of benefits.
  - No reconsideration occurs.
  - The Setter receives no less than what he would do from the default.
  - Both voters receive no less than what the disadvantaged voter would do from the default.

## Implications

- Indirect preferences over distribution of benefits.
- Contrasting Incentives:
  - Setter wants to Expropriate.
  - Voters want to Protect each other.
- Positive but limited value of proposal power.
- More power by law leads to less valuable power:
  - The Setter enjoys a greater value of proposal power in the institution with  $\delta = 0$  than in the case with  $\delta \rightarrow 1$ .

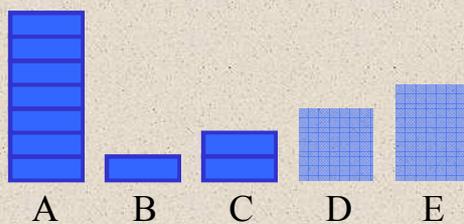
## A Large Legislature

- Total Benefits:  $\pi = 10$ .
- Default:  $x_0 = (0,1,2,3,4)$ .



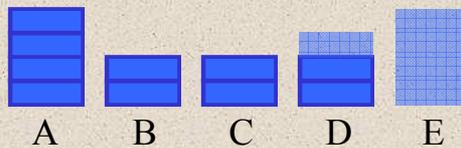
## A Large Legislature

- Institution: Reconsideration Not Allowed.
- Policy Outcome:  $x^* = (7,1,2,0,0)$ .



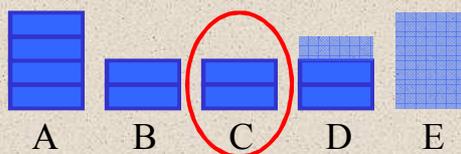
## A Large Legislature

- Institution: High Possibility for Reconsideration.
- One Possible Policy Outcome:  $x^* = (4,2,2,2,0)$ .



## A Large Legislature

- Institution: High Possibility for Reconsideration.
- One Possible Policy Outcome:  $x^* = (4,2,2,2,0)$ .
- Player C defends the benefits for Players B and D.



## Pure-Strategy Equilibrium: Properties

- There exists a pure-strategy equilibrium:
  - Given any initial default, the policy outcome is such that some  $(m + 1)$  voters receive the same amount of benefits and the rest  $(m - 1)$  voters receive nothing.
  - No reconsideration occurs.
  - Any voter who supports a proposal does not allow more than  $(m - 1)$  voters to receive less than he does from the proposal.

## Pure-Strategy Equilibrium: Properties

- There exists a pure-strategy equilibrium:
  - Some supporters of the equilibrium policy may receive more than they would do from the default.
  - One player whose vote is not needed is not fully expropriated.

## Implications

- A group of voters protect one another's benefits.
- Again, the Setter is worse off with the power to reconsider when we compare the cases with  $\delta = 0$  and with  $\delta \rightarrow 1$ .

## General Characterization

## General Characterization

- **Theorem 1:** There exists an equilibrium with pure strategies.
  - We propose an algorithm to construct, for any discrete policy space, the set of policies that would persist as default in some equilibrium.
  - We then prove existence by construction using the proposed algorithm.
- **Theorem 3:** Any pure-strategy equilibrium is constructible using the algorithm proposed to prove Theorem 1.

## General Characterization

- **Theorem 2:** In any equilibrium, the long-run policy outcome is preferred to the initial default by the Setter as well as a majority of the players.
  - As  $\delta \rightarrow 1$ , in each round the players only care the outcome their current proposal making and voting would lead to.

## General Characterization

- **Theorem 4:** For any discrete policy space and any preference profile, in *all* equilibrium the sole agenda setter is worse off with the power to reconsider (in the case with  $\delta \rightarrow 1$ ) compared to the case of no reconsideration (i.e.  $\delta = 0$ ).

## Efficiency and Reconsideration

## An Illustrative Example

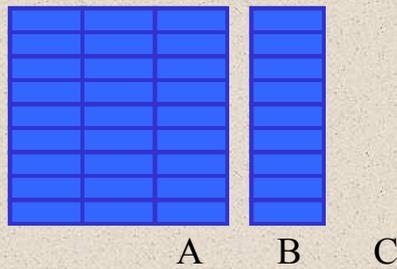
- 3 Players.
- Policy: Dividing  $\pi$  units of benefits, where  $\pi$  is also a choice variable.
- Discrete policy space: Every "unit" is indivisible.
- Public production is costly.
- Costs are convex and shared Equally.
- Quasi-linear preferences.
- Initial default is no public production:  $x_0 = (0,0,0)$ .

## A Normative Benchmark

- A benevolent dictator would choose the size of total benefits,  $\pi^*$ , such that marginal aggregate cost is equal to marginal utility of benefit consumption.

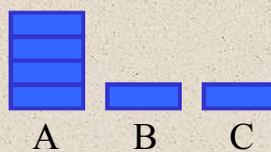
## Equilibrium Policy Outcome

- Institution: Reconsideration Not Allowed.
- Overproduction with Highly Unequal Distribution.



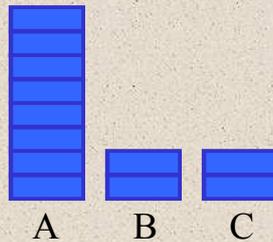
## Equilibrium Policy Outcome

- Institution: High Possibility of Reconsideration.
- Players B and C have to receive the same amount of benefits, otherwise neither would approve it.



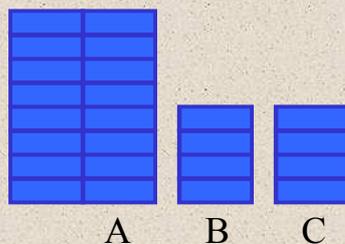
## Equilibrium Policy Outcome

- Institution: High Possibility of Reconsideration.
- As long as the total size of benefits is inefficiently too small, the Setter has incentives to increase it.



## Equilibrium Policy Outcome

- Institution: High Possibility of Reconsideration.
- The Setter internalizes all production costs and, out of self-interests, chooses the efficient level of total benefits.



## Comparisons

- Social welfare, measured by aggregate utility, is strictly higher with  $\delta \rightarrow 1$  than with  $\delta = 0$ . That is, the (high) possibility of reconsideration enhances efficiency.
- Whereas, the Setter is strictly worse off with  $\delta \rightarrow 1$  than with  $\delta = 0$ .
- Comparative results can be generalized for a large legislature.

## Lack of Commitment

- Interpretation of the possibility of reconsideration.
- Literature: Lack of Commitment is a major source of policy inefficiency in dynamic setups.
  - Kydland and Prescott (1977 JPE)
  - Persson and Svensson (1989 QJE)
  - Tabellini and Alesina (1990 AER)
  - Besley and Coate (1998 AER)
  - Acemoglu and Robinson (2001 APSR)

## Lack of Commitment

- Here, Lack of Commitment enhances Policy Efficiency. Because ....

## Committees and Proposers

## Committees as Proposers

- No. of players:  $1+2m$ .
- No. of players in Proposal Committee:  $p$ .
- No. of votes required:  $m+1$ .
- No. of votes needed:  $m+1-p$ .
- No. of players fully expropriated:  $m-p$ .
- No. of players receive positive benefits:  $m+1+p$ .

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## Empirical Implications

- More than a bare majority of players receive positive benefits in equilibrium, and the size of the supermajority can be large.
- There is a positive correlation between committee size and the number of players who receive positive benefits.
- Consistent with empirical observations (e.g. Knight 2005).

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## Comparison: Open Rules

- Baron and Ferejohn (1989)
  - Other players may submit amendments.
  - Focus: Setter's incentives.
- Our Paper
  - Proposal power is controlled by one player.
  - Focus: Voters' incentives.
  - A tractable model with pure-strategies.

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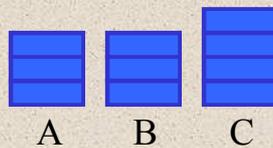
## Concluding Remarks

- A tractable model with reasonable assumptions.
- Endogenous constraints on proposal power.
- Focus on voters' incentive to protect each other.
- What's next?
  - Random turnover of proposal power
  - Weighted voting
  - Strong presidentialism in Latin America
  - A dynamic theory of autocracy

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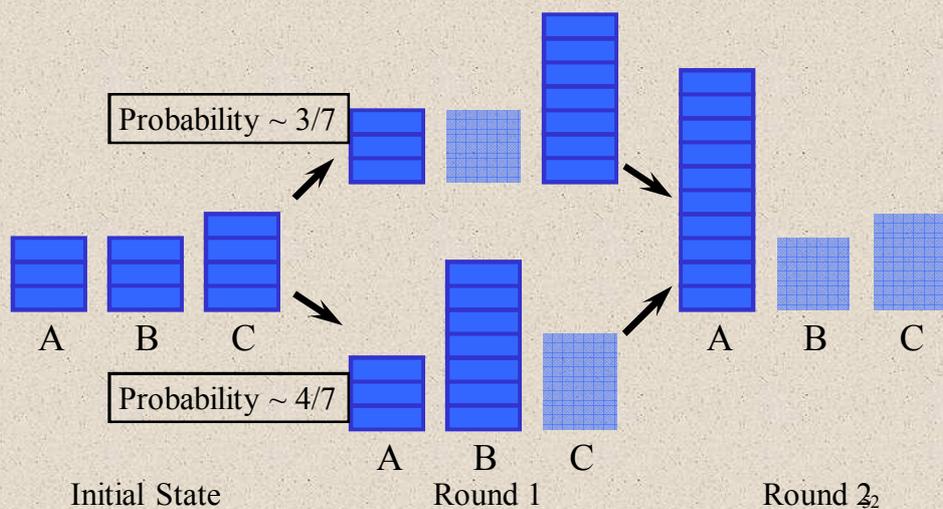
## Mixed-Strategy Equilibrium: Example

- Total Benefits:  $\pi = 10$ .
- Initial Default:  $x^0 = (3,3,4)$ .
- A Mixed Proposal Strategy is a lottery of policy alternatives conditional on the default.



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## Mixed-Strategy Equilibrium: Example



## Mixed-Strategy Equilibrium: Properties

- There exists a Mixed-Strategy Equilibrium:
  - Proposer' ideal policy is the only absorbing state.
  - Reconsideration may occur.
  - Setter takes all within at most two proposals.
  - Both voters receive less than what they would receive from the initial default.
- Equilibrium driven by Self-fulfilling Expectations.

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## Two Classes of Equilibria

- Pure-Strategy Equilibria:
  - Two voters protect each other.
  - Constrained value of proposal power.
- Mixed-Strategy Equilibria:
  - All voters are doomed by self-fulfilling beliefs.
  - Nearly dictatorial power.

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## Equilibrium Selection

- Our view: Predictions of the theory should be based on the pure-strategy equilibria.
- Reason: Consider a procedural stage in which all players discuss whether to "discuss the policy."
- Example:  $\pi = 10$ ,  $x^0 = (3,3,4)$ .

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## Mixed-Strategy Equilibrium

- There exists a Mixed-Strategy Equilibrium:
  - Setter's ideal policy is the only absorbing state.
  - Reconsideration may occur.
  - Setter takes all within at most two proposals.
  - All voters receive strictly less than what they would receive from the initial default, in general.
- Kalandrakis (2005).
- Disappears if there is a procedural stage.

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## Pure-Strategy Equilibrium: Properties

- There exists a pure-strategy equilibrium.
- In any pure-strategy equilibrium:
  - The policy outcome is such that some  $(m+1)$  voters receive the same amount of benefits and the rest  $(m - 1)$  voters receive nothing.
  - Some supporters of the equilibrium policy may receive more than they would do from the default.

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## Pure-Strategy Equilibrium: Properties

- In any pure-strategy equilibrium (continued):
  - Any voter who supports a proposal does not allow more than  $(m - 1)$  voters to receive less than he does from the proposal.
  - One player whose vote is not needed is not fully expropriated.

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