#### Electoral Manipulation as Bureaucratic Control

Scott Gehlbach and Alberto Simpser

University of Wisconsin-Madison and University of Chicago

April 2013



### The problem of bureaucratic compliance

- Standard approach: emphasizes formal institutions
  - Contracts, administrative procedures, agency design
  - Example: increase wages, monitoring, punishments
- Under weak institutions, standard approach problematic
  - Ample discretion by those in power
  - Personalized promises and contracts
  - We argue: survival of political patron becomes paramount

#### Our argument

In weakly institutionalized environments

- For bureaucrat, success depends on picking sides well
- For politician, key to eliciting compliance is to convince bureaucrat that his grip on power is solid
- Electoral manipulation can be used as an instrument of bureaucratic control

### Logic: manipulation and information

- Role of electoral manipulation:
  - Muddles information about ruler's grip on power
  - Pro: Weak ruler can appear to have strong grip
  - Con: Manipulating is costly and risky
- This is an indirect effect of electoral manipulation (Simpser 2005; 2013)

#### Example: Belarus

• "only with the certainty of a big first-round victory could he [Lukashenko] be sure of keeping his hold over state officials" (Belarussian newspaper editor, quoted in *MT*)

### Bureaucratic autonomy from politics around the world

Bureaucratic Quality	4	3	2	1	0
Number of countries	23	28	50	28	11
Percent of sample	16	20	36	20	8
Representative cases	USA	India	China	Russia	DR Congo
	Japan	Indonesia	Brazil	Nigeria	Iraq
	France	Mexico	Pakistan	Ethiopia	${\sf Mozambique}$
	UK	Italy	Vietnam	Ukraine	Mali

Source: International Country Risk Guide Bureaucratic Quality Index for 2000. Reflects "autonomy from political pressure" among other things.



#### General model sketch

- Principal (politician) provides signal of hold on power
- Agent (bureaucrat) picks level of effort
  - Effort may (but need not) affect principal survival
- 3 Principal survives in office or is removed
- Payoffs given out
  - Bureaucrat receives compensation only if principal survives

### Players and assumptions

- Bureaucrat (b), Ruler (r), Citizen (opponent or pragmatist)
- Key assumptions:
  - Bureaucrat's compensation depends on ruler's survival
  - Ruler's hold on power hinges on the citizen's type
  - Ruler benefits from bureaucrat's cooperation
    - Model B: bureaucratic effort keeps ruler in office

- Citizen's type realized, Pr(t = p) = q, observed only by citizen
- Simultaneously and independently:
  - Citizen votes against/for ruler,  $v \in \{0, 1\}$ , in non-binding vote
  - ullet Ruler chooses whether to attempt manipulation,  $m \in \{0,1\}$

Vote and manipulation jointly determine outcome  $\hat{v} \in \{0,1\}$ 

- ③ Bureaucrat chooses  $e(\hat{v}, m) \in \{0, 1\}$
- Ruler survives/not

- Citizen's type realized, Pr(t = p) = q, observed only by citizen
- Simultaneously and independently:
  - Citizen votes against/for ruler,  $v \in \{0,1\}$ , in non-binding vote
  - ullet Ruler chooses whether to attempt manipulation,  $m \in \{0,1\}$

Vote and manipulation jointly determine outcome  $\hat{\nu} \in \{0,1\}$ 

- ③ Bureaucrat chooses  $e(\hat{v}, m) \in \{0, 1\}$
- Ruler survives/not



- Citizen's type realized, Pr(t = p) = q, observed only by citizen
- 2 Simultaneously and independently:
  - Citizen votes against/for ruler,  $v \in \{0,1\}$ , in non-binding vote
  - ullet Ruler chooses whether to attempt manipulation,  $m \in \{0,1\}$

Vote and manipulation jointly determine outcome  $\hat{\nu} \in \{0,1\}$ 

- **3** Bureaucrat chooses  $e(\hat{v}, m) \in \{0, 1\}$
- 4 Ruler survives/not



- Citizen's type realized, Pr(t = p) = q, observed only by citizen
- Simultaneously and independently:
  - Citizen votes against/for ruler,  $v \in \{0,1\}$ , in non-binding vote
  - ullet Ruler chooses whether to attempt manipulation,  $m \in \{0,1\}$

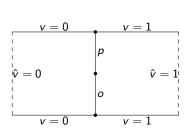
Vote and manipulation jointly determine outcome  $\hat{v} \in \{0,1\}$ 

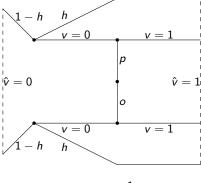
- **3** Bureaucrat chooses  $e(\hat{v}, m) \in \{0, 1\}$
- Ruler survives/not

### Non-binding vote

- Can understand non-binding vote as election where ruler is guaranteed victory (i.e. for any v, m)
  - $\bullet$  Hence, manipulation m cannot be aimed at winning
  - Nevertheless, in equilibrium manipulation can be useful to ruler
- Outcome  $\hat{v} \in \{0,1\}$  is determined thus:
  - If no manipulation then  $\hat{v} = v$
  - If manipulation:
    - If v=1 then  $\hat{v}=1$
    - If v = 0 then  $Pr\{\hat{v} = 1\} = h$

# Manipulation technology





$$m = 0$$

$$m = 1$$

• *h* = "effectiveness" of manipulation



# Outcomes and payoffs

Ruler's survival technology:

$$\pi = e \text{ if } t = p$$

$$\beta e \text{ if } t = o; \ \beta \in (0,1)$$

- Payoffs:
  - Ruler:  $u_r = \pi \varsigma m \kappa$
  - Bureaucrat:  $u_b = \pi w e \eta$
  - Pragmatist: prefers ruler to survive  $\Leftrightarrow$  bureaucrat exerts effort
  - Opponent: strictly prefers to vote against ruler, v = 0

#### **Preliminaries**

• Bureaucrat's expected payoff from e = 1:

$$[\hat{q} + (1 - \hat{q})\beta]w - \eta,$$

where  $\hat{q}(m, \hat{v})$  represents posterior belief citizen is pragmatist

• Bureaucrat prefers to exert effort iff

$$\hat{q} \ge \bar{q} \equiv \frac{\eta - \beta w}{w - \beta w}$$

• By assumption,  $q < \bar{q} \Rightarrow$  no effort in pooling equilibrium (true even with manipulation)



### Pooling equilibria

- "Pooling": pragmatist and opponent both choose v = 0
  - Bureaucrat: no learning and therefore no effort
  - Ruler: no manipulation, falls anyway
  - Pooling ruled out by intuitive criterion: Off-the-path deviation to  $\nu=1$  would reveal citizen to be pragmatist

# Separating equilibria

- "Separation": pragmatist chooses v = 1, opponent v = 0
- No manipulation:
  - Bureaucrat knows citizen's type with certainty
  - $\bullet$  Effort if and only if  $\hat{\textit{v}}=1$
- Manipulation:
  - Plebiscite outcome is noisy signal:  $\hat{v}=1$  possible if pragmatist or opponent
  - Effort if and only if a)  $\hat{v} = 1$ , and b) signal not too noisy

### Separating equilibria, cont.

• Choice to manipulate is a choice between two lotteries:

	Pragmatist $(q)$	Opponent $(1-q)$	
No manipulation	ς	0	
Manipulation	$\varsigma - \kappa$	$heta \varsigma - \kappa$	

- If manipulation does not contribute to victory, why does the ruler manipulate?
  - Allows 'weak' ruler to elicit effort from bureaucrat, by making it seem likely that he is 'strong'

#### Separating equilibria, cont.

#### Proposition

There exists a separating equilibrium in which a pragmatist chooses v=1, an opponent chooses v=0, and the bureaucrat exerts effort iff  $\hat{v}=1$  (any m). If

$$\frac{q}{q+(1-q)h} > \frac{\eta-\beta w}{w-\beta w}$$

and

$$k < (1 - q)h\beta\varsigma$$

then the ruler manipulates in this equilibrium. If either condition fails to hold (weakly), the ruler does not manipulate.

#### Model A: effort unrelated to survival

- Bureaucrat's effort benefits ruler, but does not affect survival
- Examples:
  - Effort yields corrupt rents to to ruler
  - Effort yields policy that ruler likes
- To elicit effort, ruler pays bonus conditional on observable output
  - But contract binds only if ruler survives
- Result:
  - Separating equilibrium with manipulation exists here too

### Main points

- Electoral manipulation as tool for bureaucratic control
  - Bureaucrats often depend on fate of patron
  - Effort depends on perceived likelihood of patron's survival
  - Electoral manipulation influences such perceptions
- Non-electoral motivation for electoral manipulation
- Generalization:
  - Vanishing principals: job mobility, bankruptcy, etc.
  - Signaling likely survival as key control variable