Electoral Competition and Factional Sabotage

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Motivation

Factional sabotage permeates parties' life, undermining their strength.

- Fundamental root of the corruption that caused the end of the Italian "First Republic" (Golden and Chang, 2001)
- More recently, UK Labour Party Corbyn

When is sabotage more likely to occur? How do parties react to it?

This paper: introduce factional competition in a model of elections. Factions' incentives to sabotage are taken into account by the party, which changes its organization accordingly.

The Model: Main Ingredients

- Electoral competition between two parties
  - Factions' ideological preferences determine parties' platforms (Levy, 2004; Ceron, 2012; Lo et al., 2016)
- Factions allocate resources between *campaigning* (help party) and *sabotage* (activities that worsen the collective good of the party but increase a faction's relative power within it)
- Parties distribute *electoral spoils* to encourage campaigning. Often, need to rely on *imperfect monitoring measures*

  E.g. Spoils allocation method in the DC followed *explicit formula* linking cabinet positions to number of party members each faction had DC Example

Contribution to Literature

- Models of factions (Persico et al., 2011; Dewan & Squintani, 2016; Izzo, 2018), and their effects on public good provision (Persico, Pueblita & Silverman 2011) and information aggregation (Dewan & Squintani, 2016)
  - Consider factions of interest *and* of principle

- Formal theorization of parties' internal organization
  - effects of primaries (Hirano, Snyder & Ting, 2013; Serra, 2011; Adams & Merril, 2008)
  - primaries vs hierarchical internal organizations (Caillaud & Tirole, 2002; Crutzen, Castanheira & Sahuguet, 2009)

  - Formalize the relation of agency between central party leadership and factions
  - Embed this framework in a probabilistic voting model

The Model

Setup

- Probabilistic voting model of election between *left* and *right*
- Players: leader L, factions L_1, L_2, leader R, factions R_1, R_2, voter V
- Bliss points: $x^V = 0$, $x_1^L, x_2^L < 0 < x_1^R, x_2^R$. Party policy is simple average of factions' bliss points: $x^L = (x_1^L + x_2^L)/2$
- Factions: invest in *campaigning effort* $e_i^L \in [0,1]$, rest of time $1 - e_i^L$ spent on *sabotage* (BC assumption relaxed in extension)
  - $C(e_i^L) = (e_i^L)^2$, $C(1 - e_i^L) = (1 - e_i^L)^2$, $i = \{1, 2\}$
- Value of left party to V is $-(x^L)^2 + e_1^L + e_2^L$, plus net utility shock $\xi \sim F$ for party R
- Party left wins election w/p $F\left(e_1^L + e_2^L - e_1^R - e_2^R - (x^L)^2 + (x^R)^2\right)$

Setup

- Winning, losing party get $\alpha > (1-\alpha)$ respectively
  - $\alpha \in (1/2, 1)$: power centralization (Herrera, Morelli & Palfrey 2014)
- L chooses distribution of party's pie $(\alpha, 1-\alpha)$ among factions based on a measure of intra-party power:

  $s^L = 1$ if faction L_1 ranks higher in party L, where

$$\Pr\{s^L = 1\} = \frac{1}{2} + (1-\gamma)\frac{e_1^L - e_2^L}{2}$$

  γ (known) measure sabotage's relative effectiveness
  - when $\gamma < 1$: $e_1^L \uparrow \rightarrow \Pr\{s^L = 1\} \uparrow$
    (e.g. factions associated to geographic strongholds)
  - when $\gamma > 1$: $e_1^L \uparrow \rightarrow \Pr\{s^L = 1\} \downarrow$
    (e.g. factions overlapping)
- L assigns *non-negative* premium to strongest faction (L_1 if $s^L = 1$)

Setup

- Contract specifies two *non-negative* premia $\boldsymbol{\pi^L} = (\pi_d^L, \pi_v^L)$ s.t.

$$\begin{aligned} \pi_v^L + 2b_v^L &= \alpha && \text{if electoral victory} \\ \pi_d^L + 2b_d^L &= 1 - \alpha && \text{if electoral defeat} \end{aligned}$$

  [b_d^L, b_v^L are baseline prizes offered to both factions]

- Mapping of contract:

$$(\pi_d^L, \pi_v^L) : \{1, 2\} \to [0, 1 - \alpha] \times [0, \alpha]$$

Payoffs

Leader. The party leader's unique objective is to win the election

Factions. L_1's payoff is:

$$u_1^L = \underbrace{-\left(x_1^L - x^*\right)^2}_{\text{loss from } x^* \in \{x^L, x^R\}} + \underbrace{R_1^L(\boldsymbol{\pi}^L, \boldsymbol{e}^L)}_{\text{contingent reward}} - \frac{\left(e_1^L\right)^2}{2} - \frac{\left(1 - e_1^L\right)^2}{2}$$

$R_1^L(\boldsymbol{\pi}^L, \boldsymbol{e}^L)$ is a function of the contract and the effort allocation

$$R_1^L = \begin{cases} b_v^L + \pi_v^L & \text{if } s^L(\boldsymbol{e}^L) = 1 \\ b_v^L & \text{if } s^L(\boldsymbol{e}^L) = 2, \end{cases}$$

if L wins (π_d^L, b_d^L *if loss*)

Timing

1. Leaders simultaneously announce reward scheme
2. Factions simultaneously choose e_1^L, e_2^L, e_1^R, e_2^R
3. Outcomes are realized

The equilibrium concept used is Subgame Perfect Equilibrium.

Equilibrium Analysis

Analysis: Election

The voter prefers party L to R if

$$u^V(e_1^L, e_2^L, x^L) \geq u^V(e_1^R, e_2^R, x^R) + \xi,$$

where $\xi \sim U[-\frac{1}{2\psi}, \frac{1}{2\psi}]$

The probability that party L wins is

$$p^L(\boldsymbol{e}) = \Pr\left\{\xi < u^V(e_1^L, e_2^L, x^L) - u^V(e_1^R, e_2^R, x^R)\right\}$$

$$p^L(\boldsymbol{e}) = \frac{1}{2} + \psi\left[e_1^L + e_2^L - e_1^R - e_2^R - (x^L)^2 + (x^R)^2\right]$$

[Given uniformity of ξ]

Analysis: Factions' Choice

Given fixed incentives $\boldsymbol{\pi}^L$, $\boldsymbol{b}^L$, what do factions do? Proposition 1

- e_i^L has two effects on L_i's payoff:
  1. increases L's chances of winning
  2. increases L_i's reward if $\gamma < 1$, reduces otherwise

- If $\gamma < 1$, invest in campaigning activities
- If $\gamma > 1$, *trade-off*

Analysis: Leader's Choice

Optimal contract for L:

- If $\gamma < 1$, give entire pie to stronger faction (increase incentive to campaign): *high powered incentives optimal*

  Consistent with LDP allocation method, giving premium to "mainstream faction" with highest share of votes (Browne and Kim, 2003; Ramseyer and Rosenbluth, 2009)

- If $\gamma > 1$, split evenly (giving bonus to stronger faction actively hurts party): *low powered incentives optimal*

Increasing the Electoral Stakes

For all values of γ, in equilibrium:

Campaigning effort increases with concentration of power (α). As power sharing increases, the incentive to sabotage increases as well

- Examples: change in electoral system (e.g. from WTA to PR), or institutional change holding fixed the electoral system's proportionality (e.g. from executive dominance to legislative-executive balance)

Campaigning effort increases with ideological polarization ($x^L - x^R$). As distance between parties increase, factions *in both parties* invest more resources in campaigning and less in sabotaging activities

Ideological Extremism

Do factions campaign more in the leading or trailing party?

Proposition 2. Suppose parties are not equidistant from V. When $\gamma < 1$ *factions in the more extreme, trailing party campaign less*. When $\gamma > 1$, total campaigning is the same in both parties

Intuition:

- if $\gamma < 1$, e_i^L gives L_i higher probability of winning election *and* spoils
- marginal probability of winning election and spoils are same for all factions, but spoils are likely worth α for strong party ($> 1 - \alpha$ for weak party)
- if $\gamma > 1$ premia are set to zero $\rightarrow$ no internal incentive; same external incentive for factions in L, R (i.e. same ideological loss)

Factional Polarization

When factions in the same party have different bliss points, which one campaigns more?

Proposition 3. Suppose factions differ in their policy preferences. In equilibrium, ideologically extreme factions campaign more than moderate ones, that devote more resources to sabotage

Intuition:

- same probability of victory $\rightarrow$ same expected payoff
- extreme faction: higher expected cost from losing election $\rightarrow$ more campaigning effort (e.g. Corbyn's faction during the 2017 election)

$\Rightarrow$ Different effects of ideological polarization within and across parties

Empirical Implications

Empirical Implications

1. Higher electoral stakes, higher investment in campaigning.

   More sabotage as system tends to consensus democracy

2. Better monitoring tools, higher campaigning effort.

   - E.g. factions' geographical separation vs overlap;
   - Among PR systems, closed vs open list: by observing preference votes parties can offer a better incentive scheme, thus reducing factions' incentive to sabotage

     cf. literature on personal vote: incentive to compete increases at the candidate's level (Carey and Shugart, 1995; Brauninger et al., 2012)

3. More political scandals as party weakens.

   If factional competition can trigger scandals, then model suggests that scandals are more likely in weakened parties (Invernizzi and Ceron (2020) provide evidence of politically-driven charges of malfeasance against Italian MPs)

Robustness/Extensions

1. Endogenous platforms: Extension: Policy Concessions
   - Leaders can set policies closer to factions' bliss points as reward
   - When factions are heterogeneous, in equilibrium L can reward sabotage conditional on electoral victory

2. General model with two separate actions: Robustness: Separate Actions
   - mobilization $e_i^L \in [0,1]$, sabotage $a_i^L \in [0,1]$
   - $\gamma < 1$: no incentive to sabotage: $a_i^* = 0$
   - $\gamma > 1$: incentive to sabotage for $\gamma > \hat{\gamma}$

3. Negative premia: Robustness: Negative Premia
   - same results for polarization
   - equilibrium premia are high powered for all γ

Conclusion

- I study the relation of agency between party leadership and factions in a general equilibrium model of elections
- Factions' contests over electoral spoils can be positive or destructive depending on several features of the competitive environment
  - sabotage increases as system tends to consensus democracy
  - sabotage more severe in trailing parties
- Incentives change with leadership's monitoring capability: W-T-A contests among factions optimal only if effort easy to monitor
  - When leader can reward factions with policy concessions, sabotage can be encouraged to increase odds of winning

Thank you!

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Praying for defeat: Labour insiders accused of wrecking Corbyn campaign in leaked report

The 860-page report into the handling of antisemitism reveals the factionalism that beset the Corbyn era

Jeremy Corbyn's office was reportedly keen to deal with allegations of antisemitism, as it felt that resolving them could help rebuild trust with the British Jewish community (AFP)

Portfolio Allocation in Italian Christian Democratic Party

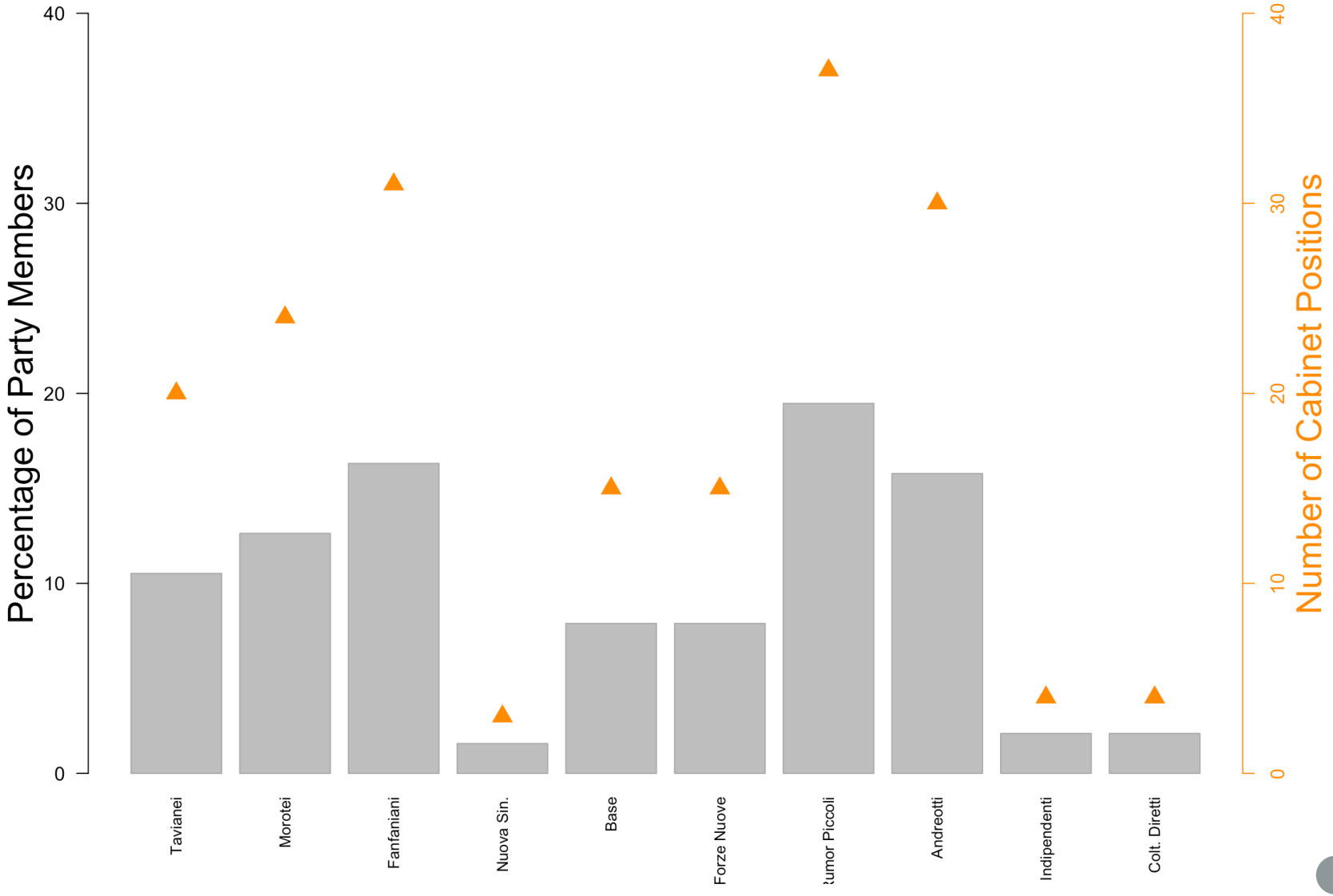
Allegati n. 5 e 6. Aggiornamento della composizione del consiglio nazionale dopo la scissione dorotea (1973).

RAPPORTI DI FORZE TRA GRUPPI DEL CONSIGLIO NAZIONALE DELLA D.C., AGGIORNATI ALLA ELEZIONE DEI SEGRETARI REGIONALI

	Eletti dal Congresso	Eletti Gruppi Parlamentari	Segretari Regionali (1)	Rappr. Enti Loc.	Membri Diritto	Totale	Percentuale
TAVIANEI	12	3	3	1	1	20	10,52
CENTRISTI	4	2	-	-	1	7	3,68
MOROTEI	17	2	2	1	2	24	12,63
FANFANIANI	1[illegible]	5	5	2	1	31	16,31
NUOVA SIN.	[illegible]	1	-	-	-	3	1,57
BASE	13	2	-	-	-	15	7,89
FORZE NUOVE	9	2	1	2	1	15	7,89
RUMOR PICCOLI	21	3	4	1	8	37	19,47
ANDREOTTI COLOMBO	20	4	2	2	2	30	15,78
INDIPENDENTI	-	-	-	-	4	4	2,10
COLT.DIRETTI	4	-	-	-	-	4	2,10
	120	24	17	9	20	190	100,00

(1) Non risultano ancora eletti i segretari della Lombardia, della Campania, della Sardegna.

Portfolio Allocation in Italian Christian Democratic Party



Equilibrium Incentives and Campaigning

Proposition 1. *Suppose party platforms are equidistant from MV.*

There exists a unique level of campaigning effort (symmetric across factions in both parties):

$$e^{L*} = \begin{cases} \frac{1}{4}\left\{2 + \psi\left[2\alpha - 1 + 2\left(x^L - x^R\right)^2\right]\right\} & \text{if} \quad \gamma > 1 \\ \frac{1}{8}\left\{5 - \gamma + 2\psi\left[2\alpha - 1 + 2\left(x^L - x^R\right)^2\right]\right\} & \text{if} \quad \gamma < 1 \end{cases}$$

The optimal premia offered by the leader of party L are

$$\boldsymbol{\pi^{L*}} = \begin{cases} \pi_d^{L*} = \pi_v^{L*} = 0 & \text{if} \quad \gamma > 1 \\ \pi_d^{L*} = (1-\alpha), \pi_v^{L*} = \alpha & \text{if} \quad \gamma < 1 \end{cases}$$

NB: Assumption $x^L = -x^R$ is *wlog* (only useful to write a simple closed-form solution for e^{L*}).

Negative Premia

- Baseline model: L constrained to choose non-negative premia
- Reflects real scenarios where parties are constrained by existing institutions

What if leaders can punish factions ranking high with negative premia?

- When $\gamma > 1$, L is strictly better off by setting *negative premia* (i.e., rewarding losing faction)

Corollary. When premia can be negative, the optimal premia are

$$\boldsymbol{\pi}^{L*} = \begin{cases} \pi_d^{L*} = \alpha - 1, \pi_v^{L*} = -\alpha & \text{if} \quad \gamma > 1 \\ \pi_d^{L*} = 1 - \alpha, \pi_v^{L*} = \alpha & \text{if} \quad \gamma < 1 \end{cases}$$

and

$$\frac{\partial(e^{L*} - e^{R*})}{\partial|x^L|} < 0 \text{ for every } \gamma$$

Robustness: Two-dimensional Effort

1. Suppose e_i^L, a_i^L s.t. $e_i^L + a_i^L \leq 1$. Then,

$$\Pr\{s^L = 1\} = \frac{1}{2} + \frac{e_1^L - e_2^L + \gamma(a_1^L - a_2^L)}{\phi}$$

   positive sabotage in equilibrium: $a_i^* > 0$, for γ high enough

2. $C(e_i^L, a_i^L) = (e_i^L + a_i^L)^2$
   - a_i^L increases MC of e_i^L and viceversa
   - $\gamma < 1$: no incentive to sabotage: $a_i^{L*} = 0$
   - $\gamma > 1$ incentive to sabotage for $\gamma > \hat{\gamma}$
   - high powered incentives in equilibrium only contingent on victory: $\pi_1^{L*} = \alpha$

Equilibrium Incentive Scheme with Policy Concessions

Suppose L can choose $\lambda \in [0,1]$, where λ is weight of faction ranking higher in party platform, i.e. (if $s^L = L_1$):

$$x^L = \lambda x_1^L + (1-\lambda) x_2^L$$

What is the optimal incentive scheme?

Proposition 4.

1. When $\gamma > 1$,
   - $(\pi_d^{L*}, \pi_v^{L*}) = (0,0)$
   - $\lambda^* = 1$
2. When $\gamma < 1$,
   - $(\pi_d^{L*}, \pi_v^{L*}) = (1-\alpha, \alpha)$
   - $\exists\ d'$ s.t. if $d(x_1^L, x_2^L) < d'$, then $\lambda^* = 1$; if $d(x_1^L, x_2^L) \geq d'$, $\lambda^* = 1/2$

Rewarding Sabotage: Intuition

Suppose $|x_1^L| > |x_2^L|$:

- In equilibrium $e_1^{L*} > e_2^{L*}$
- x_2^L gives the party a higher probability of victory (closer to V)
- L would like to set $x^L = x_2^L$, but incentive scheme must be anonymous

If $\gamma > 1 \Rightarrow \Pr\{s^L = 2\} > \Pr\{s^L = 1\} \Rightarrow \lambda^* = 1$

If $\gamma < 1 \Rightarrow \Pr\{s^L = 1\} > \Pr\{s^L = 2\}$ and higher λ has two effects:

1. incentivizes mobilization
2. moves the party platform aways from V (because $e_1^{L*} > e_2^{L*}$)

When $d(x_1^L, x_2^L) < d'$, the first effect dominates and $\lambda^* = 1$. Otherwise, the second effect dominates and $\lambda^* = 1/2$