

# DEMOCRACY AND POLITICAL TERROR: HISTORY AND TARGETS MATTER

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# Motivation

1. Universal finding:  
Democracy inhibits human rights abuses.
2. Debate over functional form: linear, U-shaped, trichotomy
3. Consider modern Iraq:  
Democracy is likely, repression and abuse are uncertain.
4. Policy implication: A world of democracies would end repression.

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- **Colombia** is routinely evaluated to have high institutional democracy but has an abysmal human rights record.
- **Algeria, Sri Lanka, Guatemala, and Israel** all reach the highest level of human rights abuses at least twice.

# Outline

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2. Measuring Repression
3. Assessing Persistence and Qualitative Time Series Models
4. Evidence on Polity Scores
5. Evidence on the Trichotomy
6. Extensions to other Measures
7. Where do we go from here?

# The Literature

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- BdM, Cherif, Downs, and Smith 2005, Davenport 1995, Davenport 1999, Davenport and Armstrong 2004, Fein 1995, Henderson 1991, Mitchell and McCormick 1988, Regan and Henderson 2002, Poe and Tate 1994, Poe, Tate and Keith 1999, Zanger 2000 find that democracy limits human rights abuses.

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- Debate over functional form of the relationship:  
U-shaped, linear, trichotomy/threshold effects
- Policy implication:  
Full-scale democracy inhibits human rights abuses
- Is this true?

## Theory

Primitive: accountability and competition inhibit the use of repression.

Repression: different effects on competitors and mass publics.

Private and public benefits to potential office holders.

Mass publics receive only public benefits.

Past repression (at low levels) should not remove competition.

Mass publics: Limited (public) benefits outweighed by high cost repression  $\Rightarrow$  accountability breaks down.

### **Consequence:**

**High past repression eliminates democratic pacification.**

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**Level 5:** “The terrors of **Level 4** have been expanded to the whole population. . . The

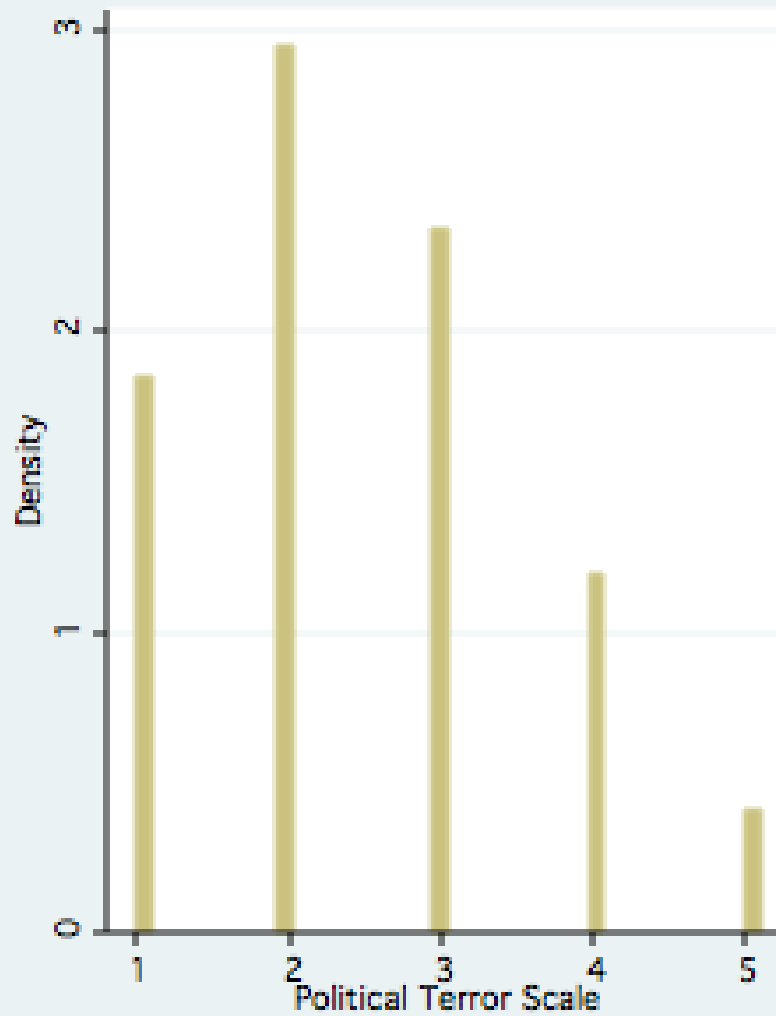
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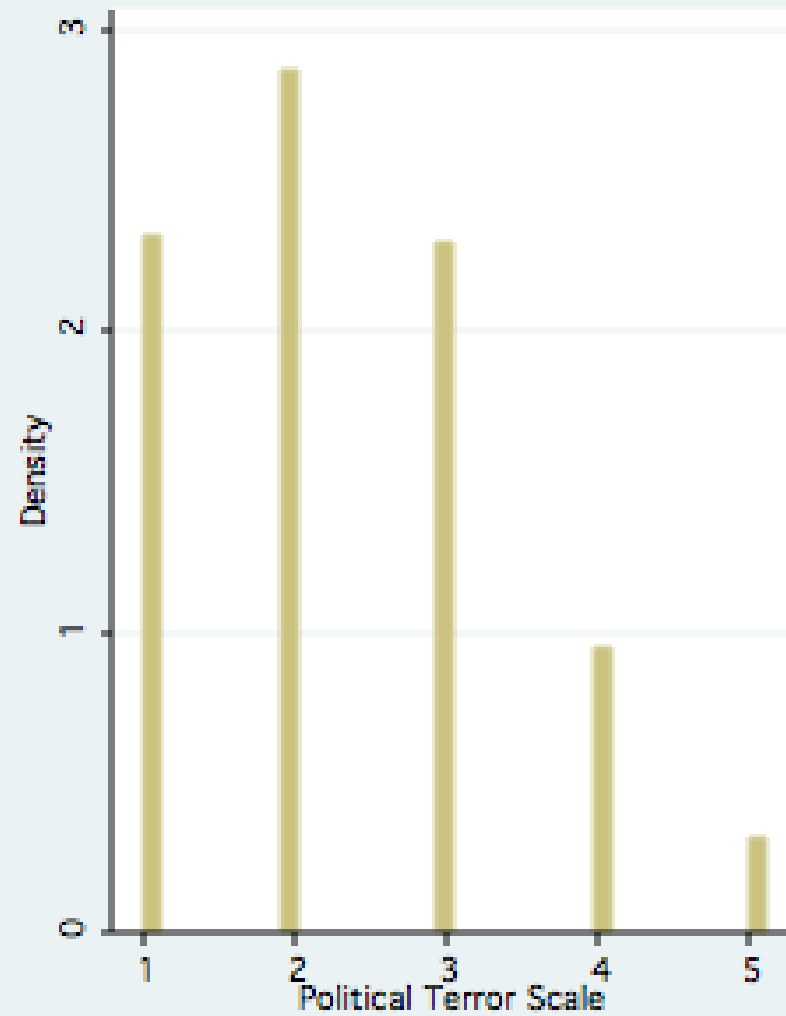
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leaders of these societies place no limits on the means or thoroughness with which they pursue personal or ideological goals”.

## Measures of Repression



Source: Amnesty International



Source: State Department

## Existing Models

- OLS (PCSE) is inappropriate, but always used!
- Errors are discrete (given  $X$ )
- Variables are bounded, estimates are not
- Assumes distances between categories are constant and equal

## State Dependence?

- 64.44% of Amnesty International scores are on the diagonal.
- 70.02 % of State Department scores are on the diagonal.

Persistence of this magnitude begs a solution for qualitative time series.

# A First-Order Markov Process

What is a Markov process?

A probabilistic representation of transitioning among multiple states.

|            |   | Present State |            |
|------------|---|---------------|------------|
|            |   | 0             | 1          |
| Past State | 0 | $\pi_{00}$    | $\pi_{01}$ |
|            | 1 | $\pi_{10}$    | $\pi_{11}$ |

- $\pi_{00} = Pr(y_t = 0 | y_{t-1} = 0)$
- $\pi_{01} = Pr(y_t = 1 | y_{t-1} = 0)$
- $\pi_{10} = Pr(y_t = 0 | y_{t-1} = 1)$
- $\pi_{11} = Pr(y_t = 1 | y_{t-1} = 1)$

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- Modelling Strategy: General to Specific  
Most General Structure pared using Wald and LR-Tests

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- First-order Markovian ordered probit
- Interactions between past levels of repression and democracy
- $y = g[I(y_{i,t-1} = j) + X\beta_j]$
- Modelling Strategy: General to Specific  
Most General Structure pared using Wald and LR-Tests
- Does the effect of democracy depend on the past level of repression?

# Measures

- Human rights abuses: Political Terror Scales and CIRI
- Democracy: Polity 4 and Trichotomy
- Wars (Uppsala)
- Population and Change in Population
- GDP per capita and Growth

| Variable                                     | $\hat{\beta}$ | Robust S.E. |
|----------------------------------------------|---------------|-------------|
| Lag AI=2                                     | 0.939**       | 0.189       |
| Lag AI=3                                     | 1.897**       | 0.200       |
| Lag AI=4                                     | 2.838**       | 0.225       |
| Lag AI=5                                     | 3.894**       | 0.275       |
| Polity 4 Democracy                           | -0.141**      | 0.023       |
| Polity*Lag AI=2                              | 0.091**       | 0.025       |
| Polity*Lag AI=3                              | 0.110**       | 0.025       |
| Polity*Lag AI=4                              | 0.158**       | 0.029       |
| Polity*Lag AI=5                              | 0.154**       | 0.046       |
| Civil Wars                                   | 0.779**       | 0.093       |
| International Wars                           | 0.325         | 0.229       |
| Int. Civil Wars                              | 0.307*        | 0.137       |
| $\Delta$ GDP                                 | -0.007        | 0.004       |
| log(GDP per capita)                          | -0.102**      | 0.024       |
| $\Delta$ Population                          | 0.001         | 0.018       |
| log(Population)                              | 0.139**       | 0.020       |
| <hr/>                                        |               |             |
| N                                            |               | 3223        |
| $\chi^2_{(16)}$                              |               | 1384.31     |
| $H_0$ : No Markovian Effects                 |               |             |
| LR Test: $\chi^2_4 = 68.5, p = 0.0000$       |               |             |
| <hr/>                                        |               |             |
| Significance levels : † : 10% * : 5% ** : 1% |               |             |

| Variable                                     | $\hat{\beta}$ | Robust S.E. |
|----------------------------------------------|---------------|-------------|
| Lag SD=2                                     | 1.144**       | 0.160       |
| Lag SD=3                                     | 2.212**       | 0.187       |
| Lag SD=4                                     | 3.416**       | 0.212       |
| Lag SD=5                                     | 4.648**       | 0.283       |
| Polity 4 Democracy                           | -0.136**      | 0.021       |
| Polity*Lag SD=2                              | 0.085**       | 0.023       |
| Polity*Lag SD=3                              | 0.127**       | 0.027       |
| Polity*Lag SD=4                              | 0.131**       | 0.028       |
| Polity*Lag SD=5                              | 0.139*        | 0.055       |
| Civil Wars                                   | 0.833**       | 0.098       |
| International Wars                           | 0.161         | 0.206       |
| Int. Civil Wars                              | 0.622**       | 0.132       |
| $\Delta$ GDP                                 | -0.006        | 0.004       |
| log(GDP per capita)                          | -0.141**      | 0.024       |
| $\Delta$ Population                          | -0.032*       | 0.015       |
| log(Population)                              | 0.135**       | 0.020       |
| <hr/>                                        |               |             |
| N                                            |               | 3223        |
| $\chi^2_{(16)}$                              |               | 1468.319    |
| $H_0$ : No Markovian Effects                 |               |             |
| LR Test: $\chi^2_4 = 40.7, p = 0.0000$       |               |             |
| <hr/>                                        |               |             |
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## Markovian Effects: PTS

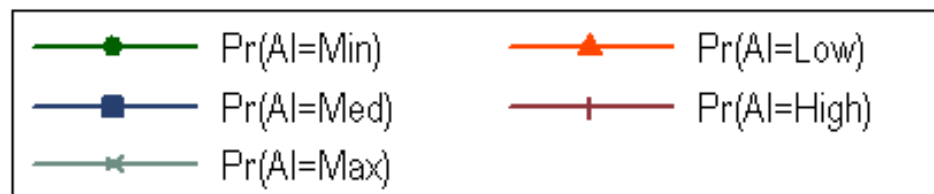
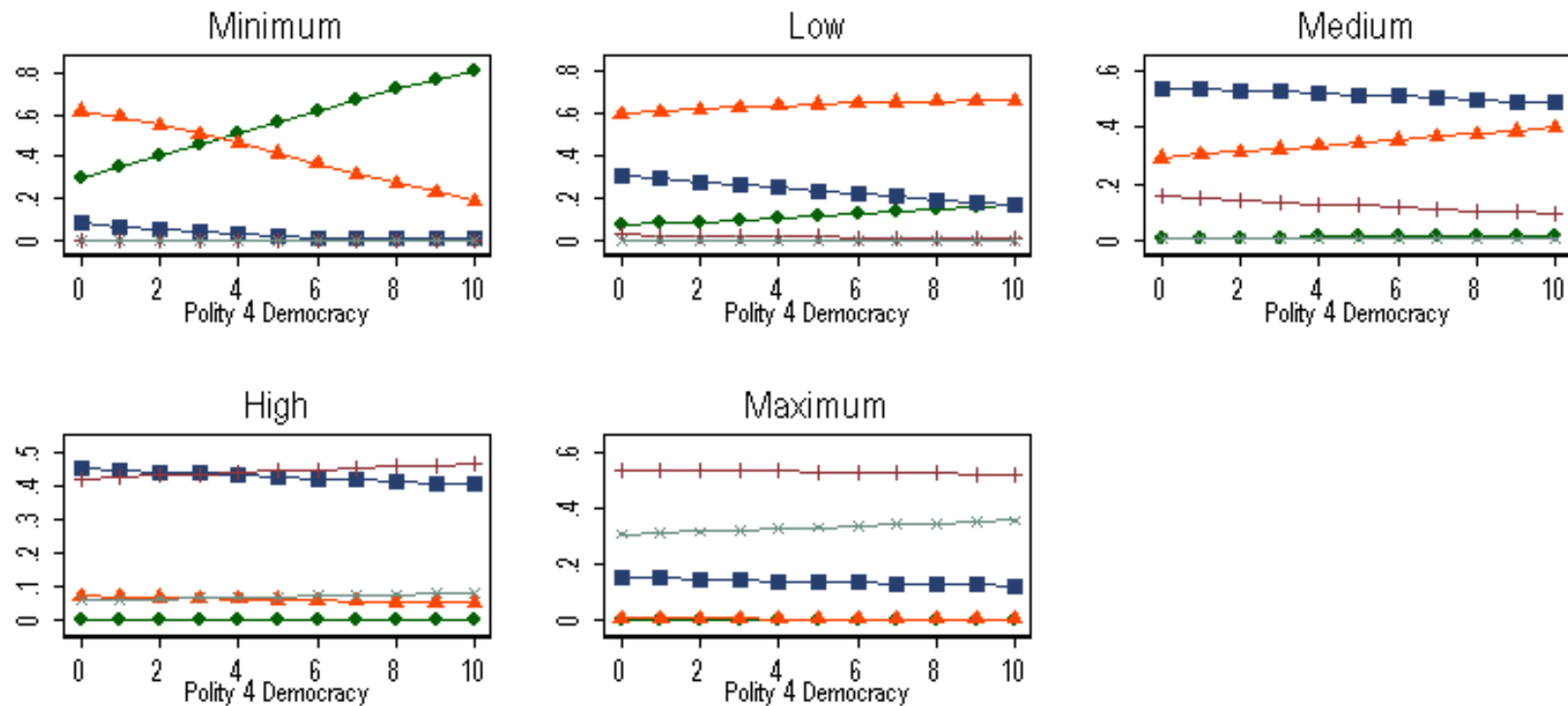
$H_0$ : Net Effect of Democracy is Zero.

|                   | AI          | SD          |
|-------------------|-------------|-------------|
| Interaction Lag=2 | 26.66, 0.00 | 18.35, 0.00 |
| Interaction Lag=3 | 7.68, 0.01  | 0.33, 0.57  |
| Interaction Lag=4 | 1.32, 0.25  | 0.08, 0.77  |
| Interaction Lag=5 | 0.24, 0.63  | 0.00, 0.96  |

Cells report:  $\chi^2$  with 1 degree of freedom, P-value

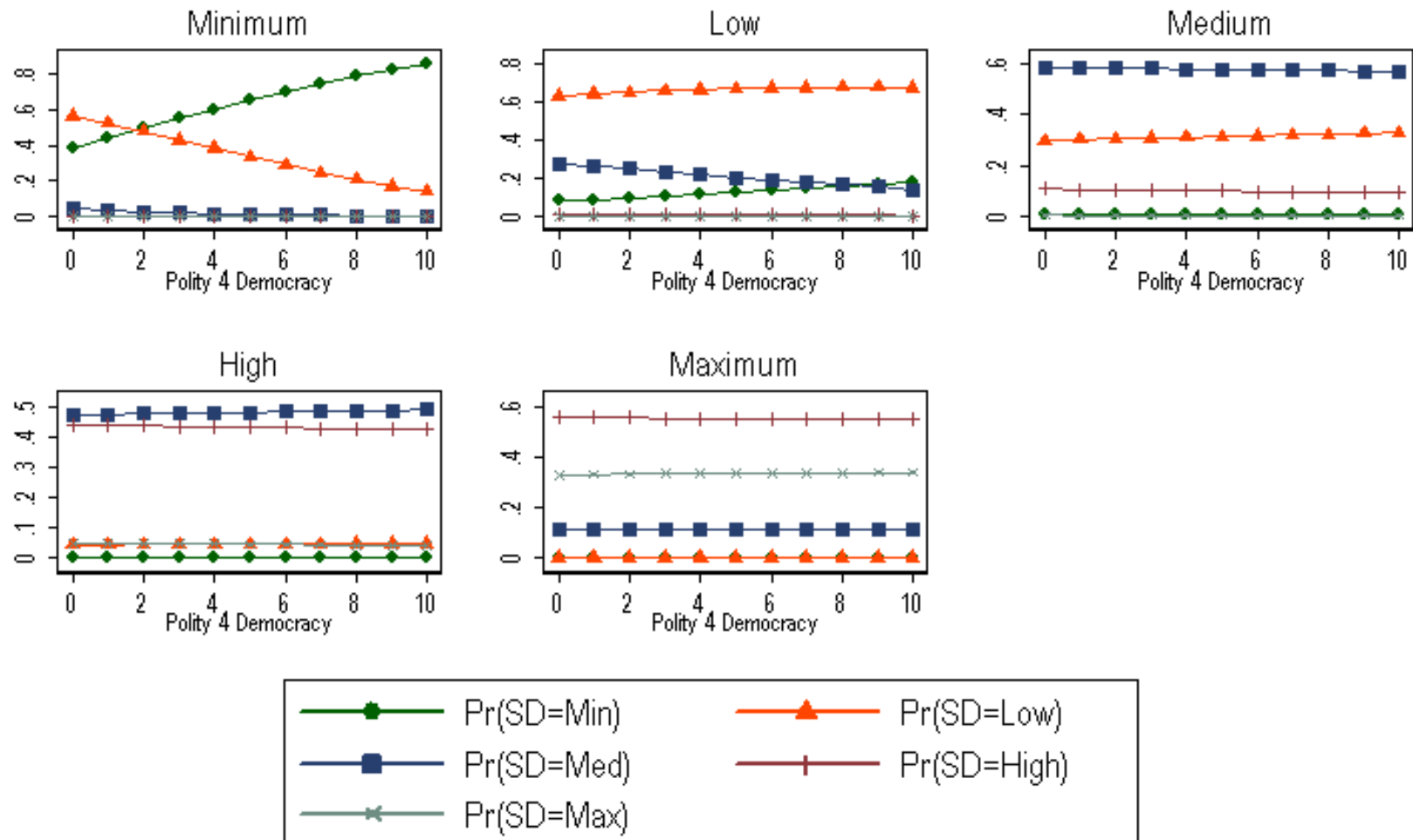
# Democracy and Amnesty International PTS

by lagged levels of political terror



# Democracy and State Department PTS

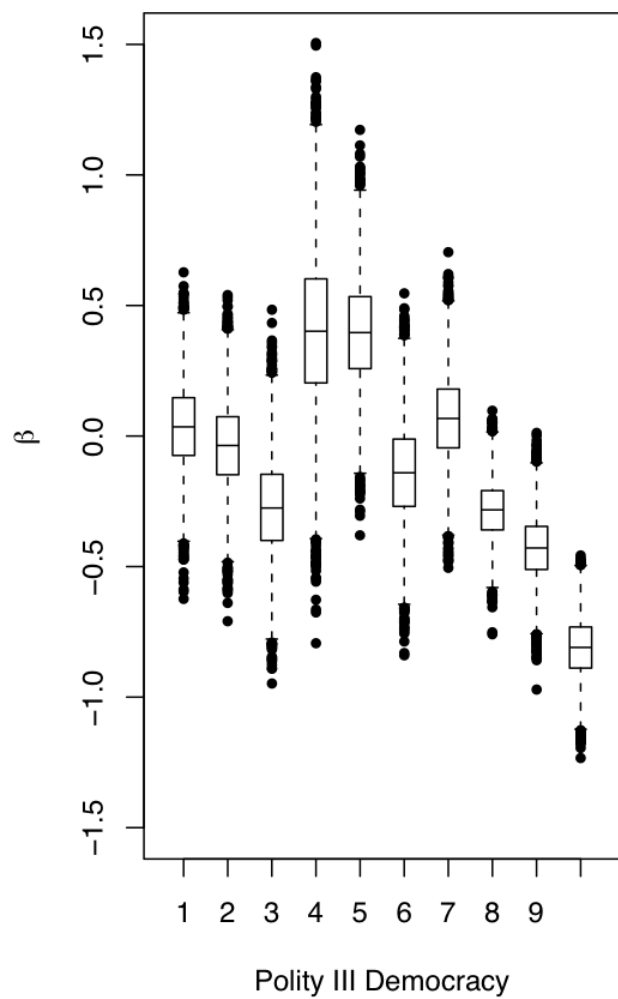
by lagged levels of political terror



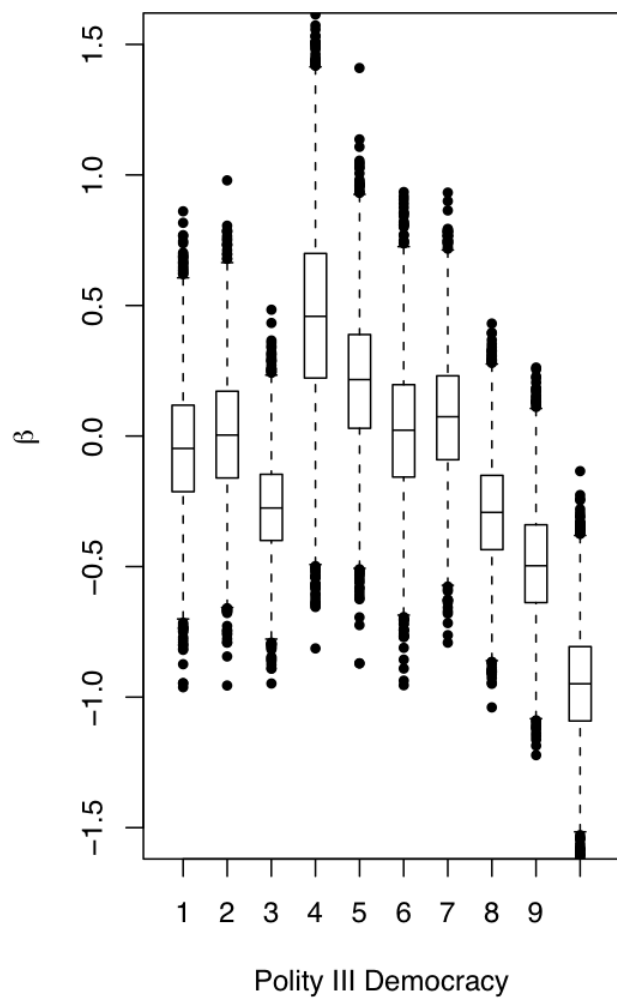
# Trichotomy

- Binary decomposition shows differences between levels
- Solution is thought to be a trichotomy.

Amnesty International



State Department



# Trichotomy

- Binary decomposition shows differences between levels
- Solution is thought to be a trichotomy.
- Does this make the Markovian evidence disappear?

### Wald Tests of Markovian Effects

$H_0$ : Democracy has no effect.

| Lag Value | Amnesty Intl. PTS |         | State Dept. PTS |         |
|-----------|-------------------|---------|-----------------|---------|
|           | $\chi^2$          | p-value | $\chi^2$        | p-value |

Trichotomy = 1 [Polity 4 Democracy = 8,9]

|         |      |      |       |       |
|---------|------|------|-------|-------|
| Lag = 2 | 6.29 | 0.01 | 10.75 | 0.001 |
| Lag = 3 | 0.33 | 0.56 | 0.05  | 0.82  |
| Lag = 4 | 0.19 | 0.66 | 1.45  | 0.23  |
| Lag = 5 | 0.01 | 0.94 | 0.07  | 0.8   |

Trichotomy = 2 [Polity 4 Democracy = 10]

|         |             |             |       |      |
|---------|-------------|-------------|-------|------|
| Lag = 2 | 47.76       | 0           | 36.07 | 0    |
| Lag = 3 | <b>3.8</b>  | <b>0.05</b> | 0.04  | 0.85 |
| Lag = 4 | <b>4.94</b> | <b>0.03</b> | 0.15  | 0.69 |
| Lag = 5 |             |             |       |      |

---

**Effect takes the wrong sign: Democracy increases abuse.**

| Variable                                     | Coefficient | Std. Err. |
|----------------------------------------------|-------------|-----------|
| Lag AI=2                                     | 1.194**     | 0.106     |
| Lag AI=3                                     | 2.134**     | 0.112     |
| Lag AI=4                                     | 3.168**     | 0.128     |
| Lag AI=5                                     | 4.226**     | 0.163     |
| Tri-1 (Polity=8,9)                           | -0.543**    | 0.175     |
| (Lag AI=Low)*Tri-1                           | 0.288       | 0.200     |
| (Lag AI=Med)*Tri-1                           | 0.484*      | 0.202     |
| (Lag AI=High)*Tri-1                          | 0.601**     | 0.218     |
| (Lag AI=Max)*Tri-1                           | 0.564†      | 0.319     |
| Tri-2 (Polity=10)                            | -1.307**    | 0.131     |
| (Lag AI=Low)*Tri-2                           | 0.529**     | 0.155     |
| (Lag AI=Med)*Tri-2                           | 0.560       | 0.401     |
| (Lag AI=High)*Tri-2                          | 2.035**     | 0.352     |
| Civil Wars                                   | 0.802**     | 0.106     |
| International Wars                           | 0.370*      | 0.182     |
| Int. Civil Wars                              | 0.334**     | 0.124     |
| Growth in GDP per capita                     | -0.008*     | 0.004     |
| log(GDP per capita)                          | -0.073**    | 0.018     |
| Chg. in Population                           | 0.010       | 0.015     |
| log(Population)                              | 0.147**     | 0.015     |
| N                                            | 3223        |           |
| $\chi^2_{(20)}$                              | 3801.002    |           |
| $H_0$ : No Markovian Effects                 |             |           |
| LR Test: $\chi^2_7 = 42.61, p = 0.0000$      |             |           |
| Significance levels : † : 10% * : 5% ** : 1% |             |           |

| Variable                                     | Coefficient | Std. Err. |
|----------------------------------------------|-------------|-----------|
| Lag SD=2                                     | 1.327**     | 0.098     |
| Lag SD=3                                     | 2.431**     | 0.108     |
| Lag SD=4                                     | 3.680**     | 0.130     |
| Lag SD=5                                     | 4.909**     | 0.175     |
| Tri-1 (Polity=8,9)                           | -0.762**    | 0.160     |
| (Lag SD=Low)*Tri-1                           | 0.434*      | 0.184     |
| (Lag SD=Med)*Tri-1                           | 0.786**     | 0.192     |
| (Lag SD=High)*Tri-1                          | 0.577**     | 0.220     |
| (Lag SD=Max)*Tri-1                           | 0.672†      | 0.381     |
| Tri-2 (Polity=10)                            | -1.297**    | 0.129     |
| (Lag SD=Low)*Tri-2                           | 0.484**     | 0.171     |
| (Lag SD=Med)*Tri-2                           | 1.233**     | 0.359     |
| (Lag SD=High)*Tri-2                          | 1.479**     | 0.478     |
| Civil Wars                                   | 0.832**     | 0.109     |
| International Wars                           | 0.196       | 0.196     |
| Int. Civil Wars                              | 0.635**     | 0.130     |
| Growth in GDP per capita                     | -0.007†     | 0.004     |
| log(GDP per capita)                          | -0.117**    | 0.019     |
| Chg. in Population                           | -0.023      | 0.016     |
| log(Population)                              | 0.143**     | 0.016     |
| <hr/>                                        |             |           |
| N                                            | 3223        |           |
| $\chi^2_{(20)}$                              | 4226.987    |           |
| $H_0$ : No Markovian Effects                 |             |           |
| LR Test: $\chi^2_7 = 34.24, p = 0.0000$      |             |           |
| Significance levels : † : 10% * : 5% ** : 1% |             |           |

# CIRI

Cingranelli and Richards measure:

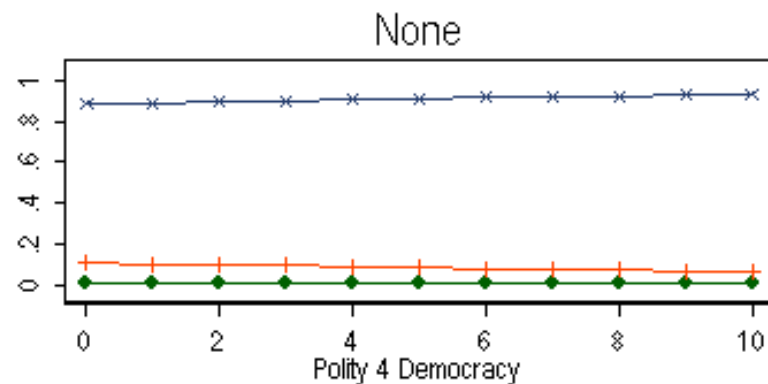
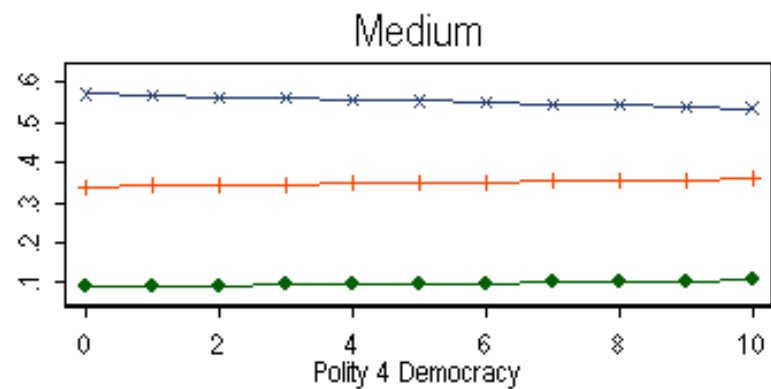
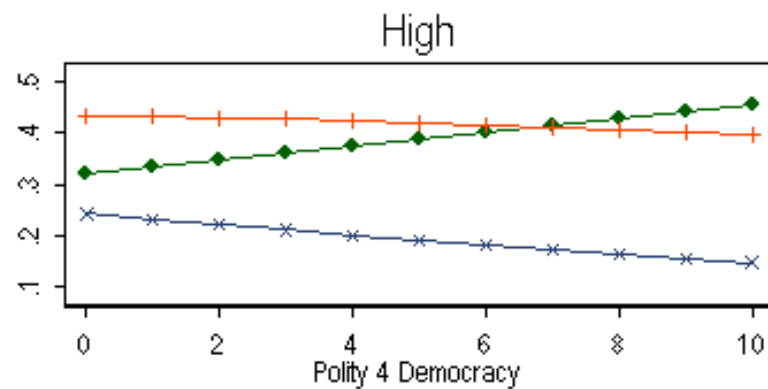
- Disappearances
- Political Imprisonment
- Torture
- Extrajudicial Killing

Results:

All but imprisonment behave as before.

# Democracy and Disappearance

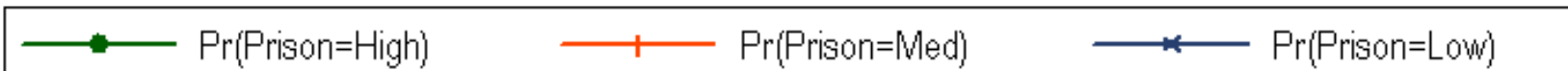
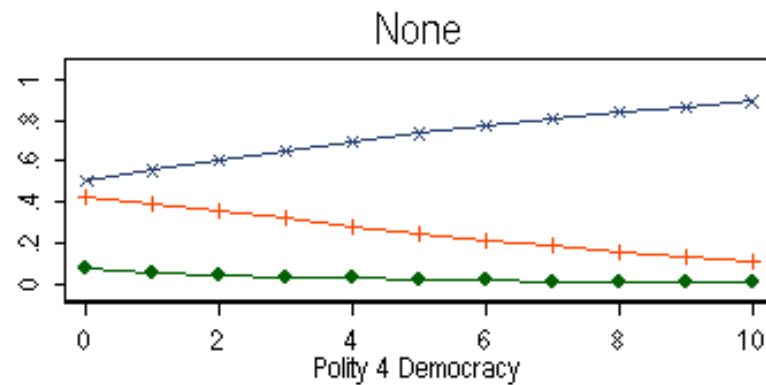
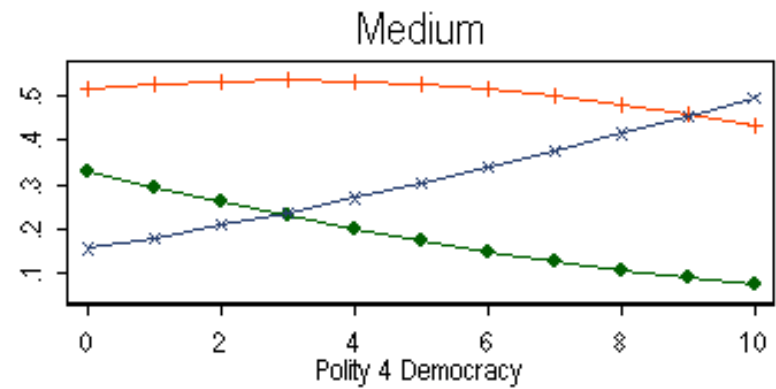
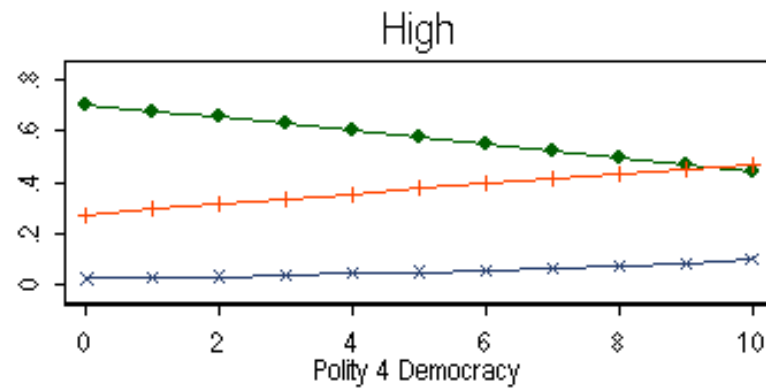
by lagged levels of disappearance



—●— Pr(Disappear=High)      —+— Pr(Disappear=Med)      —x— Pr(Disappear=Low)

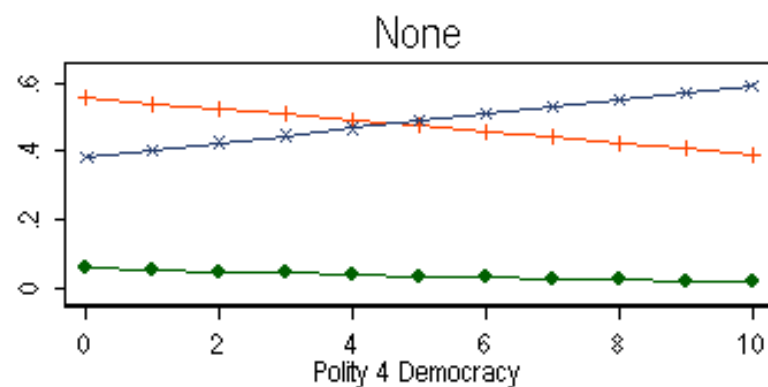
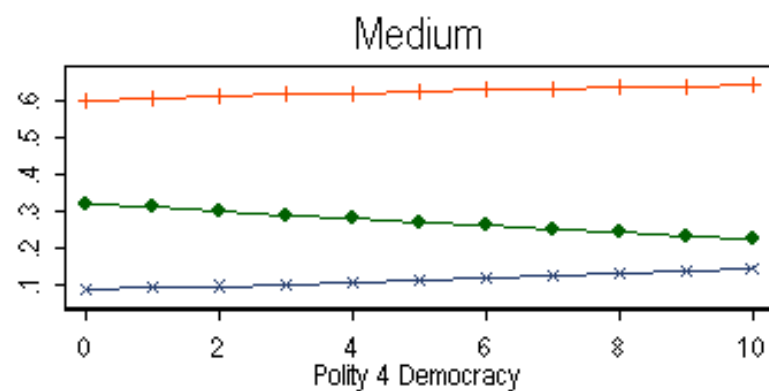
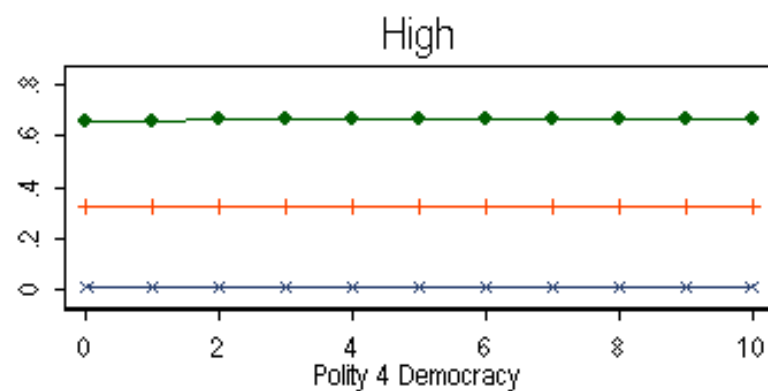
# Democracy and Political Imprisonment

by lagged levels of political imprisonment



## Democracy and Torture

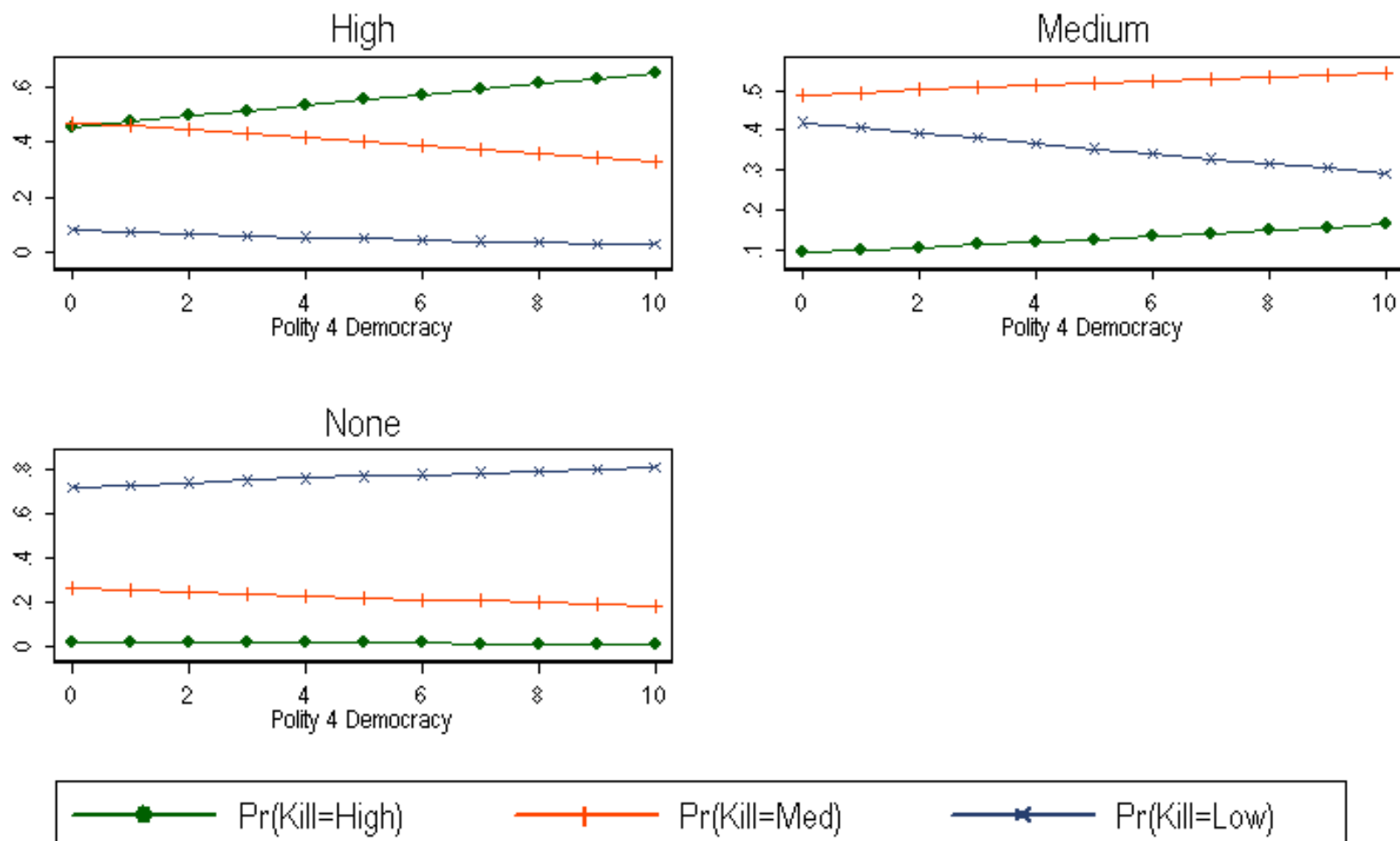
by lagged levels of torture



—●— Pr(Torture=High)     
 —+— Pr(Torture=Med)     
 —x— Pr(Torture=Low)

# Democracy and Extrajudicial Killing

by lagged levels of extrajudicial killing



# Conclusions

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- Democracy depends on past history – state dependence
- Linear and threshold effects of democracy disappear with sufficient past repression
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- Finding is robust to random effects and other specification twists

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- Sophisticated and flexible estimation of ordered Markov processes
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- Formalization: Repression in equilibrium
- Repression-dissent nexus in a Markov-switching framework
- Dynamic IRT: Measurement models of repression

**Thank you!**



## On Markov Models

Let  $\pi_{jk}^i$  be a probability that the  $i^{\text{th}}$  individual is in the  $k^{\text{th}}$  state at time  $t$  given that  $i$  was in the  $j^{\text{th}}$  state at  $t - 1$ .

$$\begin{pmatrix} \pi_{11}^{it} & \pi_{12}^{it} & \pi_{13}^{it} \\ \pi_{21}^{it} & \pi_{22}^{it} & \pi_{23}^{it} \\ \pi_{31}^{it} & \pi_{32}^{it} & \pi_{33}^{it} \end{pmatrix}$$

For the above to be a **Markov matrix**, the following must apply:

1.  $j \in J$  and  $k \in K \Rightarrow \pi_{jk} \geq 0$ .
2.  $\sum_{j=1}^J \pi_{j\cdot}^{it} = 1$

## Types of Markov models

- If, for all  $j$  and  $k$ ,  $\pi$  is independent of  $t$ , i.e.  $[\pi_{jk}^{it} = \pi_{jk}^i]$ , the model can be represented by a **stationary Markov model**.
- If, for all  $i$ ,  $p_{jk}^i = p_{jk}$ , the model can be represented by a **homogeneous Markov model**.

## Estimation

1. The two-state [binary] case requires the estimation of four probabilities [more appropriately two and their converses],

$$p_{01} = F(X\beta) \qquad p_{11} = F(X\beta + X\alpha y_{i,t-1})$$

As Amemiya (1985: 422) notes, the similarity to a QR model is easiest seen in the likelihood

$$L = \prod_i \prod_t F_{it}^{y_{it}} [1 - F_{it}]^{1-y_{it}}$$

where  $F_{it} = F(X\beta + X\alpha y_{i,t-1})$ .

## State Dependence

| SD Scores    | 1          | 2            | 3          | 4          | 5          | Total        |
|--------------|------------|--------------|------------|------------|------------|--------------|
| 1            | 729        | 147          | 12         | 0          | 0          | 888          |
| 2            | 114        | 718          | 208        | 19         | 1          | 1,060        |
| 3            | 12         | 177          | 529        | 85         | 12         | 815          |
| 4            | 0          | 13           | 89         | 206        | 30         | 338          |
| 5            | 0          | 0            | 8          | 39         | 75         | 122          |
| <b>Total</b> | <b>855</b> | <b>1,055</b> | <b>846</b> | <b>349</b> | <b>118</b> | <b>3,223</b> |

| AI Scores    | 0          | 1            | 2          | 3          | 4          | Total        |
|--------------|------------|--------------|------------|------------|------------|--------------|
| 1            | 559        | 133          | 19         | 1          | 0          | 712          |
| 2            | 116        | 706          | 218        | 28         | 3          | 1,071        |
| 3            | 7          | 225          | 493        | 112        | 11         | 848          |
| 4            | 1          | 21           | 126        | 238        | 55         | 441          |
| 5            | 0          | 3            | 6          | 61         | 81         | 151          |
| <b>Total</b> | <b>683</b> | <b>1,088</b> | <b>862</b> | <b>440</b> | <b>150</b> | <b>3,223</b> |

|                                        |  |    |      |  |       |
|----------------------------------------|--|----|------|--|-------|
| Afghanistan                            |  | 21 | 9.21 |  | 9.21  |
| Algeria                                |  | 7  | 3.07 |  | 12.28 |
| Angola                                 |  | 12 | 5.26 |  | 17.54 |
| Azerbaijan                             |  | 2  | 0.88 |  | 18.42 |
| Bosnia Herzegovina                     |  | 4  | 1.75 |  | 20.18 |
| Burundi                                |  | 10 | 4.39 |  | 24.56 |
| Chad                                   |  | 2  | 0.88 |  | 25.44 |
| Chile                                  |  | 1  | 0.44 |  | 25.88 |
| China                                  |  | 1  | 0.44 |  | 26.32 |
| Colombia                               |  | 13 | 5.70 |  | 32.02 |
| Congo, Democratic Republic of / Zaire  |  | 10 | 4.39 |  | 36.40 |
| Congo, Republic of the                 |  | 3  | 1.32 |  | 37.72 |
| Croatia                                |  | 4  | 1.75 |  | 39.47 |
| Ethiopia                               |  | 4  | 1.75 |  | 41.23 |
| Georgia                                |  | 1  | 0.44 |  | 41.67 |
| Guatemala                              |  | 3  | 1.32 |  | 42.98 |
| Guinea-Bissau                          |  | 1  | 0.44 |  | 43.42 |
| Haiti                                  |  | 1  | 0.44 |  | 43.86 |
| India                                  |  | 3  | 1.32 |  | 45.18 |
| Iran                                   |  | 10 | 4.39 |  | 49.56 |
| Iraq                                   |  | 17 | 7.46 |  | 57.02 |
| Korea, Democratic People's Republic of |  | 5  | 2.19 |  | 59.21 |
| Kuwait                                 |  | 2  | 0.88 |  | 60.09 |
| Liberia                                |  | 8  | 3.51 |  | 63.60 |

|                 |  |    |      |  |        |
|-----------------|--|----|------|--|--------|
| Mozambique      |  | 5  | 2.19 |  | 65.79  |
| Myanmar (Burma) |  | 8  | 3.51 |  | 69.30  |
| Namibia         |  | 2  | 0.88 |  | 70.18  |
| Nicaragua       |  | 2  | 0.88 |  | 71.05  |
| Nigeria         |  | 1  | 0.44 |  | 71.49  |
| Peru            |  | 6  | 2.63 |  | 74.12  |
| Russia          |  | 3  | 1.32 |  | 75.44  |
| Rwanda          |  | 5  | 2.19 |  | 77.63  |
| Sierra Leone    |  | 5  | 2.19 |  | 79.82  |
| Somalia         |  | 7  | 3.07 |  | 82.89  |
| South Africa    |  | 4  | 1.75 |  | 84.65  |
| Sri Lanka       |  | 5  | 2.19 |  | 86.84  |
| Sudan           |  | 13 | 5.70 |  | 92.54  |
| Suriname        |  | 1  | 0.44 |  | 92.98  |
| Syria           |  | 2  | 0.88 |  | 93.86  |
| Tajikistan      |  | 1  | 0.44 |  | 94.30  |
| Togo            |  | 1  | 0.44 |  | 94.74  |
| Turkey          |  | 3  | 1.32 |  | 96.05  |
| Uganda          |  | 3  | 1.32 |  | 97.37  |
| Venezuela       |  | 1  | 0.44 |  | 97.81  |
| Yugoslavia      |  | 1  | 0.44 |  | 98.25  |
| Yugoslavia post |  | 2  | 0.88 |  | 99.12  |
| Zimbabwe        |  | 2  | 0.88 |  | 100.00 |

# Logic

Research on human rights consistently points to the importance of democracy in reducing the severity and incidence of personal integrity abuses. The prescriptive implications of this finding for policymakers interested in state-building have been somewhat limited, however, by a reliance on multidimensional measures of democracy. Consequently, a policymaker emerges from this literature confident that democracy matters but unclear about which set(s) of reforms is likely to yield a greater human rights payoff. Using data from the Polity IV Project, we examine what aspects of democracy are most consequential in improving a states human rights record. Analysis of democracys dimensions elicits three findings. First, political participation at the level of multiparty competition appears more significant than other dimensions in reducing human rights abuses. Second, improvements in a states level of democracy short of full democracy do not promote greater respect for integrity rights. Only those states with the highest levels of democracy, not simply those conventionally defined as democratic, are correlated with better human rights practices. Third, accountability appears to be the critical feature that makes full-fledged democracies respect human rights; limited accountability generally retards improvement in human rights.