

Political Economics

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Topic 2

Content:

- ✓ Political agency
- ✓ Re-election incentives
- ✓ Term limit

Reference:

- ✓ Besley (2007), ch. 3 (3.1, 3.2, 3.3 only)

Political agency

- ✓ Principal-agent framework where voters represent the principal and elected officials represent the agent

- ✓ Two main issues:
 - **Monitoring of opportunistic behavior** (hidden action by politicians and moral hazard problem)
 - **Selection of “good” politicians** (hidden type - i.e. honesty or competence - of politicians and adverse selection problem)

- ✓ Need for political accountability
 - **Formal accountability** (i.e. repeated elections) vs. **real accountability** (media freedom, political competition, social capital)

A simple model of political agency

➤ Two-period model where preferred policy (by voters) depends on the state of the world (e.g. boom or recession)

$t \in \{1,2\} \Rightarrow$ two periods

$e_t \in \{0,1\} \Rightarrow$ policy decision

$s_t \in \{0,1\} \Rightarrow$ state of the world

$\Delta > 0$ iff $e_t = s_t$ (zero otherwise) \Rightarrow voters' payoff

$\beta < 1 \Rightarrow$ discount factor

Good vs. bad politicians

- There are 2 types of politicians: **congruent** (i.e. aligned with voters' preferences) and **dissonant** (i.e. unaligned with voters' preferences)

congruent with probability π
 $i = c \rightarrow$ payoff : $E + \Delta$ if $e_t = s_t$
always set $e_t = s_t$

dissonant with probability $(1 - \pi)$
 $i = d \rightarrow$ payoff : $E + r_t$ if $e_t \neq s_t$
 $r_t \sim G(r)$ CDF $r_t \in [0, R]$
 $E(r) = \mu$

Timing

1. Nature decides the type of incumbent politician (i) and state of the world (s): both unobservable to voters
2. Nature decides rents for dissonant politicians (r_1)
3. Incumbent politician decides policy (e_1)
4. Payoff to voters and re-election decision
5. Rents (r_2), policy (e_2) and payoff for the second period are determined

Equilibrium

Period 2

$e_2 = s_2$ for congruent

$e_2 = (1 - s_2)$ for dissonant

Period 1

λ probability that $e_1 = s_1$ for dissonant (endogenous)

$e_1 = s_1$ always for congruent

$\psi = \frac{\pi}{\pi + (1 - \pi)\lambda} \geq \pi$ voters' belief that incumbent politician is congruent

Retrospective voting \rightarrow if Δ observed, then politician is re - elected

[rational behavior by voters]

Equilibrium (contd.)

Decision in period 1 by dissonant guy

Benefit of $e_1 = 1 - s_1 \Rightarrow r_1$

Benefit (expected) of $e_1 = s_1 \Rightarrow \beta(\mu + E)$

Hence, $e_1 = s_1$ iff $\beta(\mu + E) > r_1$

$\Rightarrow \lambda = G(\beta(\mu + E))$

\Rightarrow Accountability effect of re - election incentives

Welfare

Period 1 voters' utility :

$$V_1(\lambda) = [\pi + (1 - \pi)\lambda]\Delta$$

Period 2 voters' utility (4 cases) :

$\pi \rightarrow$ re - elected $\rightarrow \Delta$

$(1 - \pi)\lambda \rightarrow$ re - elected $\rightarrow 0$

$\pi[1 - \pi - (1 - \pi)\lambda] \rightarrow$ not re - elected & congruent drawn $\rightarrow \Delta$

$(1 - \pi)[1 - \pi - (1 - \pi)\lambda] \rightarrow$ not re - elected & dissonant drawn $\rightarrow 0$

Therefore $\Rightarrow V_2(\lambda) = \pi[1 + (1 - \pi)(1 - \lambda)]\Delta$

Welfare (contd.)

$$V(\lambda) = V_1(\lambda) + \beta V_2(\lambda)$$

$\Rightarrow V(\lambda)$ increasing in λ $\left[\begin{array}{l} \text{second period loss : } \beta\pi(1 - \pi) \\ \text{first period gain : } (1 - \pi) \end{array} \right]$

$\Rightarrow V(\lambda)$ increasing in π [for now exogenous]

\Rightarrow negative relationship between voter welfare and political turnover

TURNOVER = $(1 - \pi)(1 - \lambda)$ decreasing in both λ and π

WELFARE = $V(\lambda)$ increasing in both λ and π

Term limit

- Dissonant politicians behave differently in first vs. second term

$$e_1 = s_1 \text{ with probability } \lambda$$

$$e_2 = 1 - s_2 \text{ always}$$

- But expected performance in the selected group of re-elected politician is higher than average:

$$\frac{\pi}{\pi(1-\pi)\lambda} > \pi$$

Term limit (contd.)

- On average, if you compare first vs. second term:

$$\pi + \lambda(1 - \pi) \quad e_1 = s_1 \quad \text{in period 1}$$

$$\pi + \pi(1 - \pi)(1 - \lambda) \quad e_2 = s_2 \quad \text{in period 2}$$

$$\lambda(1 - \pi) \leftrightarrow \pi(1 - \pi)(1 - \lambda)$$

↑
Positive
discipline
effect

↑
Positive
selection
effect

Empirical evidence

➤ Do voters keep politicians accountable by means of retrospective voting? Look at US governors from 1950 to 2000 (Besley 2007):

$$r_{gst} = \alpha_s + \beta_t + \rho X_{st} + \gamma Z_{gt} + \mathcal{J}\Delta_{st} + \varepsilon_{st}$$

variable of interest: policy change (Δ)

➤ Does term limit matter? And how?

$$p_{st} = \alpha_s + \beta_t + \rho t_{st} + \mathcal{J}y_{st} + \varepsilon_{st}$$

variable of interest: binding term limit (t)

Retrospective voting (1)

Table 3.2 Accountability

	(1)	(2)	(3)	(4)
	Governor re-elected	Governor re-elected	Governor re-elected	Governor re-elected
Growth in real taxes per capita	-0.704 (2.49)*	-0.734 (2.29)*	-0.932 (3.22)**	-0.873 (2.76)**
Growth in real income per capita	1.808 (3.05)**	2.501 (4.73)**	1.475 (2.54)*	2.350 (4.82)**
Growth in real expenditure per capita	0.132 (0.37)	-0.013 (0.03)	-0.035 (0.10)	-0.258 (0.71)
Log of state population	-0.001 (0.00)	0.230 (1.43)	0.025 (0.15)	0.241 (1.53)
Vote share in last election	0.004 (1.04)	0.010 (2.87)**	-0.001 (0.17)	0.006 (2.09)*
Governor's age			-0.017 (5.08)***	-0.013 (2.77)**
Governor is trained as a lawyer			0.021 (0.38)	0.007 (0.13)
Years of work experience before governorship			0.018 (5.58)**	0.016 (3.95)**
Fraction of previous experience in politics			0.636 (5.48)**	0.775 (6.85)**
Years of education			0.003 (0.35)	0.003 (0.38)
Constant	-1.983 (0.90)	-3.131 (1.31)	-1.856 (0.87)	-4.186 (1.76)
Observations	485	381	475	372
R-Squared	0.17	0.26	0.31	0.41

Retrospective voting (2)

Table 3.3 Votes if re-elected

	(1) % vote captured by the winner	(2) % vote captured by the winner
Growth in real taxes per capita	-13.288 (2.50)*	-11.901 (2.18)*
Growth in real income per capita	9.452 (1.10)	7.275 (0.82)
Growth in real expenditure per capita	4.945 (0.85)	5.068 (0.83)
Log of state population	-0.126 (0.28)	-0.175 (0.36)
Vote share in last election	0.432 (4.94)**	0.424 (4.84)**
Governor's age		-0.110 (0.66)
Governor is trained as a lawyer		1.592 (1.18)
Years of experience before governorship		-0.010 (0.07)
Fraction of experience in politics		2.479 (0.97)
Years of education		0.147 (0.44)
Constant	36.291 (3.98)**	38.904 (3.12)**
Observations	268	261
R-squared	0.18	0.22

Term limit (1)

Table 3.5 Term-limit effects

	(1) Real government spending per capita (\$ 1982)	(2) Total taxes per capita (\$ 1982)	(3) Sales taxes per capita	(4) Income taxes per capita	(5) Corporate taxes per capita
Governor cannot run	0.034 (4.45)**	0.090 (1.81)	0.030 (0.83)	0.116 (3.35)**	0.028 (2.76)**
Log of real income per capita (\$ 1982)	-0.244 (4.53)**	1.015 82.59**	1.522 (5.52)**	-0.579 (1.80)	-0.142 (1.91)
Log of state population	-0.047 (0.84)	-1.570 (3.80)**	-0.675 (2.05)*	0.184 (0.56)	-0.021 (0.26)
Population aged 65 and above (%)	-0.851 (1.97)*	6.167 (2.39)*	9.202 (4.63)**	0.155 (0.006)	0.492 (0.93)
Population aged 17 and below (%)	-0.571 (1.68)	6.063 (2.56)**	3.328 (2.20)*	7.241 (3.86)**	-0.051 (0.13)
Governor is a democrat	0.020 (3.36)**	0.037 (1.03)	0.033 (1.33)	0.060 (2.06)*	-0.000 (0.06)
Democrats control senate	0.032 (3.78)**	0.299 (5.26)**	0.099 (2.15)*	0.159 (3.30)**	0.021 (1.46)
Democrats control house	0.004 (0.39)	0.202 (3.39)**	0.049 (1.08)	0.103 (2.19)*	0.032 (2.23)*
Divided government	-0.000 (0.03)	-0.103 (2.66)**	-0.039 (1.47)	0.030 (1.00)	-0.032 (3.72)**
Constant	7.181 (21.78)**	13.813 (4.84)**	-16.489 (6.36)**	4.789 (2.30)*	3.462 (4.93)**
Observations	2162	2203	2210	1739	1810
R-Squared	0.95	0.91	0.88	0.87	0.79

Term limit (2)

Table 3.6 Congruence and term limits

	(1) Congruence-ADA	(2) Congruence-COPE
Governor cannot run	1.173 (2.63)**	2.383 (4.40)**
Log of real income per capita (\$ 1982)	-29.049 (7.60)**	-22.964 (4.90)**
Log of state population	12.958 (2.88)**	4.569 (0.84)
Population aged 65 and above (%)	-92.096 (3.62)**	-139.090 (4.14)**
Population aged 17 and below (%)	-32.204 (1.20)	-7.249 (0.22)
Governor is a democrat	1.651 (4.68)**	2.104 (4.78)**
Democrats control senate	1.034 (1.93)	-0.818 (1.18)
Democrats control house	-0.113 (0.21)	0.969 (1.41)
Divided government	-3.001 (8.19)**	-3.499 (7.84)**
Constant	343.609 (10.23)**	360.278 (8.41)**
Observations	1632	1632
R-squared	0.72	0.64

Further empirical evidence

- Brazilian evidence from anti-corruption program (independent audit reports on local governments)
- Ferraz&Finan (2008) show that the release of the audit (before next election) reduces the re-election probability of corrupt incumbents
- Ferraz&Finan (2011) find less corruption in municipalities where mayors can get reelected:
 - Mayors with re-election incentives misappropriate 27 percent fewer resources than mayors without re-election incentives