Does Political Competition Eliminate Rents?

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An important objective of democracy is to prevent abuse of political power via elections.

However, electoral formula may affect the functioning of democracy.

A big difference between PR and plurality rule systems: coalition governments.

Hence, we study the impact of coalition governments on political competition.

Notice that other models of electoral competition take political rents as exogenous (except some papers that I will discuss shortly).

Any link between policy choice and political rents?
Results

PR with Probabilistic Selection Rule

- Uncertainty about which party forms the government relaxes political competition and leads to positive rents
- Policy differentiation in order to extract more rents

Plurality Rule or PR with Fixed Selection Rule

- Strong competition in order to attract the highest vote share eliminates all rents
- No policy differentiation
Related Literature

- **Polo (1998)** studies the two-party system
  - No rent unless there is an uncertainty about voters’ preferences
- **Kunicova & Rose-Ackerman (2004)** shows empirically that PR systems lead to more corruption
- **Myerson (1993)** focuses on coordination problem of voters
  - Binary policy choice
  - Winning majority instead of government formation
- **Ferejohn (1986)** studies post-election politics
- **Austen-Smith & Banks (1988)**
  - Exogenous rents
  - Multiplicity of voting equilibria
The Model
A simplified version

- Three office-motivated parties $L$, $M$ and $R$ with given ideal policies
  \[ p_L \leq p_M = \frac{1}{2} \leq p_R \]
- Uniformly distributed voter preferences $x_i \in [0, 1]$

Timing

1. Each party $j = L, M, R$ chooses a rent level $r_j \geq 0$
2. Each voter $x_i \in [0, 1]$ votes for one party
3. A coalition government is formed probabilistically (we take the necessity of a coalition government as given)
4. Final policy is a compromise between two coalition parties which also get their announced rent levels

- Payoff of a party in government $v_j(r_j, p_j, p_{jk}) = r_j - \alpha(p_{jk} - p_j)^2$
- Payoff of a voter $u(p_{jk}, r_j, r_k, x_i) = -(p_{jk} - x_i)^2 - r_j - r_k$
The Government Formation Stage

- A simple version (robustness is checked later on)
- A party is chosen as the formateur with probability equal to her vote share
- The formateur chooses her coalition partner
- Each coalition member takes her announced rent level
- The final policy is \( p_{jk} = \frac{p_j + p_k}{2} \)
Equilibrium
The Government Formation Stage

- The formateur chooses the party with more aligned policy preferences
- $L$ and $R$ choose both $M$ as her coalition partner
- Hence, $M$ is always in the government
- Final policy is either $p_{LM} = \frac{p_L + p_M}{2}$ or $p_{RM} = \frac{p_R + p_M}{2}$
Equilibrium
The Government Formation Stage

- Assume the following vote distribution

- There are two cases:

  - **First case:** $M$ is indifferent between $L$ and $R$ as her coalition partner, then

    \[ LM \iff (p_{LM}, r_L, r_M) \]
    \[ \Pr (LM|e_1, e_2) = e_1 + \frac{e_2 - e_1}{2} = \frac{e_1 + e_2}{2} \]
    \[ RM \iff (p_{RM}, r_R, r_M) \]
    \[ \Pr (RM|e_1, e_2) = \frac{e_2 - e_1}{2} + 1 - e_2 = 1 - \frac{e_1 + e_2}{2} \]
The expected utility of the voter $x_i$ is

$$\quad Eu(x_i) = \Pr (LM|e_1, e_2) u(LM, x_i) + \Pr (RM|e_1, e_2) u(RM, x_i)$$

Assume the following vote distribution

At equilibrium, it must be that

$$\sum_{j=L,R} \frac{\partial \Pr (jM|e_1, e_2)}{\partial e_1} u (jM, e_1) = 0$$

and

$$\sum_{j=L,R} \frac{\partial \Pr (jM|e_1, e_2)}{\partial e_2} u (jM, e_2) = 0$$

so that no voter has an incentive to deviate.
First case: M is indifferent between L and R as her coalition partner, then

$$e_1^* = e_2^* = \frac{r_R - r_L}{p_R - p_L} + \frac{p_L + p_R + 1}{4}$$

- No strategic voter votes for M since M is always in the government (We assume partisan votes so that M gets in the parliament)
- The probabilities of a coalition government LM or RM are respectively $$\frac{r_R - r_L}{p_R - p_L} + \frac{p_L + p_R + 1}{4}$$ and $$1 - \left(\frac{r_R - r_L}{p_R - p_L} + \frac{p_L + p_R + 1}{4}\right)$$
Second case: $M$ prefers $L$ or $R$ as her coalition partner

The probabilities of a coalition government $LM$ or $RM$ are the same as those of the first case

Intuition: The choice of a voter is again between $LM$ and $RM$ coalition governments
Equilibrium
Remarks

The probability of a coalition government $LM$ is

$$\frac{r_R - r_L}{p_R - p_L} + \frac{p_L + p_R + 1}{4}$$

- This does not depend on $r_M$
- The first term: when $L$ increases her rent level, she reduces her probability of being in the government. However, this reduction is less important, the more differentiated the parties’ policy choices are.
- The second term: $L$ attracts more votes with a more moderate policy
Equilibrium
The Rent Decision Stage

At equilibrium, rents are positive.

- L’s maximization problem:

  \[ \max_{r_L} \left( \frac{r_R - r_L}{p_R - p_L} + \frac{p_L + p_R + 1}{4} \right) \left( r_L - \alpha \left( p_{LM} - p_L \right)^2 \right) \]

  which leads to

  \[ r_L = \frac{r_R}{2} + \frac{\alpha (1 - 2p_L)^2}{32} + \frac{(p_R - p_L) (p_L + p_R + 1)}{8} \]

- Basic trade-off: probability of being in the government vs. the rent level when in government

- The first term: \( r_L \) increases with \( r_R \)

- The last term: \( r_L \) increases with policy differentiation (Voters are ready to pay more rents with more differentiated policies of parties)
Now, we introduce a first stage where parties choose their ideal policies.

We get

$$p_L = \frac{p_R}{3} + \frac{\alpha - 5}{3\alpha + 3}$$

- $p_L$ gets more moderate with a more extreme $p_R$
- $p_L$ gets more moderate with a higher $\alpha$
At equilibrium, political parties choose divergent policy preferences and positive rents.

\[ p_L = 1 - p_R = \frac{\alpha - 2}{2\alpha + 2} \]

\[ r_L = r_R = \frac{33\alpha + 24}{16(1 + \alpha)^2} \]

**Trade-off**

- More moderate policy increases vote share
- More moderate policy leads to less policy differentiation and so to less rents
The Fixed Selection Rule

- We keep the same model except the government formation stage.
- The party with the highest vote share is chosen as the formateur.
- This party makes a government proposal to another party.
- If rejected, the party with the second highest vote share is chosen as the formateur, and so on.
- **Remark:** The fixed selection rule is deterministic.
The median voter is decisive

Rent Decision Equilibrium

- If $L$ and $R$ have symmetric policies, the equilibrium is $r_L = r_R = 0$
- If, say, $L$’s policy is closer to the median, the equilibrium is
  
  $$r_L = \left( p_{RM} - \frac{1}{2} \right)^2 - \left( p_{LM} - \frac{1}{2} \right)^2 \text{ and } r_R = 0$$

Policy Decision Equilibrium

- They both choose the median policy
The Fixed Selection Rule

Result

At equilibrium, parties choose the median policy and zero rent.

**Intuition:** harsh competition in order to attract the highest vote share

**Remark:** The driving force of the results of the original model is the probabilistic nature of the coalition government formation process

Diermeier and Merlo (2004) find that probabilistic selection rule fits better the data
Robustness

Bargaining with the probabilistic selection rule

- We keep the same model except the government formation stage.
- Now, the formateur makes a government proposal \((p_{jk}, t)\) to another party.
- If rejected, a caretaker government is formed, which results in no utility for the parties.
At equilibrium, political parties choose divergent policy preferences and positive rents.

- The intuitions continue to hold
- The expressions change since now $L$ and $R$ internalize $M$’s utility
- Hence, they choose more moderate policies.
Conclusion

- PR systems lead to more corruption and divergent policies of parties than plurality rule systems due to the stochastic nature of coalition formation.
- This may be partly fixed by the use of the fixed selection rule.