Why do Autocrats Disclose? Economic Transparency and Inter-Elite Politics in the Shadow of Mass Unrest

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Question

When and why do autocratic governments disclose information (particularly economic information) to their publics?

Note: We will use the terms *disclosure* and *transparency* interchangeably

The Larger (Book) Project

Contributions:

1. Develop index of transparency based on missing data
2. ↑ Transparency
   - **In autocracies:** ↑ mass protest, risk regime collapse/transition
   - **In democracies:** ↓ risk of regime collapse, irregular leader removal
3. Democracies more prone to disclose than autocracies
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Given the risks, why would autocrats disclose?

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Transparent autocratic regimes:

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- but, are less prone to collapse due to coups

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- this is *because* transparency facilitates mass mobilization

Predictions

Demonstrate that in autocracies:

1. disclosure more frequent in institutionalized/hierarchical regimes
2. leaders disclose more readily when new to office
3. transparency is associated with reduced risk of *leader* removal via coup

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Autocratic leaders face two threats to rule:

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Steps by elites to replace leader increase regime instability

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Transparency cows elites from acting against leader

The Leadership's Trade-off

Transparency brings both costs and benefits for leader

- **Benefits:** Increased insulation from elite
- **Costs:** Populace may depose regime even w/o regime infighting

Benefits outweigh costs when:

1. Leader's preferences over policy diverge from regime elite
2. Internal risks are high
   a. institutionalized rule (designated successors, legitimacy vested in institutions rather than leader identity)
   b. leaders are new to office

Illustrative Example

Think *glasnost* and *perestroika*

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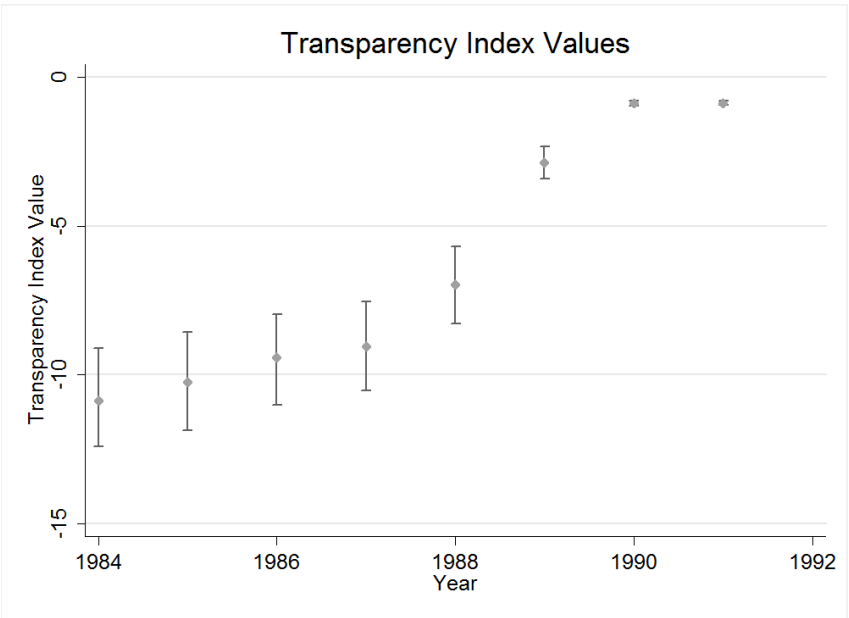

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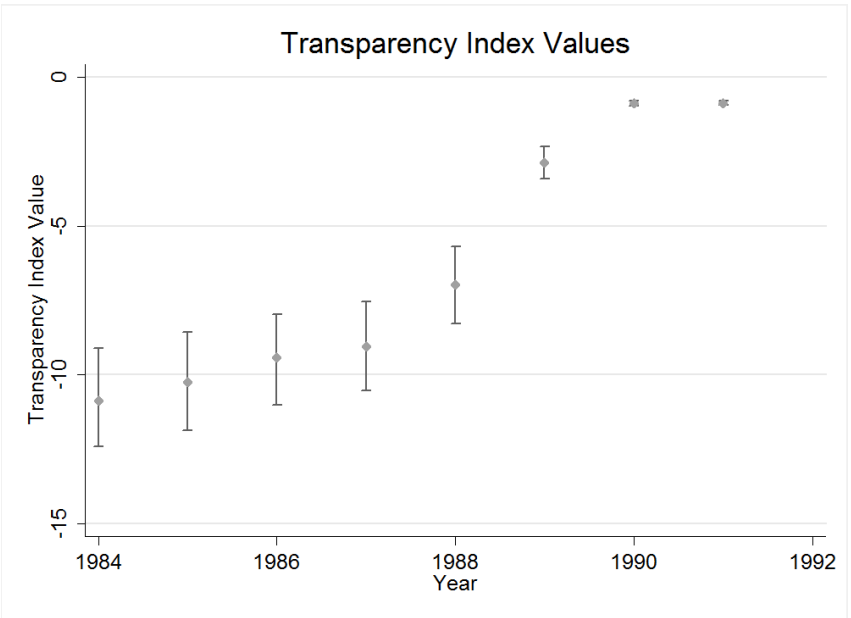
- Gorbachev undertakes 'socialist democratization' to overcome resistance w/in Party to *perestroika*



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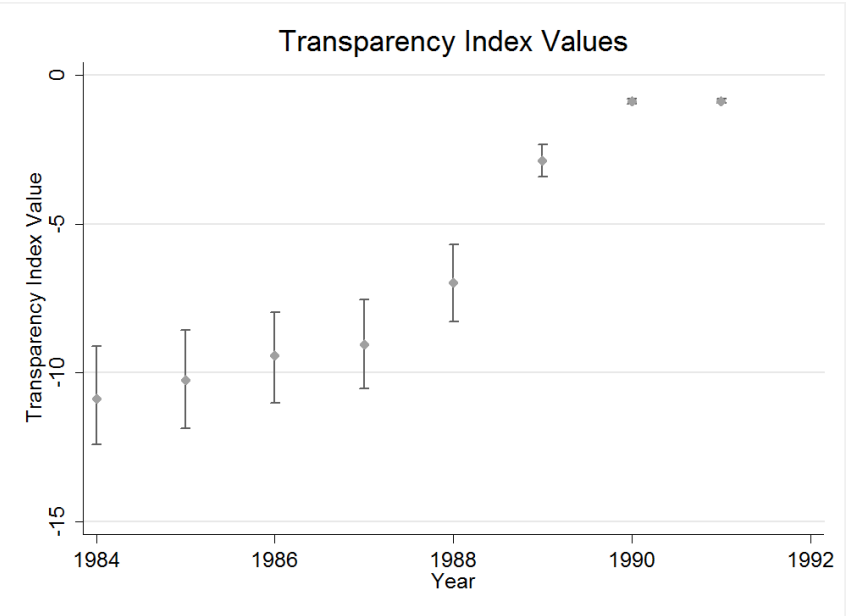

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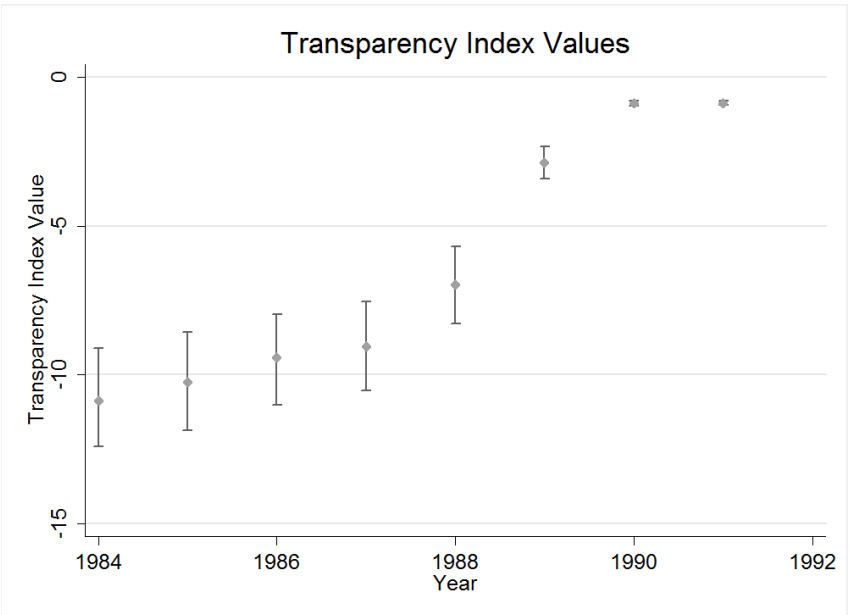
- and Soviet collapse following August 1991 *putsch* that is met by counter-coup led by Yeltsin featuring street protests



Model Primitives

Actors:	an autocratic leader L Regime Elites R and the masses M
Actions:	L chooses $d \in \{0, 1\}$ and a policy variable $e_t \in \{0, 1\}$ R chooses $v \in \{0, 1\}$
Typespace:	L is of type $\theta \in \{0, 1\}$ $\theta = 1$ denotes a 'convergent' type $\theta = 0$ denotes a 'divergent' type $Pr(\theta = 1) = \pi$
State Space:	$s_t \in \{0, 1\}$, $Pr(s_t = 1) = \frac{1}{2}$
Timing:	$t \in \{1, 2\}$

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- risk of regime collapse given by $\omega p(d)$ following removal of L
- ω declines with institutionalization, rises with leader's time in office

Regime Utilities

$$u_{R,t}(e_t, s_t) = \begin{cases} I_t[\Delta + \lambda y] + (1 - I_t)(1 - \lambda)y \text{ if } e_t = s_t \\ I_t \lambda y + (1 - I_t)(1 - \lambda)y \text{ otherwise} \end{cases}$$

where

$$I_t = \begin{cases} 1 \text{ if } R \text{ is in power} \\ 0 \text{ otherwise.} \end{cases}$$

and $\lambda \in (\frac{1}{2}, 1)$, $\Delta > 0$.

Leader Utilities

$$u_{L,t}(e_t, s_t; \theta) = \begin{cases} \Delta + \lambda y \text{ if } e_t = s_t \text{ and in power} \\ \lambda y \text{ if } e_t \neq s_t,\ \theta = 1 \text{ and in power} \\ r_t + \lambda y \text{ if } e_t \neq s_t,\ \theta = 0 \text{ and in power} \\ 0 \text{ if out of power.} \end{cases}$$

where $r_t \sim G(\cdot)$, and $G(\cdot)$ has support on $[\Delta, \infty)$

Game Form

1. *Nature* draws the the leader's type $\theta \in \{0, 1\}$, the state variable s_1 and the value of rents r_1, which are revealed to the leader but not to any citizen.
2. The leader chooses $d \in \{0, 1\}$ and the value of e_1
3. Members of the regime observe the choice of d and the realization of the policy outcome. They choose whether to unseat the leader $v \in \{0, 1\}$.
4. A contest for power between R and M takes place. M prevails with probability $p(d)$ if the leader was previously retained and with probability $\omega p(d)$ if the leader was previously removed.
5.
   a. If M prevails, it is in power in round 2 and a new leader is chosen by *Nature*. This leader is of type $\theta = 1$ with probability π.
   b. If R prevails after ousting the leader, a new leader is chosen by *Nature*. This leader is of type $\theta = 1$ with probability π.
   c. Otherwise, L remains in office.
6. *Nature* chooses values of s_2 and r_2, which are revealed to the sitting leader, but not to any other player.
7. The sitting leader chooses e_2. All payoffs are realized and the game ends.

Equilibrium Concept

Perfect Bayesian equilibrium (PBE) solution concept

Apply following restrictions:

1. L discloses when indifferent over $d \in \{0, 1\}$
2. intuitive criterion (Cho and Kreps, 1987) satisfied

Semi-separating PBE uniquely satisfies these restrictions

Definition: Stability Thresholds

Implicitly define $\bar{\omega}$ and $\underline{\omega}$ s.t.:

$$\pi\Delta = \frac{p(0)y(\bar{\omega}-1)(2\lambda-1)}{1-\bar{\omega}p(0)}$$

$$\pi\Delta = \frac{p(1)y(\underline{\omega}-1)(2\lambda-1)}{1-\underline{\omega}p(1)}.$$

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- if $\omega > \bar{\omega}$ no internal threat to leader
- if $\omega < \underline{\omega}$ always an internal threat to leader
- if $\omega \in [\underline{\omega}, \bar{\omega}]$ a threat absent disclose, but no threat given disclosure

Definition: Rent Thresholds

Define $\bar{r}(\omega)$ such that:

$$\bar{r}(\omega) = \begin{cases} \Delta + [1 - p(0)][\mu + \lambda y] \text{ if } \omega < \underline{\omega} \\ \Delta + \rho[\mu + \lambda y] \text{ if } \omega \in [\underline{\omega}, \bar{\omega}] \\ \Delta \text{ if } \omega > \bar{\omega}. \end{cases}$$

Equilibrium Definition

A semi-separating PBE to this game consists of the following strategies and beliefs:

1. For L:

$$(e_1, d) = \begin{cases} (\neg s_1, 1) \text{ if } r_1 \geq \bar{r}(\omega),\ \omega \leq \bar{\omega} \text{ and } \theta = 0 \\ (\neg s_1, 0) \text{ if } r_1 \geq \bar{r}(\omega),\ \omega > \bar{\omega} \text{ and } \theta = 0 \\ (s_1, 0) \text{ otherwise.} \end{cases}$$

$$e_2 = \begin{cases} \neg s_2 \text{ if } \theta = 0 \\ s_2 \text{ otherwise.} \end{cases}$$

2. For R:

$$v = \begin{cases} 0 \text{ if } \omega > \bar{\omega} \\ 0 \text{ if } \omega > \underline{\omega} \text{ and } d = 1 \\ 0 \text{ if } (e_1, d) = (s_1, 0) \\ 1 \text{ otherwise.} \end{cases}$$

3. and R's beliefs are given (with some abuse of notation) by $Pr(\theta = 1 | e_1 = s_1, d = 0) > \pi$ and $Pr(\theta = 1 | e_1, d) = 0$ for all other realizations of (e_1, d).

Disclosure Reduces Coups

Proposition

In a semi-separating equilibrium to a model without disclosure, when $\omega \in [\underline{\omega}, \bar{\omega}]$ *and* $r_1 > \Delta + [1 - p(0)][\mu + \lambda y]$, *divergent types of L are removed by the elite with certainty. For the same set of parameter values, in a semi-separating equilibrium where disclosure is possible, divergent types of L are retained with certainty and choose* $d = 1$.

Leaders Disclose When Threats are from the Elite

Proposition

L chooses $d = 1$ *for a wider range of realizations of* r_1 *and* θ *when* $\omega \leq \bar{\omega}$ *than when* $\omega > \bar{\omega}$.

Corollary: Disclosure a Strategic Complement to Leader Defiance

Corollary

L sets $d = 1$ *only if* $e_1 \neq s_1$.

Data Definitions

Test these predictions using:

- HRV Transparency Index (HRV, 2014) as a measure of disclosure of economic info
- GWF dataset on autocratic institutions – party, personalistic, and military (and monarchies)
- DD dataset on autocratic institutions – hierarchical (military/monarchical) vs. non-hierarchical
- PWT 7.1 economic data
- Svolik (2012) for definitions of regimes and leaders' time in office and leader removal

Coups: Empirical Model

Cox conditional gap time models, with strata defined by coup history

$$h_l(t) = h_0(t, c_l) exp(\gamma transparency_{l,t-1} + \mathbf{X_{l,t-1}}\beta)$$

- l denotes leader
- t denotes time in office
- c_l is either an indicator for past leader removal via coup, or an ordered term reflecting past coup history

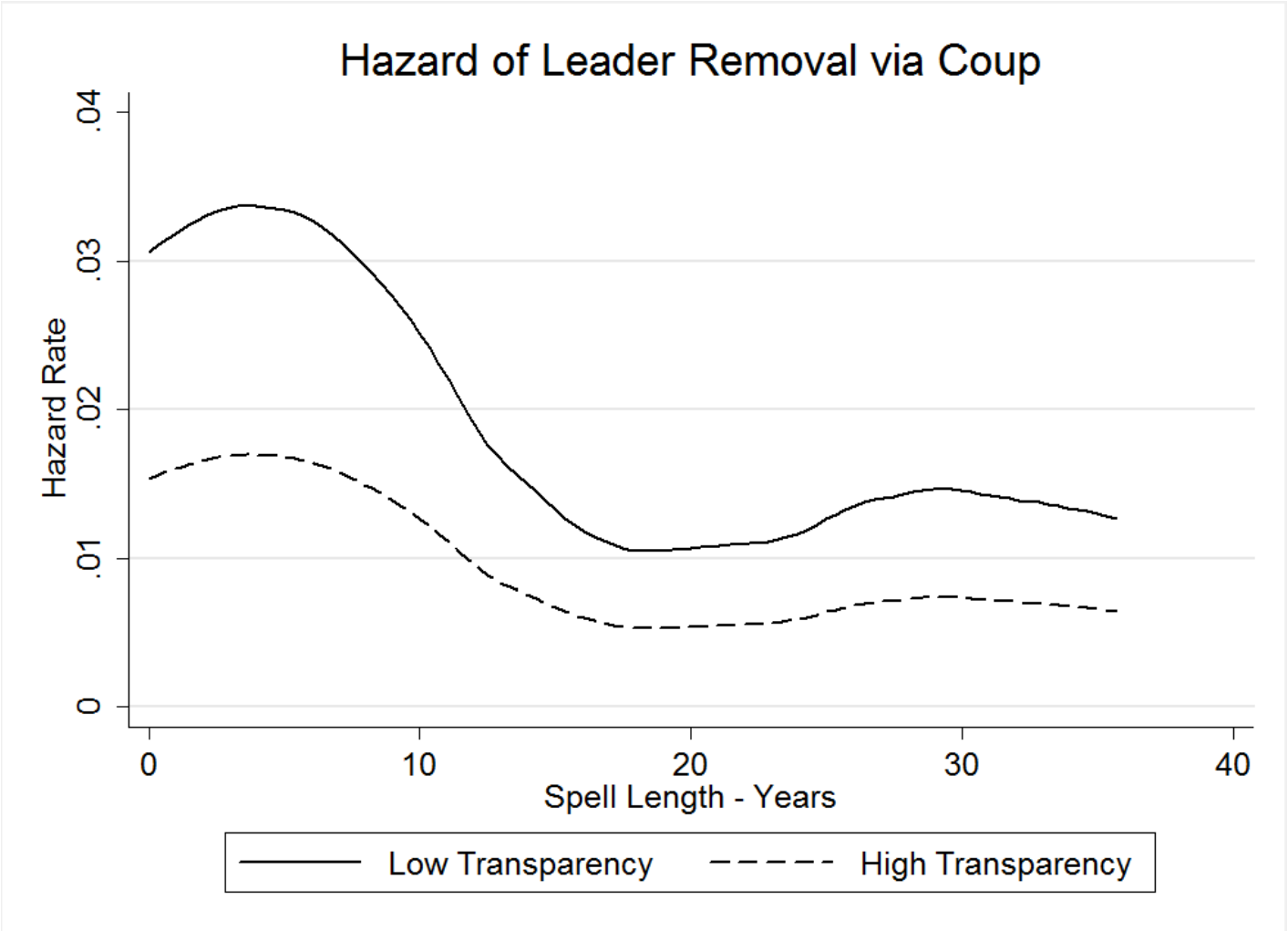
Coup Results: GWF Controls

	Past Coup Strata	Coup Experience Strata	Past Coup Control
Transparency	-0.248	-0.282	-0.240
	[-0.480,-0.016]	[-0.531,-0.033]	[-0.461,-0.019]
Growth	-0.003	-0.005	-0.000
	[-0.031,0.026]	[-0.042,0.032]	[-0.029,0.029]
GDP *per capita*	-0.110	-0.094	-0.117
	[-0.208,-0.012]	[-0.175,-0.013]	[-0.229,-0.005]
Party	-1.793	-1.709	-1.735
	[-2.595,-0.991]	[-2.451,-0.967]	[-2.661,-0.810]
Party $\times$ t	0.113	0.112	0.109
	[0.045,0.181]	[0.049,0.175]	[0.037,0.182]
Personal	-0.807	-0.676	-0.809
	[-1.609,-0.004]	[-1.437,0.084]	[-1.592,-0.025]
Ever Past Coup			-0.047
			[-0.908,0.814]
# of Subjects	89	89	89
# of Failures	36	36	36

Coup Results: DD Controls

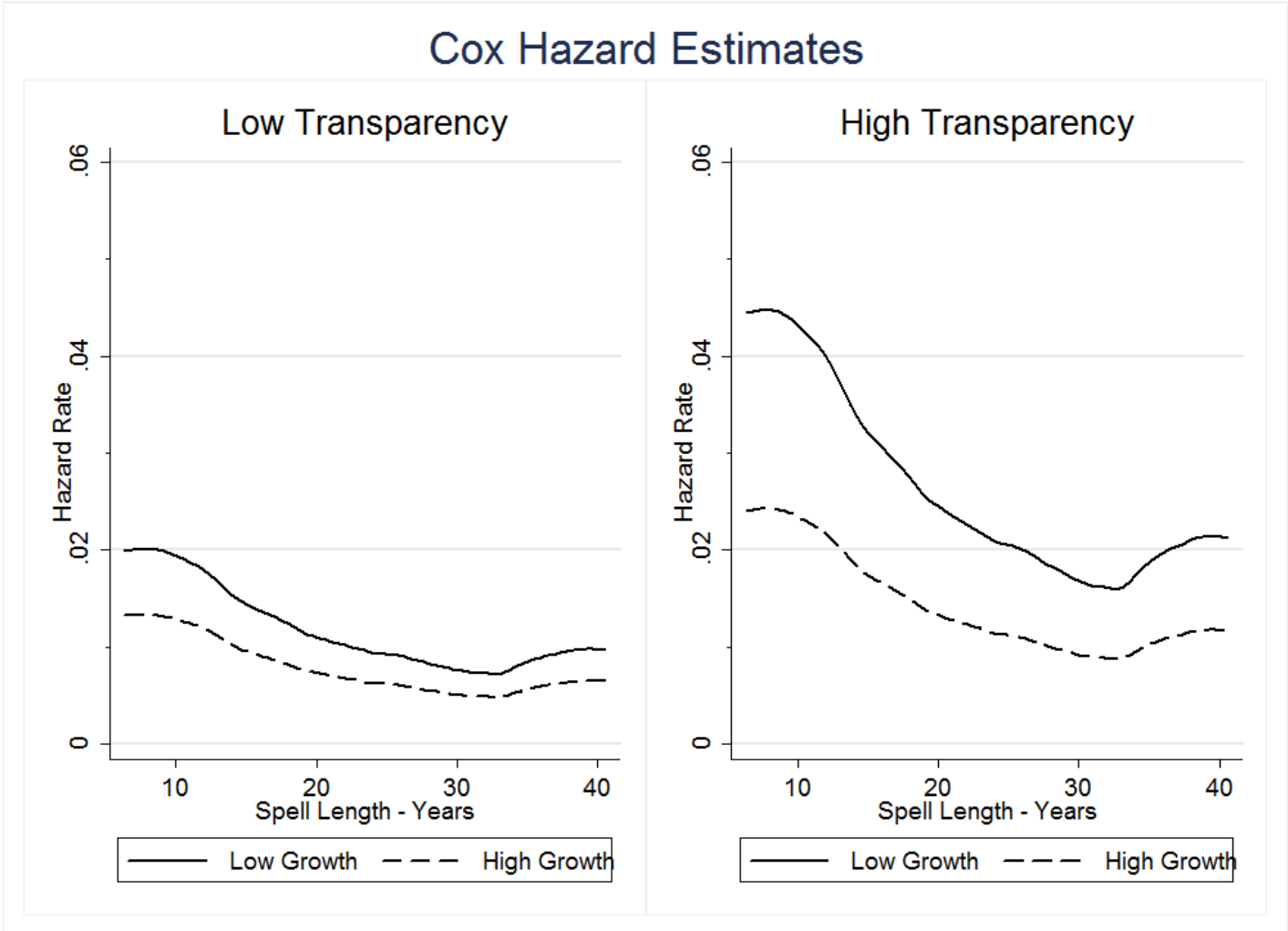
	Past Coup Strata	Coup Experience Strata	Past Coup Control
Transparency	-0.202	-0.228	-0.217
	[-0.401,-0.002]	[-0.450,-0.006]	[-0.420,-0.014]
Growth	-0.008	-0.006	-0.006
	[-0.035,0.019]	[-0.040,0.028]	[-0.033,0.021]
GDP *per capita*	-0.073	-0.071	-0.078
	[-0.145,-0.001]	[-0.138,-0.004]	[-0.154,-0.002]
Hierarchical	0.410	0.280	0.430
	[-0.196,1.017]	[-0.311,0.871]	[-0.182,1.041]
Ever Past Coup			-0.126
			[-0.969,0.717]
# of Subjects	94	94	94
# of Failures	37	37	37

Graphically...

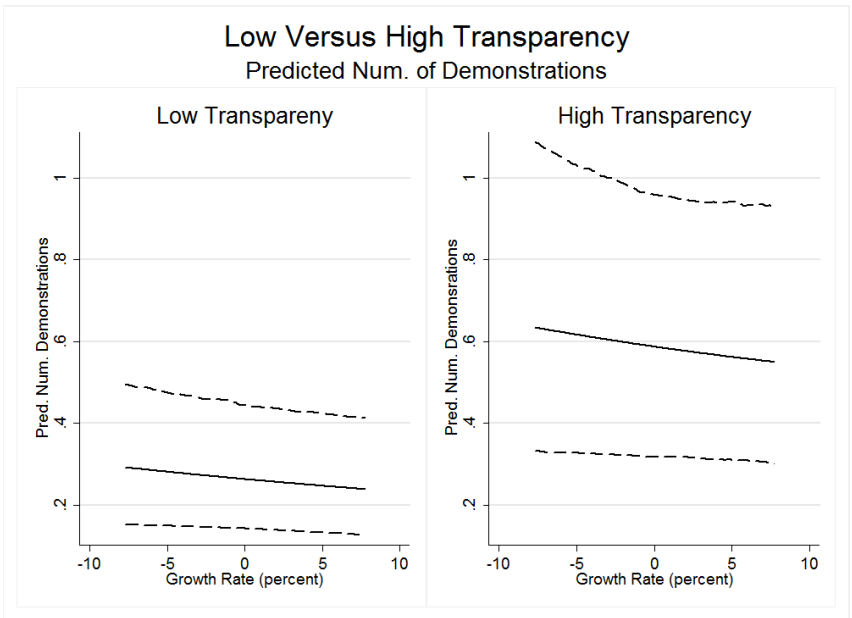


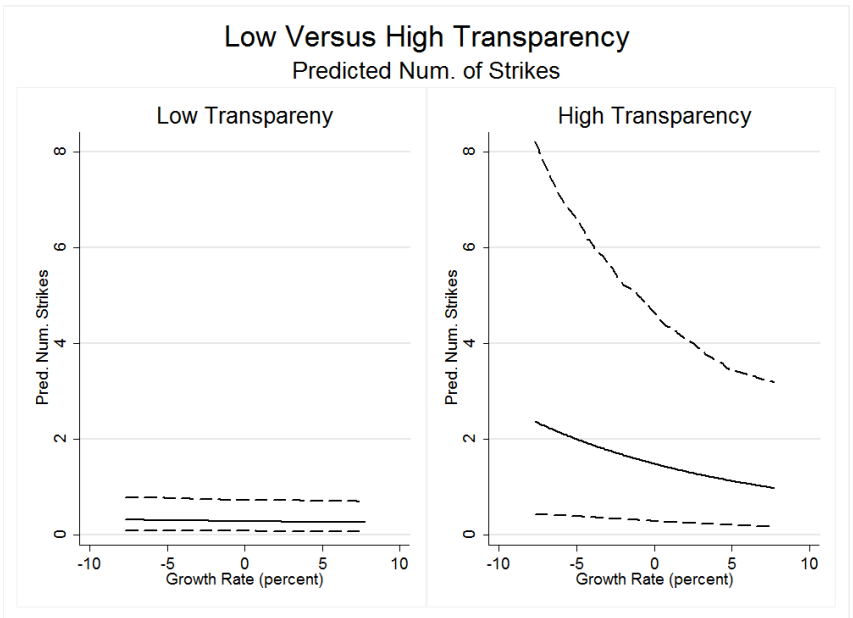
Contrast with Threat of Mass Mobilization

Hazard of Aut. Regime Removal via Mass Unrest or Democratization



Contrast with Frequency of Strikes and Protests





Who Discloses?: Empirical Model

Varying intercepts hierarchical model:

$$transparency_{i,t} = \rho transparency_{i,t-1} + \alpha_i + \mathbf{X_{i,t-1}}\beta + \epsilon_{i,t}$$
$$\alpha_i \sim N(\mathbf{Z_i}\gamma, \sigma_\alpha^2)$$

- $\mathbf{Z_i}$ denotes time invariant institutional characteristics
- $X_{i,t-1}$ denotes ec. data, leader time in office, cubic polynomial of time
- i is an autocratic regime (some of which are quite short-lived)

Estimate via MCMC

Who Discloses?: GWF Results

	Model 1	Model 2	Model 3
Party	0.002	0.002	0.002
	[-0.033, 0.038]	[-0.039, 0.031]	[-0.037, 0.036]
Personal	-0.039	-0.038	-0.044
	[-0.083, -0.001]	[-0.085, -0.007]	[-0.087, -0.008]
Fuel Exporter	-0.037	-0.036	-0.033
	[-0.082, 0.010]	[-0.073, 0.006]	[-0.070, 0.008]
Lag Transparency	0.960	0.961	0.964
	[0.943, 0.978]	[0.943, 0.977]	[0.947, 0.980]
New Leader	0.023	0.024	0.024
	[-4×10^{-4}, 0.047]	[0.001, 0.048]	[0.002, 0.049]
# **Obs**	1530	1530	1530
# **Regimes**	119	119	119

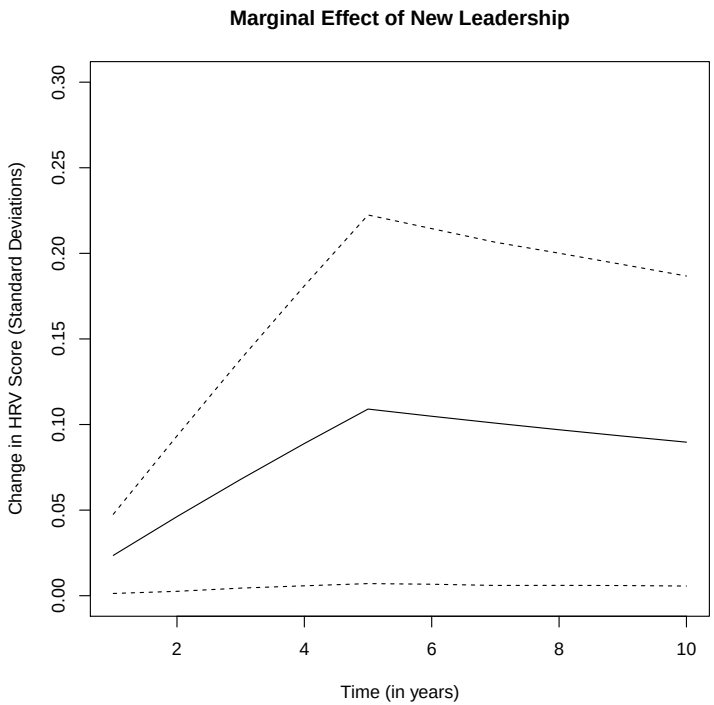
Ec. controls and cubic polynomial of time included in all specifications

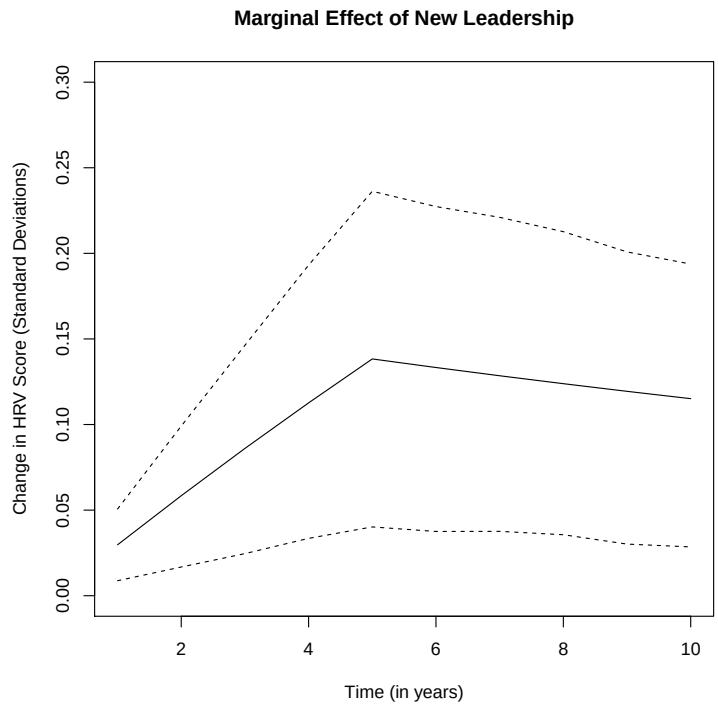
Who Discloses?: DD Results

	Model 1	Model 2	Model 3
Hierarchical	-0.024	-0.036	-0.034
	[-0.061, 0.005]	[-0.064, -0.009]	[-0.062, -0.004]
Fuel Exporter	-0.003	-0.024	-0.023
	[-0.054, 0.045]	[-0.068, 0.016]	[-0.066, 0.019]
Lag Transparency	0.957	0.962	0.965
	[0.939, 0.976]	[0.947, 0.979]	[0.948, 0.98]
New Leader	0.032	0.03	0.03
	[0.007, 0.054]	[0.006, 0.055]	[0.007, 0.056]
# **Obs**	1481	1481	1481
# **Regimes**	131	131	131

Additional controls and cubic polynomial of time included in all specifications

New Leader Marginal Effect





Conclusion

Construct a model of disclosure consistent with existing empirical findings

- transparency increases the risk of mass mobilization
- and reduces the risk of coup

Novel argument that autocratic leaders may gain from deliberately destabilizing the regime

Conclusion

Demonstrate that:

1. newly installed leaders more likely to disclose
2. personalistic/hierarchical autocracies less likely to disclose
3. transparency associated with a reduced threat of *leader* removal via coup

Transparency as Missing Data

World Development Indicators (Downloaded Dec. 2012)

Items: 240 variables from across WDI
recoded into indicator $\{0, 1\}$ equal to 1 if non-missing

Panels: 125 countries

Time: Annual obs., 1980-2010

3875 observations

Measurement Model

Item Response Model

240 equations of the form:

$$Pr(y_{j,c,t} = 1 | transparency_{c,t}) = logit(\delta_j + \beta_j transparency_{c,t})$$
$$j \in \{1, 2, ..., 240\}$$
$$c \in \{1, 2, ..., 124\}$$
$$t \in \{1, 2, ..., 31\}$$

Priors:

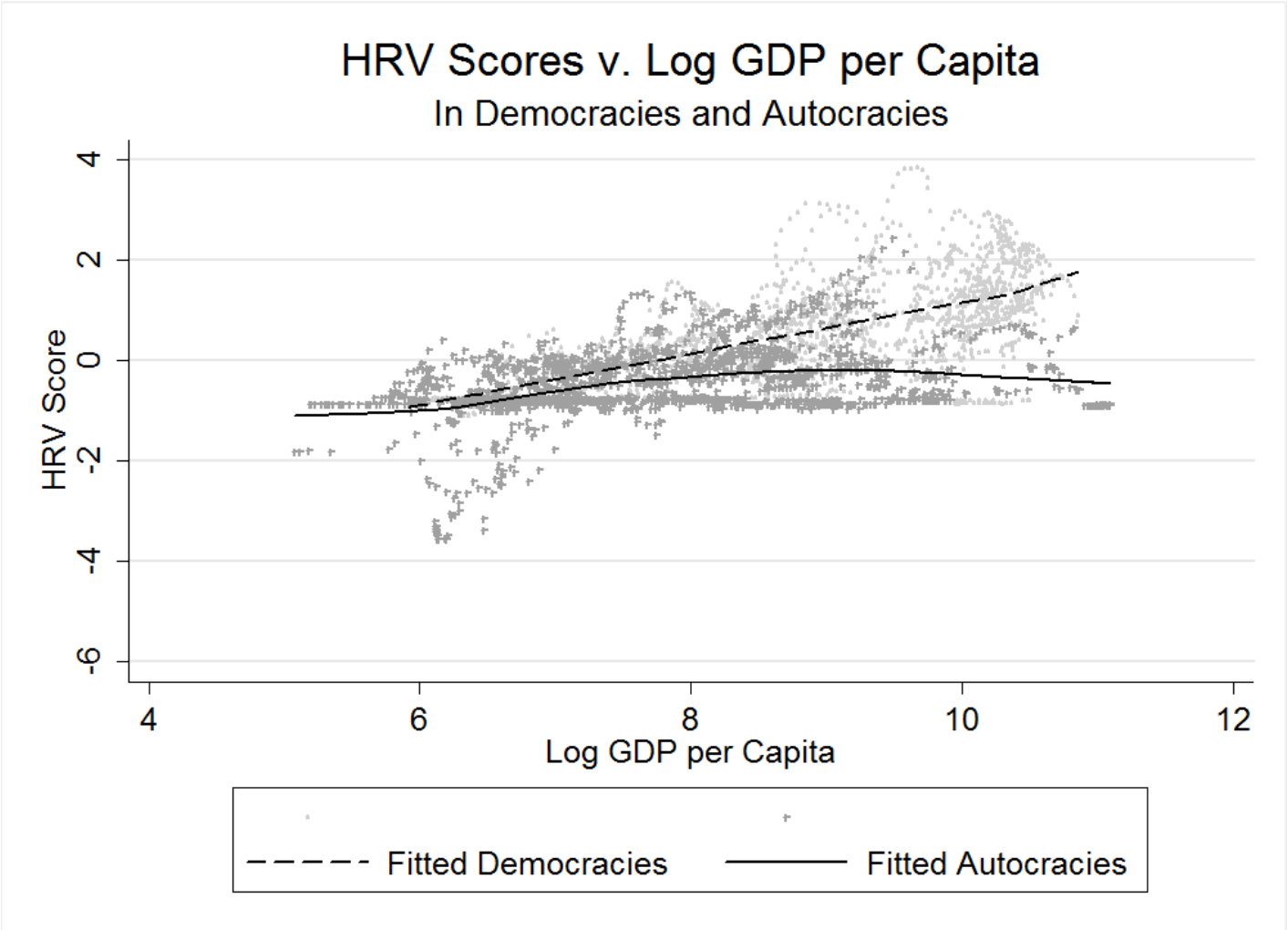
$$\begin{pmatrix} \delta_j \\ \beta_j \end{pmatrix} \sim N(\begin{pmatrix} 0 \\ 0 \end{pmatrix}, \begin{pmatrix} 100 & 0 \\ 0 & 100 \end{pmatrix})$$

$transparency_{c,1} \sim N(0, 100)$ recentered at each iteration of the MCMC algorithm

$transparency_{c,t} \sim N(transparency_{c,t-1}, \frac{1}{\tau_c}) \; \forall \; t > 1$

Cuba constrained to be negative, Sweden positive

Transparency v. GDP in Democracies and Autocracies



Transparency v. GDP in Democracies and Autocracies