Appendix: Transparency, Protest and Autocratic Instability

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Appendix: Proofs of Theoretical Propositions

Baseline Model

Lemma 1. *$\bar{y}^*(s)$ is well-defined and monotone in s.*

Proof. Definition 2 gives us $Pr(\theta = 0|\bar{y}^*(s), s)\beta = \kappa$. Substituting the posterior probability, conditional on signals s and $\bar{y}^*(s)$, generated by Bayes' rule, yields

$$\frac{\phi(\frac{\bar{y}^*(s)}{\sigma_y})\phi(\frac{s}{\sigma_s})(1-p)}{p\phi(\frac{\bar{y}^*(s)-g}{\sigma_y})\phi(\frac{s-g}{\sigma_s}) + \phi(\frac{\bar{y}^*(s)}{\sigma_y})\phi(\frac{s}{\sigma_s})(1-p)}\beta = \kappa$$

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where ϕ is the pdf of the standard normal. Rearranging yields $\bar{y}^*(s) = \frac{g}{2}(1 + \frac{\sigma_y^2}{\sigma_s^2}) - \frac{s\sigma_y^2}{\sigma_s^2} - \frac{\sigma_y^2}{g} ln(\frac{p\kappa}{(1-p)[\beta-\kappa]})$ which is monotone in s. $\square$

Proof of Equilibrium Existence

Proof of Proposition 1. The leader has a dominant strategy to match his type. Since $u_{L,t}(G;\theta) = 1$ if $G_t = \theta$, zero otherwise, for $t \in \{1,2\}$, it is always optimal to set $G_t = \theta$ in each period $t \in \{1,2\}$ of the game. Following these equilibrium strategies, citizen i sets $a_i = 1$ if $y_{i,1} \leq \bar{y}^*(s)$. Since there is a continuum of citizens, the proportion of citizens that mobilize, i.e. set $a_i = 1$ is either $Pr\{y_{i,1} \leq \bar{y}^*(s)|\theta = 0\}$ or $Pr\{y_{i,1} \leq \bar{y}^*(s)|\theta = 1\}$ depending on the type of leader. That is the proportion of citizens that protest is either $\Phi(\frac{\bar{y}^*(s)}{\sigma_y})$ or $\Phi(\frac{\bar{y}^*(s)-g}{\sigma_y})$ where Φ is the cdf of the standard normal. If $\Phi(\frac{\bar{y}^*(s)}{\sigma_y}) \geq T > \Phi(\frac{\bar{y}^*(s)-g}{\sigma_y})$, L is removed if and only if $\theta = 0$. Then for any citizen i, given the actions of other citizens, and the leader, i will prefer to set $a_i = 1$ iff:

$$Pr(\theta = 1|y_{i,1}, s)g + Pr(\theta = 0|y_{i,1}, s)[pg + \beta] - \kappa \geq Pr(\theta = 1|y_{i,1}, s)g + Pr(\theta = 0|y_{i,1}, s)pg$$

$$Pr(\theta = 0|y_{i,1}, s)\beta \geq \kappa$$

The left hand side is the expected earnings to citizen i of protesting after receiving both her private and public signals. If the leader is a good type, in equilibrium she will survive the protest and implement policies that yield the citizen payoff g in expectation in the second period (the first term). If, on the other hand the leader is a bad type, she is removed for sure, and replaced with a good type with probability p that implements g (a bad type would implement 0). There is also a benefit of β for participating in a successful protest (the second term). Of course political action incurs fixed costs κ. If the citizen does not protest, her payoffs are as on the right hand side. Since there is a continuum of citizens, no citizen is pivotal. Hence a good leader will survive the protest and implement g in the second period; a poor leader will fall, and be replaced with a good leader with probability p who will institute good policy g.

Therefore, when $\Phi(\frac{\bar{y}^*(s)}{\sigma_y}) \geq T > \Phi(\frac{\bar{y}^*(s)-g}{\sigma_y})$, each citizen optimally protests (given the other citizens and the leader's actions) when $y_{i,1} \leq \bar{y}^*(s)$. If, on the other hand, $\Phi(\frac{\bar{y}^*(s)}{\sigma_y}) < T$, and each citizen i is adopting a strategy of $a_i = 1$ if and only if $y_{i,1} \leq \bar{y}^*(s)$, then L would never be removed. Given that this is the case, the utility from setting $a_i = 1$ is $-\kappa < 0$, and so this cannot be a best response. Thus, $a_i = 0 \; \forall \; i$ if $\Phi(\frac{\bar{y}^*(s)}{\sigma_y}) < T$. We write this as $\bar{y}(s) = -\infty$ when $\Phi(\frac{\bar{y}^*(s)}{\sigma_y}) < T$.

Conversely, if $\Phi(\frac{\bar{y}^*(s)-g}{\sigma_y}) \geq T$, and each citizen i is adopting a strategy of $a_i = 1$ if an only if $y_{i,1} \leq \bar{y}^*(s)$, then L would always be removed, regardless of type. Given that this is the case, the utility from setting $a_i = 1$ is $\beta - \kappa > 0$, the return from not participating. Hence $a_i = 1 \; \forall \; i$ if $\Phi(\frac{\bar{y}^*(s)-g}{\sigma_y}) \geq T$ is a best response. We write this as $\bar{y}(s) = \infty$ when $\Phi(\frac{\bar{y}^*(s)-g}{\sigma_y}) \geq T$.

Together these yield a best response for any citizen as $y_{i,1} \leq \bar{y}(s)$ where $\bar{y}(s)$ is as defined in Definition 2.

Finally, beliefs follow directly from Bayes' rule. □

Lemma 2. *$\bar{s}$ and $\underline{s}$ are well-defined*

Proof. Recall from Lemma 1 that $\bar{y}^*(s)$ is monotonic (and decreasing) in s. Further $\lim_{s\to\infty} \bar{y}^*(s) = -\infty$ and $\lim_{s\to-\infty} \bar{y}^*(s) = \infty$. Since $\Phi(\frac{\bar{y}^*(s)}{\sigma_y})$ ($\Phi(\frac{\bar{y}^*(s)-g}{\sigma_y})$) are monotonic and increasing in $\bar{y}^*(s)$ and limited below by zero and above by 1, it follows that there exist two values of s, which we define as $\bar{s}$ and $\underline{s}$, such that $T = \Phi(\frac{\bar{y}^*(\underline{s})-g}{\sigma_y})$ and $T = \Phi(\frac{\bar{y}^*(\bar{s})}{\sigma_y})$. □

Transparency Improves Discrimination

Proof of Proposition 2. Discrimination $= \Phi(\frac{\bar{s}}{\sigma_s}) - \Phi(\frac{\underline{s}-g}{\sigma_s})$. Firstly, recall that $\Phi(\frac{\bar{y}^*(\bar{s})}{\sigma_y}) = T$. Substituting $\bar{y}^*(s)$ from Lemma 1, and solving we get $\bar{s} = \frac{g}{2}(\frac{\sigma_s^2}{\sigma_y^2} + 1) - \frac{\sigma_s^2}{g} ln(\frac{p\kappa}{(1-p)[\beta-\kappa]}) - \frac{\sigma_s^2}{\sigma_y}\Phi^{-1}(T)$. Similarly, since $\Phi(\frac{\bar{y}^*(\underline{s})-g}{\sigma_y}) = T$, substituting and rearranging leads to $\underline{s} = \frac{g}{2}(1 - \frac{\sigma_s^2}{\sigma_y^2}) - \frac{\sigma_s^2}{g} ln(\frac{p\kappa}{(1-p)[\beta-\kappa]}) - \frac{\sigma_s^2}{\sigma_y}\Phi^{-1}(T)$. Then $\frac{\partial}{\partial\sigma_s}(\frac{\bar{s}}{\sigma_s}) = \frac{g}{2}(\frac{1}{\sigma_y^2} - \frac{1}{\sigma_s^2}) - \frac{1}{g} ln(\frac{p\kappa}{(1-p)[\beta-k]}) - \frac{1}{\sigma_y}\Phi^{-1}(T)$ and $\frac{\partial}{\partial\sigma_s}(\frac{\underline{s}-g}{\sigma_s}) = \frac{g}{2}(\frac{1}{\sigma_s^2} - \frac{1}{\sigma_y^2}) - \frac{1}{g} ln(\frac{p\kappa}{(1-p)[\beta-\kappa]}) - \frac{1}{\sigma_y}\Phi^{-1}(T)$. To conserve on notation, we will label

$Z \equiv \frac{1}{g}ln(\frac{p\kappa}{(1-p)[\beta-\kappa]}) + \frac{1}{\sigma_y}\Phi^{-1}(T)$, and hence

$$\frac{\partial}{\partial\sigma_s}(\frac{\bar{s}}{\sigma_s}) = \frac{g}{2}(\frac{1}{\sigma_y^2} - \frac{1}{\sigma_s^2}) - Z$$
$$\frac{\partial}{\partial\sigma_s}(\frac{\underline{s}-g}{\sigma_s}) = \frac{g}{2}(\frac{1}{\sigma_s^2} - \frac{1}{\sigma_y^2}) - Z$$

while $\frac{g}{2}(\frac{1}{\sigma_s^2} - \frac{1}{\sigma_y^2}) > 0 > \frac{g}{2}(\frac{1}{\sigma_y^2} - \frac{1}{\sigma_s^2})$, given that $\sigma_s < \sigma_y$. Notice too that

$$\frac{g}{2}(\frac{1}{\sigma_s} + \frac{\sigma_s}{\sigma_y^2}) - \sigma_s Z = \frac{\bar{s}}{\sigma_s}$$
$$-\frac{g}{2}(\frac{1}{\sigma_s} + \frac{\sigma_s}{\sigma_y^2}) - \sigma_s Z = \frac{\underline{s}-g}{\sigma_s}$$

Since $\phi(\cdot)$ is the pdf of a standard normal, we can also notice that

$$\phi(\frac{\bar{s}}{\sigma_s}) \gtreqless \phi(\frac{\underline{s}-g}{\sigma_s}) \Leftrightarrow Z \gtreqless 0. \quad (1)$$

Now consider a change in discrimination due to a change in σ_s:

$$\frac{\partial}{\partial\sigma_s}[\Phi(\frac{\bar{s}}{\sigma_s}) - \Phi(\frac{\underline{s}-g}{\sigma_s})] < 0 \Leftrightarrow$$
$$\phi(\frac{\bar{s}}{\sigma_s})[\frac{\partial}{\partial\sigma_s}(\frac{\bar{s}}{\sigma_s})] < \phi(\frac{\underline{s}-g}{\sigma_s})[\frac{\partial}{\partial\sigma_s}(\frac{\underline{s}-g}{\sigma_s})] \quad (2)$$

Having defined these preliminaries, we can now evaluate condition 2. Let us first assume $\frac{\partial}{\partial\sigma_s}(\frac{\bar{s}}{\sigma_s}) > 0$. Notice that, since $\frac{g}{2}(\frac{1}{\sigma_y^2} - \frac{1}{\sigma_s^2}) < 0$, this implies that $Z < 0$. Condition 2 can thus be expressed as:

$$\frac{\phi(\frac{\bar{s}}{\sigma_s})}{\phi(\frac{\underline{s}-g}{\sigma_s})} < \frac{\frac{g}{2}(\frac{1}{\sigma_s^2} - \frac{1}{\sigma_y^2}) - Z}{\frac{g}{2}(\frac{1}{\sigma_y^2} - \frac{1}{\sigma_s^2}) - Z}$$

Since $Z < 0$, we know from equation (1) that the LHS of this inequality is strictly less than one. We similarly know that the RHS of this inequality must be strictly greater than one, given that $\sigma_s < \sigma_y$ and the denominator is positive. Thus, this inequality must hold.

Let us now consider the case where $\frac{\partial}{\partial\sigma_s}(\frac{\bar{s}}{\sigma_s}) < 0$. Then condition 2 can be rewritten as:

$$\frac{\phi(\frac{\bar{s}}{\sigma_s})}{\phi(\frac{\underline{s}-g}{\sigma_s})} > \frac{\frac{g}{2}(\frac{1}{\sigma_s^2} - \frac{1}{\sigma_y^2}) - Z}{\frac{g}{2}(\frac{1}{\sigma_y^2} - \frac{1}{\sigma_s^2}) - Z}$$

When $\frac{\partial}{\partial\sigma_s}(\frac{\bar{s}}{\sigma_s}) < 0$, $\frac{\partial}{\partial\sigma_s}(\frac{\underline{s}-g}{\sigma_s})$ may be either positive or negative. If it is positive, it is immediately apparent that this inequality must hold – the RHS will be strictly negative, while the LHS (by the definition of a pdf) is strictly positive.

Let us now consider the final possible case, in which $\frac{\partial}{\partial\sigma_s}(\frac{\underline{s}-g}{\sigma_s}) < 0$. Since $\frac{g}{2}(\frac{1}{\sigma_s^2} - \frac{1}{\sigma_y^2}) > 0$, this implies that $Z > 0$ and $\frac{\frac{g}{2}(\frac{1}{\sigma_s^2}-\frac{1}{\sigma_y^2})-Z}{\frac{g}{2}(\frac{1}{\sigma_y^2}-\frac{1}{\sigma_s^2})-Z} \in (0,1)$. $Z > 0$ implies that $\frac{\phi(\frac{\bar{s}}{\sigma_s})}{\phi(\frac{\underline{s}-g}{\sigma_s})} > 1$. Thus, the inequality holds.

Hence condition 2 holds for all possible parameter values. Discrimination is therefore rising in transparency. □

Corollary 1 follows directly from the strategies identified in the equilibrium in Proposition 1.

Proof of Proposition 3. The unconditional probability of autocratic removal is given by $(1-p)\Phi(\frac{\bar{s}}{\sigma_s}) + p\Phi(\frac{\underline{s}-g}{\sigma_s})$. This probability is increasing in transparency if the quantity above is decreasing in σ_s. Thus, the unconditional probability of democratization is rising in transparency iff

$$(1-p)\phi(\frac{\bar{s}}{\sigma_s})[\frac{\partial}{\partial\sigma_s}(\frac{\bar{s}}{\sigma_s})] + p\phi(\frac{\underline{s}-g}{\sigma_s})[\frac{\partial}{\partial\sigma_s}(\frac{\underline{s}-g}{\sigma_s})] < 0. \quad (3)$$

As we saw in the proof of Proposition 2 above, $\frac{\partial}{\partial\sigma_s}(\frac{\underline{s}-g}{\sigma_s}) > \frac{\partial}{\partial\sigma_s}(\frac{\bar{s}}{\sigma_s})$. Thus, a sufficient condition for condition 3 to hold is that $\frac{\partial}{\partial\sigma_s}(\frac{\underline{s}-g}{\sigma_s}) \leq 0$. Recall that

$$\frac{\partial}{\partial\sigma_s}(\frac{\underline{s}-g}{\sigma_s}) = \frac{g}{2}(\frac{1}{\sigma_s^2} - \frac{1}{\sigma_y^2}) - Z$$

which is monotonic and decreasing in σ_s and converges to $-Z$ as $\sigma_s \to \sigma_y$. Thus, if $Z > 0$, there exists a value $\bar{\sigma}_s$ such that this expression is negative for all $\sigma_s \geq \bar{\sigma}_s$. Finally, $Z > 0$ implies that $\frac{1}{g}ln(\frac{p\kappa}{(1-p)[\beta-\kappa]}) + \frac{1}{\sigma_y}\Phi^{-1}(T) > 0$ or $\Phi^{-1}(T) > -\frac{\sigma_y}{g}ln(\frac{p\kappa}{(1-p)[\beta-\kappa]})$. □

Proof of Remark 1. From the proof of Proposition 3 above, a sufficient condition for the unconditional probability of autocratic removal to be rising in transparency (falling in σ_s) is $\frac{\partial}{\partial\sigma_s}(\frac{\underline{s}-g}{\sigma_s}) \leq 0$. Now $\frac{\partial}{\partial\sigma_s}(\frac{\underline{s}-g}{\sigma_s}) = \frac{g}{2}(\frac{1}{\sigma_s^2} - \frac{1}{\sigma_y^2}) - Z$ and $Z = \frac{1}{g}ln(\frac{p\kappa}{(1-p)[\beta-\kappa]}) + \frac{1}{\sigma_y}\Phi^{-1}(T)$. Then $\lim_{\beta\to\kappa} Z = \infty \; \forall\, T > 0$ and hence $\lim_{\beta\to\kappa} \frac{\partial}{\partial\sigma_s}(\frac{\underline{s}-g}{\sigma_s}) < 0 \; \forall \sigma_s, T > 0$. □

Proof of the Efficiency of the Cut-Point Equilibrium

We consider the efficiency of the alternative equilibria from the perspective of public goods provision (i.e., the *ex ante* probability $G = 1$), ignoring the selective incentives for mobilization β. The expected utility of either 'pooling' equilibrium, in which the public either always revolts or never revolts, is simply $2pg$. By contrast, the expected utility of the 'separating' equilibrium, depicted above, is given by $p[g + Pr(s > \underline{s}|\theta = 1)g + Pr(s \leq \underline{s}|\theta = 1)pg] + (1-p)[Pr(s \leq \bar{s}|\theta = 0)pg]$. The latter expression dominates the former iff:

$$pg + Pr(s > \underline{s}|\theta = 1)pg + Pr(s \leq \underline{s}|\theta = 1)p^2g + Pr(s \leq \bar{s}|\theta = 0)(1-p)pg \geq 2pg$$

$$Pr(s > \underline{s}|\theta = 1) + Pr(s \leq \underline{s}|\theta = 1)p + Pr(s \leq \bar{s}|\theta = 0)(1-p) \geq 1$$

$$1 - Pr(s \leq \underline{s}|\theta = 1) + Pr(s \leq \underline{s}|\theta = 1)p + Pr(s \leq \bar{s}|\theta = 0)(1-p) \geq 1$$

$$(1-p)[Pr(s \leq \bar{s}|\theta = 0) - Pr(s \leq \underline{s}|\theta = 1)] \geq 0$$

$$Pr(s \leq \bar{s}|\theta = 0) - Pr(s \leq \underline{s}|\theta = 1) \geq 0$$

substituting

$$\Phi(\frac{\bar{s}}{\sigma_s}) - \Phi(\frac{\underline{s} - g}{\sigma_s}) \geq 0$$

From the above, we have $\frac{\bar{s}}{\sigma_s} = \frac{g}{2}(\frac{1}{\sigma_s} + \frac{\sigma_s}{\sigma_y^2}) - \sigma_s Z > \frac{\underline{s}-g}{\sigma_s} = -\frac{g}{2}(\frac{1}{\sigma_s} + \frac{\sigma_s}{\sigma_y^2}) - \sigma_s Z$ implying that $\Phi(\frac{\bar{s}}{\sigma_s}) > \Phi(\frac{\underline{s}-g}{\sigma_s})$. Thus, the above equality must hold. $\square$

Model Extension

Separating Equilibrium

Proof of Proposition 4: Taking the behavior of the leaders of each type as given, the citizens update in the same way as in the baseline game - and their actions conditional on their beliefs are the same. Given the citizens' actions and beliefs, the probability of removal given $G_1 = 0$ is given by $\Phi(\frac{\bar{s}}{\sigma_s})$ while the probability of removal given $G_1 = 1$ is given by $\Phi(\frac{\underline{s}-g}{\sigma_s})$, where $\Phi(\cdot)$ is the cdf of the standard normal. Leaders of type $\theta = 1$ have a dominant strategy to set $G_t = 1\, \forall\, t$.

The return to leaders of type $\theta = 0$ when they separate, and set $G_1 = 0$ is larger than their return when they deviate, and set $G_1 = 1$ iff

$$1 + B + [1 - \Phi(\frac{\bar{s}}{\sigma_s})](1 + B) \geq B + [1 - \Phi(\frac{\underline{s} - g}{\sigma_s})](1 + B)$$
$$\frac{1}{1 + B} \geq \Phi(\frac{\bar{s}}{\sigma_s}) - \Phi(\frac{\underline{s} - g}{\sigma_s})$$

which is satisfied by the condition. Finally in all equilibria, leaders of type θ set $G_2 = \theta$.) $\square$

Proof of Proposition 5: Given B, define $\bar{\sigma_s}$ such that $\frac{1}{1+B} = \Phi(\frac{\bar{s}}{\bar{\sigma_s}}) - \Phi(\frac{\underline{s}-g}{\bar{\sigma_s}})$. The definition of a cdf implies that $\Phi(\frac{\bar{s}}{\sigma_s}) - \Phi(\frac{\underline{s}-g}{\sigma_s})$ is bounded below by zero and above by one, since $\frac{\bar{s}}{\sigma_s} \geq \frac{\underline{s}-g}{\sigma_s}$. Proposition 2 establishes that this expression is monotonically decreasing in σ_s, it converges to zero as $\sigma_s \to \infty$. Then for any $\sigma_s \geq \bar{\sigma_s}$, $\frac{1}{1+B} \geq \Phi(\frac{\bar{s}}{\sigma_s}) - \Phi(\frac{\underline{s}-g}{\sigma_s})$. $\square$

Pooling Equilibrium

Since both types pool on providing the public good in the first period, the citizen learns nothing from the private signal $y_{i,1}$. While the citizen also can't update on the type of leader by having observed the public signal (since both types take the same action), the posterior on the type of the leader doesn't change with the public signal either. However the public signal can still be used as a coordination device such that whenever the signal lies below some threshold, say $\check{s}$, then all citizens protest; when the public signal is high enough, then they all stay home.

The threshold $\check{s}$ is not unique; there is a continuum of pooling equilibria.

Proposition 6. *For any $\check{s}$ such that $\frac{1}{1+B} < \Phi(\frac{\check{s}}{\sigma_s}) - \Phi(\frac{\check{s}-g}{\sigma_s})$ then the following strategies and beliefs constitute a (pooling) PBE to the extended model.*

1. $G_1 = 1$ *for* $\theta = 0, 1$ *and* $G_2 = \theta$ *for* $\theta = 0, 1$
2. $a_i = 1$ *if* $s \leq \check{s}$ *and* $a_i = 0$ *otherwise, for all* i
3. $Pr(\theta = 0 | y_{i,1}, s) = 1 - p$ *for all* i.

Proof. Leaders of type $\theta = 1$ will set $G_t = 1 \; \forall \; t$, for this is a dominant strategy. In a pooling equilibrium, leaders of type $\theta = 0$ set $G_1 = 1$. Such leaders always have a dominant strategy of setting $G_2 = 0$. Taking the behavior of the citizens, $Pr(remove|G_1 = 1) = \Phi(\frac{\check{s}-g}{\sigma_s})$ where $\Phi(\cdot)$ is the cdf of the standard normal. If instead, the leader deviates and sets $G_1 = 0$, then the $Pr(remove|G_1 = 0) = \Phi(\frac{\check{s}}{\sigma_s})$. Then a type $\theta = 0$ pools with the strong leader iff

$$1 + B + [1 - Pr(remove|G_1 = 0)](1 + B) < B + [1 - Pr(remove|G_1 = 1)(1 + B)$$
$$\frac{1}{1+B} < \Phi(\frac{\check{s}}{\sigma_s}) - \Phi(\frac{\check{s}-g}{\sigma_s})$$

As for the citizens, if $s \leq \check{s}$, then everyone else is revolting and the leader will be removed; the best response is to revolt; if $s > \check{s}$, then no other citizen is revolting, and the best response is to set $a_i = 0$. □

Remark 2. *Note that for* $B \to \infty$, $\frac{1}{1+B} < \Phi(\frac{\check{s}}{\sigma_s}) - \Phi(\frac{\check{s}-g}{\sigma_s})$ *since* $0 < \Phi(\frac{\check{s}}{\sigma_s}) - \Phi(\frac{\check{s}-g}{\sigma_s})$ *for all finite* $\check{s}$ *and* σ_s *by Proposition 2. Hence the parameter space for the pooling equilibrium is not empty.*

Appendix: Empirical Appendix

Transparency and Autocrat Removal Via Revolt and Democratization Separately

Here we present the results of competing hazards regressions in which we separately model the risk of autocratic regime removal via mass protest and autocratic regime removal via processes leading to democratization. As in the main empirical section of the paper, we fit conditional gap time competing hazards regressions. For regressions in which the outcome is regime removal only via mass revolt (the results of which are presented in Table 1), we code a binary indicator which takes the value of 1 in the year a given autocratic regime is removed (via revolt). All autocratic regimes enter the data, those that are removed by other methods are treated as censored. In regressions in which the outcome is regime removal via processes leading to democratization (the results of which are presented in Table 2), we code a binary indicator which takes the value of 1 in the year a given autocratic regime is removed (via democratization). All autocratic regimes enter the regression, those that exit via other methods are treated as censored. In both instances, we stratify the baseline hazard based on the history of past autocratic transitions: results in the first three columns of both tables stratify based on whether there was a prior autocratic collapse in a given country, results in the next three columns stratify based on the number of prior collapses, and results in the final three columns control for an indicator of past collapse.

Results from both sets of regressions reveal similar patterns to one another, and to the main results in the text. Transparency is associated with an increased risk of collapse (via either revolt or democratization) and economic growth with a reduced risk of collapse. In some specifications, these results rise to the level of statistical significance, in others, they do not. However, both sets of models rely on very small samples of regime collapses: there are six such failures via mass revolt in our sample, and 24-25 instances of failures via democratization. Given the similarity of the estimates across both forms of regime collapse, and the small sample size, we prefer to combine these two forms of collapse for our main presentation in the text.

Transparency and Other Forms of Autocrat Instability

Are relatively weak autocratic regimes – those most prone to removal via any method – simply more likely to be transparent? Might the above results be explained by the reform efforts of relatively weak regimes attempting to stave off their ouster?

We assess this possibility below. We do so by examining the relationship between transparency, economic growth, and autocratic instability resulting from threats not involving mass unrest or democratization. Our methods are broadly similar to those described above. Table 3 presents the results of a Cox competing hazards model of the hazard autocratic regimes face from removal via a coup. In contrast to the results in the prior section, a regime fails if a sitting autocratic leader is removed via a coup (which, in Svolik's (2012) data involves a plot by either the

Table 1: Cox Model, Autocrat Removal via Revolt Only

	Cond. Past Collapse			**Cond. Hist. Instability**			**Control Past Collapse**		
Transparency	0.535*	0.475	0.426	0.704*	0.511	0.455	0.452	0.386	0.414
	[-0.090,1.159]	[-0.092,1.042]	[-0.105,0.957]	[-0.040,1.447]	[-0.262,1.284]	[-0.342,1.252]	[-0.196,1.099]	[-0.277,1.049]	[-0.257,1.086]
Growth	-0.058*	-0.075**	-0.067	-0.050	-0.055	-0.034	-0.072	-0.075*	-0.072*
	[-0.125,0.009]	[-0.149,-0.001]	[-0.147,0.013]	[-0.245,0.145]	[-0.160,0.050]	[-0.167,0.100]	[-0.160,0.017]	[-0.159,0.008]	[-0.158,0.013]
Transparency	-0.031*	-0.037**	-0.033	0.008	-0.002	-0.002	-0.036*	-0.036*	-0.035
× Growth	[-0.063,0.001]	[-0.074,-0.001]	[-0.072,0.006]	[-0.226,0.241]	[-0.160,0.155]	[-0.149,0.145]	[-0.077,0.006]	[-0.078,0.006]	[-0.079,0.010]
GDP *per capita*	-0.669			-0.020			-0.307		
	[-2.163,0.825]			[-1.227,1.188]			[-1.493,0.880]		
Openness	-0.017			-0.035**			-0.022		
	[-0.052,0.017]			[-0.069,-0.001]			[-0.058,0.014]		
Party	-0.598	-0.534		-0.786	-0.684		-0.110	-0.022	
	[-2.092,0.896]	[-1.741,0.673]		[-2.556,0.985]	[-2.364,0.996]		[-1.528,1.307]	[-1.508,1.464]	
Military	0.139	0.218		0.051	-0.097		0.270	0.469	
	[-1.375,1.652]	[-1.245,1.681]		[-2.295,2.396]	[-1.855,1.662]		[-1.442,1.981]	[-1.097,2.035]	
Ever Collapse							1.052	0.703	0.835
							[-0.837,2.942]	[-1.428,2.833]	[-1.143,2.813]
# of Subjects	137	137	143	137	137	143	137	137	143
# of Failures	6	6	6	6	6	6	6	6	6

Cox competing hazards regressions of the hazard of autocratic removal by mass revolt only. The models depicted in the first three columns, the middle three columns, and the last three columns differ in the manner in which they deal with countries that experienced multiple autocratic failures. Those in the first three columns report a conditional gap time model wherein the baseline hazard is separately estimated for regimes that experience a prior regime failure and for those that did not. Those in the next two columns estimate separate baseline hazards based on a categorical measure that reflects the number of prior collapses. Those in the final three columns simply control for prior collapses, rather than stratifying the baseline hazard. In all models, * denotes significance at the 10 percent level, ** denotes significance at the 5 percent level, and *** denotes significance at the 1 percent level. 95 percent confidence intervals are presented in brackets. All standard errors have been clustered by autocratic regime.

Table 2: Cox Model, Autocrat Removal via Democratization Only

	Cond. Past Collapse			**Cond. Hist. Instability**			**Control Past Collapse**		
Transparency	0.210	0.231	0.208	0.211	0.214	0.205	0.209	0.223	0.215
	[-0.128,0.548]	[-0.100,0.562]	[-0.058,0.473]	[-0.110,0.532]	[-0.112,0.540]	[-0.084,0.495]	[-0.130,0.548]	[-0.104,0.551]	[-0.054,0.484]
Growth	-0.024	-0.023	-0.017	-0.050**	-0.050**	-0.041*	-0.022	-0.022	-0.018
	[-0.061,0.013]	[-0.060,0.015]	[-0.052,0.017]	[-0.097,-0.003]	[-0.097,-0.003]	[-0.087,0.005]	[-0.061,0.016]	[-0.060,0.017]	[-0.054,0.018]
Transparency	0.004	0.004	0.005	-0.006	-0.006	-0.006	0.008	0.008	0.007
$\times$ Growth	[-0.035,0.043]	[-0.036,0.045]	[-0.031,0.040]	[-0.049,0.037]	[-0.048,0.037]	[-0.038,0.027]	[-0.033,0.048]	[-0.034,0.049]	[-0.032,0.045]
GDP *per capita*	0.254			0.113			0.145		
	[-0.321,0.829]			[-0.535,0.761]			[-0.289,0.579]		
Ec. Openness	-0.003			-0.001			-0.002		
	[-0.013,0.008]			[-0.012,0.010]			[-0.013,0.009]		
Party	-0.038	-0.098		-0.161	-0.193		-0.041	-0.080	
	[-1.136,1.060]	[-1.149,0.954]		[-1.338,1.016]	[-1.283,0.897]		[-1.171,1.090]	[-1.171,1.010]	
Military	0.740	0.676		0.668	0.648		0.648	0.611	
	[-0.252,1.733]	[-0.274,1.627]		[-0.261,1.596]	[-0.237,1.533]		[-0.297,1.593]	[-0.295,1.516]	
Ever Collapse							0.542	0.515	0.672
							[-0.537,1.622]	[-0.454,1.484]	[-0.280,1.623]
# of Subjects	137	137	143	137	137	143	137	137	143
# of Failures	24	24	25	24	24	25	24	24	25

Cox competing hazards regressions of the hazard of autocratic removal by democratization only. The models depicted in the first three columns, the middle three columns, and the last three columns differ in the manner in which they deal with countries that experienced multiple autocratic failures. Those in the first three columns report a conditional gap time model wherein the baseline hazard is separately estimated for regimes that experience a prior regime failure and for those that did not. Those in the next two columns estimate separate baseline hazards based on a categorical measure that reflects the number of prior collapses. Those in the final three columns simply control for prior collapses, rather than stratifying the baseline hazard. In all models, * denotes significance at the 10 percent level, ** denotes significance at the 5 percent level, and *** denotes significance at the 1 percent level. 95 percent confidence intervals are presented in brackets. All standard errors have been clustered by autocratic regime.

military or other elites involving the threat or use of force). Regimes removed via other methods enter the dataset until they collapse, after which they are treated as censored. Table 4 presents the results of Cox regressions of autocratic regime removal (via any method) on transparency, growth and their interaction. As in the above section, we fit conditional gap time models in which the baseline hazard is stratified by whether their has been a prior regime collapse, on the number of prior regime collapses, and a final model in which we simply control for prior collapse.

Tables 3 and 4 show starkly contrasting results from those in Table 1, which examines removal via mass unrest or democratization. Table 3 demonstrates that transparency is associated with a *reduced* threat of coups. The coefficient on transparency is negative and large in all specifications, and significant at the 90 percent level or above in all specifications that do not control for GDP *per capita* and economic openness. Furthermore, the coefficient on growth (and its interaction with transparency) is consistently positive in all specifications. That is, growth, transparency, and their interaction have the opposite association with instability as brought about via coups as with instability brought about via unrest.

Table 4 shows that these starkly contrasting results offset one another when one considers the risk autocratic regimes face from all possible threats. Coefficients on transparency, growth and their interaction are never significant. Moreover, the point estimate of the coefficient on transparency is consistently small – approximately equal to zero – and switches signs across the various specifications. Transparency is associated with increased autocratic instability only via threats from below – its relationship to threats emerging from within the regime follows starkly different patterns. This finding argues against the notion that transparency is simply higher in weak autocratic regimes.

Alternative Specifications

Proposition 3 establishes that transparency enhances the risk of autocratic removal for a plausible range of parameter values. However, for sufficiently high levels of transparency (high values of

Table 3: Cox Models, Autocrat Removal via Coup

	Cond. Past Collapse			Cond. Hist. Instability			Control Past Collapse		
Transparency	-0.163	-0.293*	-0.239**	-0.243	-0.320*	-0.315*	-0.200	-0.294**	-0.240**
	[-0.477,0.151]	[-0.586,0.000]	[-0.451,-0.028]	[-0.765,0.280]	[-0.691,0.050]	[-0.676,0.046]	[-0.523,0.122]	[-0.579,-0.009]	[-0.443,-0.037]
Growth	0.042	0.041	0.041	0.068*	0.056*	0.057*	0.029	0.034	0.035
	[-0.020,0.105]	[-0.016,0.097]	[-0.011,0.094]	[-0.009,0.146]	[-0.004,0.116]	[-0.003,0.116]	[-0.025,0.082]	[-0.020,0.089]	[-0.014,0.085]
Transparency	-0.001	0.014	0.015	0.021	0.028	0.024	0.001	0.009	0.013
$\times$ Growth	[-0.044,0.042]	[-0.028,0.055]	[-0.007,0.037]	[-0.049,0.090]	[-0.024,0.080]	[-0.021,0.068]	[-0.040,0.042]	[-0.030,0.048]	[-0.007,0.034]
GDP *per capita*	-1.411*			-1.421			-1.324		
	[-3.083,0.262]			[-3.131,0.288]			[-3.010,0.362]		
Ec. Openness	0.034			0.039			0.023		
	[-0.030,0.098]			[-0.022,0.101]			[-0.038,0.083]		
Ec. Openness^2	-0.011			-0.013			-0.004		
	[-0.062,0.040]			[-0.061,0.034]			[-0.057,0.048]		
Ec. Openness^3	0.001			0.001			-0.001		
	[-0.010,0.012]			[-0.008,0.011]			[-0.012,0.011]		
Party	-0.140	0.031		-0.406	0.045		-0.185	-0.005	
	[-1.230,0.950]	[-1.139,1.201]		[-1.529,0.717]	[-1.010,1.100]		[-1.375,1.005]	[-1.226,1.216]	
Military	0.389	0.672		0.362	0.660		0.398	0.680	
	[-0.581,1.359]	[-0.318,1.662]		[-0.531,1.256]	[-0.266,1.585]		[-0.628,1.423]	[-0.364,1.725]	
Ever Collapse							0.482	0.318	0.470
							[-0.551,1.516]	[-0.679,1.316]	[-0.553,1.493]
# of Subjects	137	137	143	137	137	143	137	137	143
# of Failures	16	16	18	16	16	18	16	16	18

Cox competing hazards regressions of the hazard of autocratic removal via coup. The models depicted in the first three columns, the middle three columns, and the last three columns differ in the manner in which they deal with countries that experienced multiple autocratic failures. Those in the first three columns report a conditional gap time model wherein the baseline hazard is separately estimated for regimes that experience a prior regime failure and for those that did not. Those in the next two columns estimate separate baseline hazards based on a categorical measure that reflects the number of prior collapses. Those in the final three columns simply control for prior collapses, rather than stratifying the baseline hazard. In all models, * denotes significance at the 10 percent level, ** denotes significance at the 5 percent level, and *** denotes significance at the 1 percent level. 95 percent confidence intervals are presented in brackets. All standard errors have been clustered by autocratic regime.

Table 4: Cox Models, Autocrat Removal via All Methods

	Cond. Past Collapse			Cond. Hist. Instability			Control Past Collapse		
Transparency	0.014	0.000	0.040	0.010	-0.029	-0.009	0.012	0.001	0.042
	[-0.159,0.187]	[-0.181,0.181]	[-0.117,0.197]	[-0.171,0.190]	[-0.218,0.160]	[-0.184,0.167]	[-0.170,0.194]	[-0.192,0.193]	[-0.125,0.209]
Growth	-0.005	-0.006	-0.009	-0.006	-0.007	-0.012	-0.008	-0.008	-0.011
	[-0.030,0.020]	[-0.030,0.018]	[-0.034,0.015]	[-0.039,0.027]	[-0.038,0.024]	[-0.042,0.018]	[-0.034,0.019]	[-0.033,0.017]	[-0.036,0.015]
Transparency	0.015	0.012	0.006	0.013	0.011	0.007	0.017	0.012	0.006
× Growth	[-0.011,0.042]	[-0.014,0.037]	[-0.010,0.022]	[-0.019,0.045]	[-0.020,0.042]	[-0.013,0.026]	[-0.011,0.045]	[-0.016,0.040]	[-0.011,0.022]
GDP *per capita*	-0.265			-0.330			-0.274		
	[-0.705,0.174]			[-0.796,0.135]			[-0.709,0.161]		
Ec. Openness	-0.040***			-0.031**			-0.046***		
	[-0.066,-0.014]			[-0.057,-0.006]			[-0.071,-0.021]		
Ec. Openness^2	0.034***			0.027**			0.038***		
	[0.009,0.059]			[0.003,0.050]			[0.015,0.062]		
Ec. Openness^3	-0.008**			-0.006**			-0.009***		
	[-0.015,-0.002]			[-0.012,-0.001]			[-0.015,-0.003]		
Party	0.392	0.364		0.272	0.262		0.414	0.371	
	[-0.101,0.884]	[-0.122,0.850]		[-0.239,0.784]	[-0.225,0.748]		[-0.095,0.923]	[-0.125,0.867]	
Military	0.060	0.094		0.026	0.076		0.071	0.098	
	[-0.406,0.525]	[-0.360,0.548]		[-0.426,0.478]	[-0.363,0.516]		[-0.397,0.540]	[-0.360,0.556]	
Ever Collapse							0.283	0.288	0.356
							[-0.227,0.793]	[-0.237,0.813]	[-0.144,0.856]
# of Subjects	137	137	143	137	137	143	137	137	143
# of Failures	87	87	93	87	87	93	87	87	93

Cox regressions of the hazard of autocratic removal via any method. The models depicted in the first three columns, the middle three columns, and the last three columns differ in the manner in which they deal with countries that experienced multiple autocratic failures. Those in the first three columns report a conditional gap time model wherein the baseline hazard is separately estimated for regimes that experience a prior regime failure and for those that did not. Those in the next two columns estimate separate baseline hazards based on a categorical measure that reflects the number of prior collapses. Those in the final three columns simply control for prior collapses, rather than stratifying the baseline hazard. In all models, * denotes significance at the 10 percent level, ** denotes significance at the 5 percent level, and *** denotes significance at the 1 percent level. 95 percent confidence intervals are presented in brackets. All standard errors have been clustered by autocratic regime.

β and low values of κ), this comparative static will not hold. Here, we test whether observations fall in the anticipated range of the parameter space by allowing for a non-monotonic relationship between transparency and the hazard of autocratic removal. To be more precise, we include a quadratic-term of transparency in our baseline specification. The results of this Cox competing hazards model are presented in Table 5, below.

While the quadratic term is negative in most specifications, coefficient estimates are small in magnitude and imprecisely estimated. We therefore conclude that observations lie in the portion of the parameter space described by Proposition 3, and that the baseline (monotonic) specification is appropriate.

Robustness Checks

In what follows, we explore the robustness of our results to the inclusion of a variety of controls. In particular, we seek to ensure that our results are not simply the result of a more general process of autocratic liberalization – i.e., that liberalizing autocrats disclose more information and that it is liberalization, rather than transparency, that explains the vulnerability of these regimes to mass mobilization and democratization.

Liberalization is a complex and multifaceted process, which cannot adequately be captured with any one control. Instead, we explore the robustness of our empirical specifications to the inclusion of a variety of different measures, which capture aspects of liberalization.

We additionally examine specifications in which we control for two measures of economic openness: that captured by the KOF Index of Globalization's measure of economic restrictions and that measured by the Wacziarg & Welch measure of economic openness. The former captures tariffs, non-tariff barriers, other taxes on trade, and capital account restrictions while the latter is a $\{0, 1\}$ indicator for 'closed' economies. In our baseline specifications, we attempt to control for economic liberalization using openness to trade ($\frac{Exports+Imports}{GDP}$). However, this measure is not purely a policy choice – it is also heavily influenced by geography and population size.

Table 5: Cox Model, Including a Quadratic Term of Transparency

	Cond. Past Collapse			Cond. Hist. Instability			Control Past Collapse		
Transparency	0.244	0.274*	0.275*	0.263*	0.255*	0.266*	0.234	0.258*	0.270*
	[-0.077,0.564]	[-0.047,0.594]	[-0.002,0.552]	[-0.041,0.566]	[-0.040,0.550]	[-0.031,0.564]	[-0.075,0.542]	[-0.047,0.563]	[-0.004,0.544]
Transparency^2	-0.006	0.003	-0.010	-0.015	-0.008	-0.019	-0.008	0.004	-0.005
	[-0.097,0.084]	[-0.092,0.097]	[-0.107,0.087]	[-0.097,0.068]	[-0.090,0.074]	[-0.102,0.064]	[-0.101,0.085]	[-0.091,0.100]	[-0.102,0.091]
Growth	-0.034*	-0.033*	-0.028*	-0.049**	-0.049**	-0.040*	-0.036*	-0.034*	-0.029
	[-0.068,0.000]	[-0.067,0.001]	[-0.059,0.004]	[-0.098,-0.000]	[-0.096,-0.001]	[-0.085,0.004]	[-0.074,0.003]	[-0.072,0.004]	[-0.064,0.006]
Transparency	-0.003	-0.007	-0.005	0.001	-0.004	-0.005	-0.002	-0.006	-0.004
$\times$ Growth	[-0.041,0.034]	[-0.042,0.028]	[-0.036,0.026]	[-0.052,0.053]	[-0.058,0.050]	[-0.045,0.036]	[-0.044,0.041]	[-0.045,0.033]	[-0.039,0.030]
GDP *per capita*	0.195			0.090			0.145		
	[-0.325,0.715]			[-0.474,0.654]			[-0.283,0.573]		
Ec. Openness	-0.033			-0.031			-0.043*		
	[-0.079,0.012]			[-0.076,0.013]			[-0.091,0.004]		
Ec. Openness^2	0.026			0.023			0.034		
	[-0.014,0.067]			[-0.017,0.063]			[-0.009,0.078]		
Ec. Openness^3	-0.006			-0.005			-0.007		
	[-0.014,0.003]			[-0.013,0.004]			[-0.017,0.002]		
Party	-0.004	-0.105		-0.209	-0.280		0.113	-0.003	
	[-0.913,0.906]	[-1.010,0.799]		[-1.235,0.816]	[-1.266,0.706]		[-0.814,1.040]	[-0.941,0.935]	
Military	0.696*	0.619		0.504	0.491		0.676	0.597	
	[-0.120,1.512]	[-0.159,1.397]		[-0.303,1.312]	[-0.271,1.253]		[-0.132,1.485]	[-0.166,1.359]	
Ever Collapse							0.619	0.560	0.723
							[-0.384,1.621]	[-0.424,1.545]	[-0.212,1.658]
# of Subjects	137	137	143	137	137	143	137	137	143
# of Failures	30	30	31	30	30	31	30	30	31

Cox competing hazards regressions of the hazard of autocratic removal via revolt or democratization. The models depicted in the first three columns, the middle three columns, and the last three columns differ in the manner in which they deal with countries that experienced multiple autocratic failures. Those in the first three columns report a conditional gap time model wherein the baseline hazard is separately estimated for regimes that experience a prior regime failure and for those that did not. Those in the next three columns estimate separate baseline hazards based on a categorical measure that reflects the number of prior collapses. Those in the final three columns simply control for prior collapses, rather than stratifying the baseline hazard. In all models, * denotes significance at the 10 percent level, ** denotes significance at the 5 percent level, and *** denotes significance at the 1 percent level. 95 percent confidence intervals are presented in brackets. All standard errors have been clustered by autocratic regime.

The alternatives we employ below are more directly related to policy, and help to adjust for the risk that liberal (open) autocracies may derive legitimacy from economic growth in a way that isn't true of illiberal autocracies, and are hence more transparent.

Robustness of Stability Results

Tables 6 and 7 present our results on autocratic stability controlling for, respectively the KOF Index measure of economic restrictions on cross-border flows and the Wacziarg-Welch measure of economic openness. All tables present the results of Cox competing hazards models, in which the outcome of interest is the collapse of an autocratic regime brought about either through mass mobilization or democratization. We separately present results in which we stratify the baseline hazard by whether there has been a previous autocratic collapse, on the number of autocratic collapses, and in which we simply control for previous instability for each set of controls. Throughout, we present coefficient estimates rather than hazards ratios.

The coefficient estimates in our robustness tests are substantively quite similar to those in our baseline specification. Whereas the baseline estimates place a coefficient of between 0.221 and 0.278 on the transparency term; the robustness tests return a coefficient value of between 0.171 and 0.294. As in the baseline model, the coefficient on growth is negative in all robustness specifications – and the magnitude of this coefficient is similar across baseline and robustness models. The coefficient on the interaction term is negative in most robustness specifications, and is of similar magnitude to that in the baseline.

The inclusion of the alternative controls does reduce the precision of our estimates. The coefficient on transparency only returns a p-value of below 0.10 when the KOF measure is used as a control. p-values for the robustness checks range from 0.34 on the high end to 0.08 on the low. (The as opposed to between 0.17 and 0.05 in the baseline results.) Given the low statistical power of these tests, and the striking similarity of coefficient estimates across all specifications, we view these results as evidence of the robustness of the baseline model.

Table 6: Cox Model, KOF Measure of Economic Openness

	Cond. Past Collapse		**Cond. Hist. Instability**		**Control Past Collapse**	
Transparency	0.294*	0.248*	0.279	0.255	0.282	0.259
	[-0.038,0.625]	[-0.043,0.538]	[-0.083,0.640]	[-0.070,0.580]	[-0.062,0.625]	[-0.064,0.582]
	(0.082)	(0.095)	(0.131)	(0.125)	(0.108)	(0.116)
Growth	-0.047***	-0.036**	-0.047*	-0.035	-0.045**	-0.035*
	[-0.081,-0.013]	[-0.070,-0.003]	[-0.094,0.001]	[-0.080,0.010]	[-0.082,-0.007]	[-0.072,0.001]
	(0.007)	(0.035)	(0.055)	(0.131)	(0.021)	(0.059)
Transparency	0.010	0.006	0.004	-0.001	0.007	0.005
× Growth	[-0.042,0.061]	[-0.039,0.050]	[-0.055,0.064]	[-0.046,0.045]	[-0.048,0.062]	[-0.044,0.053]
	(0.714)	(0.803)	(0.887)	(0.982)	(0.798)	(0.856)
GDP *per capita*	0.121		0.161		0.155	
	[-0.448,0.690]		[-0.449,0.771]		[-0.314,0.624]	
	(0.676)		(0.605)		(0.517)	
KOF Restrictions	-0.010	-0.012	-0.020	-0.021*	-0.013	-0.015
	[-0.037,0.017]	[-0.034,0.010]	[-0.050,0.010]	[-0.045,0.003]	[-0.040,0.014]	[-0.037,0.007]
	(0.480)	(0.275)	(0.198)	(0.090)	(0.343)	(0.190)
Party	-0.414		-0.471		-0.240	
	[-1.502,0.675]		[-1.499,0.557]		[-1.313,0.834]	
	(0.456)		(0.369)		(0.662)	
Military	0.613		0.587		0.578	
	[-0.292,1.518]		[-0.239,1.413]		[-0.290,1.445]	
	(0.184)		(0.164)		(0.192)	
Ever Collapse					0.602	0.675
					[-0.736,1.940]	[-0.456,1.806]
					(0.378)	(0.242)
# of Subjects	119	124	119	124	119	124
# of Failures	29	30	29	30	29	30

Cox competing hazards regressions of the hazard of autocratic removal via revolt or democratization. The models depicted in the first two columns, the middle two columns, and the last two columns differ in the manner in which they deal with countries that experienced multiple autocratic failures. Those in the first two columns report a conditional gap time model wherein the baseline hazard is separately estimated for regimes that experience a prior regime failure and for those that did not. Those in the next two columns estimate separate baseline hazards based on a categorical measure that reflects the number of prior collapses. Those in the final two columns simply control for prior collapses, rather than stratifying the baseline hazard. In all models, * denotes significance at the 10 percent level, ** denotes significance at the 5 percent level, and *** denotes significance at the 1 percent level. 95 percent confidence intervals are presented in brackets, while p-values are presented in parentheses. All standard errors have been clustered by autocratic regime.

Table 7: Cox Model, Wacziarg & Welch Measure of Economic Openness

	Cond. Past Collapse		Cond. Hist. Instability		Control Past Collapse	
Transparency	0.250	0.207	0.259	0.199	0.247	0.218
	[-0.066,0.567]	[-0.066,0.480]	[-0.061,0.578]	[-0.090,0.488]	[-0.085,0.578]	[-0.079,0.516]
	(0.120)	(0.138)	(0.113)	(0.176)	(0.145)	(0.150)
Growth	-0.035**	-0.032*	-0.048**	-0.044**	-0.035*	-0.032*
	[-0.070,-0.001]	[-0.065,0.001]	[-0.093,-0.003]	[-0.086,-0.002]	[-0.072,0.002]	[-0.067,0.003]
	(0.044)	(0.056)	(0.036)	(0.040)	(0.065)	(0.076)
Transparency	-0.008	-0.008	-0.005	-0.008	-0.006	-0.007
× Growth	[-0.045,0.029]	[-0.038,0.022]	[-0.051,0.041]	[-0.043,0.028]	[-0.046,0.034]	[-0.041,0.028]
	(0.667)	(0.596)	(0.843)	(0.664)	(0.759)	(0.709)
GDP *per capita*	0.013		-0.078		0.012	
	[-0.470,0.495]		[-0.557,0.401]		[-0.421,0.445]	
	(0.959)		(0.750)		(0.957)	
Wacziarg-Welch	0.262	0.428	-0.048	0.286	0.156	0.337
	[-0.688,1.212]	[-0.494,1.351]	[-1.098,1.002]	[-0.683,1.255]	[-0.805,1.117]	[-0.582,1.256]
	(0.589)	(0.363)	(0.928)	(0.563)	(0.750)	(0.473)
Party	-0.154		-0.288		-0.028	
	[-1.080,0.771]		[-1.321,0.744]		[-0.988,0.931]	
	(0.744)		(0.584)		(0.954)	
Military	0.602		0.491		0.589	
	[-0.192,1.395]		[-0.312,1.294]		[-0.201,1.379]	
	(0.137)		(0.231)		(0.144)	
Ever Collapse					0.574	0.714
					[-0.451,1.598]	[-0.221,1.649]
					(0.272)	(0.134)
# of Subjects	137	143	137	143	137	143
# of Failures	30	31	30	31	30	31

Cox competing hazards regressions of the hazard of autocratic removal via revolt or democratization. The models depicted in the first two columns, the middle two columns, and the last two columns differ in the manner in which they deal with countries that experienced multiple autocratic failures. Those in the first two columns report a conditional gap time model wherein the baseline hazard is separately estimated for regimes that experience a prior regime failure and for those that did not. Those in the next two columns estimate separate baseline hazards based on a categorical measure that reflects the number of prior collapses. Those in the final two columns simply control for prior collapses, rather than stratifying the baseline hazard. In all models, * denotes significance at the 10 percent level, ** denotes significance at the 5 percent level, and *** denotes significance at the 1 percent level. 95 percent confidence intervals are presented in brackets, while p-values are presented in parentheses. All standard errors have been clustered by autocratic regime.

Robustness of Unrest Results

Tables 10-13 present the results of a set of robustness checks to our results on the relationship between transparency and various forms of unrest in autocracies that are analogous to the robustness checks employed above. All coefficient estimates are obtained from fixed-effects negative binomial regressions of the number of incidents of unrest, as coded by Banks (1979), on transparency, growth and their interaction. Tables 10 and 11 include a control for the KOF measure of economic restrictions, and Tables 12 and 13 include the Wacziarg-Welch measure of economic openness. To reiterate: Our theory predicts a positive relationship between transparency and the frequency of anti-government demonstrations and strikes, but does not predict that any such relationship should for other forms of unrest.

Our baseline results are highly robust to the inclusion of these controls. Across all specifications, transparency is positively and significantly associated with the frequency of strikes and anti-government demonstrations. The substantive magnitude of the coefficients is similar to those of the baseline model. Moreover, transparency is not strongly associated with other forms of unrest. Coefficient estimates on the relationship between transparency and assassinations, guerrilla movements, and revolutions are never significant – and the association with coups is only significant in one specification (and is of inconsistent sign across specifications).

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Table 8: Fixed-Effects Negative Binomial Models of Unrest, Including Freedom House Control

	General Strikes	Riots	Demonstrations	Revolutions	Guerrilla	Coups	Assassinations
Lag Unrest	0.175	0.076***	0.083***	0.179***	0.557***	-0.070	0.099*
	[-0.052,0.403]	[0.027,0.124]	[0.046,0.121]	[0.099,0.259]	[0.346,0.769]	[-0.997,0.858]	[-0.002,0.199]
	(0.131)	(0.002)	(0.000)	(0.000)	(0.000)	(0.883)	(0.055)
Transparency	0.596**	0.077	0.212**	-0.006	0.005	-0.187	0.047
	[0.104,1.088]	[-0.123,0.278]	[0.046,0.379]	[-0.120,0.109]	[-0.123,0.134]	[-0.668,0.294]	[-0.169,0.262]
	(0.018)	(0.450)	(0.013)	(0.922)	(0.935)	(0.445)	(0.672)
Growth	-0.030*	0.004	-0.008	0.001	0.010	-0.040	-0.036***
	[-0.062,0.002]	[-0.021,0.028]	[-0.028,0.012]	[-0.013,0.015]	[-0.005,0.025]	[-0.089,0.008]	[-0.060,-0.012]
	(0.066)	(0.773)	(0.412)	(0.885)	(0.207)	(0.106)	(0.003)
Transparency	-0.018	-0.007	0.001	0.003	0.004	-0.017**	-0.008
× Growth	[-0.046,0.010]	[-0.022,0.008]	[-0.010,0.013]	[-0.003,0.009]	[-0.004,0.011]	[-0.035,-0.000]	[-0.020,0.004]
	(0.218)	(0.355)	(0.851)	(0.311)	(0.328)	(0.048)	(0.188)
GDP *per capita*	-0.059	0.523	0.467	1.634**	0.233	-11.099*	1.100
	[-1.957,1.839]	[-0.733,1.780]	[-0.399,1.333]	[0.225,3.044]	[-1.127,1.593]	[-22.757,0.560]	[-0.220,2.421]
	(0.952)	(0.414)	(0.291)	(0.023)	(0.737)	(0.062)	(0.102)
Ec. Openness	0.006	-0.011**	-0.004	-0.006**	-0.002	-0.003	-0.012
	[-0.015,0.027]	[-0.020,-0.002]	[-0.011,0.004]	[-0.011,-0.001]	[-0.008,0.003]	[-0.020,0.014]	[-0.027,0.002]
	(0.559)	(0.021)	(0.310)	(0.026)	(0.435)	(0.770)	(0.103)
Party	0.800*	-0.351	-0.248	-0.006	0.331	0.774*	0.423
	[-0.077,1.678]	[-0.864,0.162]	[-0.707,0.211]	[-0.362,0.350]	[-0.168,0.831]	[-0.128,1.677]	[-0.205,1.051]
	(0.074)	(0.179)	(0.289)	(0.974)	(0.194)	(0.093)	(0.186)
Military	0.493	-0.019	0.120	-0.281	-0.570*	0.242	-0.299
	[-0.492,1.478]	[-0.571,0.534]	[-0.387,0.627]	[-0.708,0.146]	[-1.186,0.046]	[-0.790,1.274]	[-1.087,0.488]
	(0.327)	(0.947)	(0.643)	(0.197)	(0.070)	(0.646)	(0.456)
Fuel Exports	-1.933	0.237	-0.190	0.135	-0.435	5.305	-0.177
	[-4.455,0.589]	[-0.924,1.397]	[-1.256,0.875]	[-188.909,189.178]	[-294.428,293.559]	[-89.719,100.329]	[-1.839,1.485]
	(0.133)	(0.689)	(0.726)	(0.999)	(0.998)	(0.913)	(0.835)
Not Free	-0.642*	-0.699***	-0.357*	-0.259	0.388	-0.595	-0.384
	[-1.296,0.013]	[-1.138,-0.259]	[-0.742,0.028]	[-0.618,0.101]	[-0.146,0.922]	[-1.527,0.336]	[-0.931,0.163]
	(0.055)	(0.002)	(0.069)	(0.158)	(0.154)	(0.210)	(0.169)
Constant	-3.415***	-1.609**	-2.998***	9.939	11.006	2.053	-2.797***
	[-5.701,-1.128]	[-2.907,-0.312]	[-4.240,-1.756]	[-106.368,126.247]	[-100.054,122.066]	[-2.802,6.909]	[-4.764,-0.830]
	(0.003)	(0.015)	(0.000)	(0.867)	(0.846)	(0.407)	(0.005)
Cubic Time							
Polynomial	✓	✓	✓	✓	✓	✓	✓
#Obs	511	808	846	791	566	423	522
#Countries	40	62	65	56	40	30	37

Fixed-effects negative binomial regressions of levels of unrest as a function of transparency and growth. Measures of unrest are drawn from (Banks, 1979). All models include a lagged dependent variable, the coefficient on which is reported in the first row of the table. * denotes significance at the 10 percent level, ** denotes significance at the 5 percent level, and *** denotes significance at the 1 percent level. 95 percent confidence intervals are presented in brackets, while p-values are presented in parentheses.

Table 9: Fixed-Effects Negative Binomial Models of Unrest, Including Freedom House Control

	General Strikes	Riots	Demonstrations	Revolutions	Guerrilla	Coups	Assassinations
Lag Unrest	0.258**	0.077***	0.077***	0.192***	0.543***	-0.029	0.161***
	[0.047,0.469]	[0.031,0.123]	[0.042,0.111]	[0.113,0.272]	[0.342,0.744]	[-0.912,0.854]	[0.063,0.260]
	(0.017)	(0.001)	(0.000)	(0.000)	(0.000)	(0.949)	(0.001)
Transparency	0.523**	0.055	0.269***	-0.038	-0.029	-0.191	0.032
	[0.103,0.943]	[-0.125,0.235]	[0.109,0.428]	[-0.149,0.074]	[-0.145,0.086]	[-0.639,0.257]	[-0.159,0.224]
	(0.015)	(0.551)	(0.001)	(0.508)	(0.619)	(0.403)	(0.739)
Growth	-0.027*	0.005	-0.005	0.005	0.006	-0.059**	-0.026**
	[-0.057,0.003]	[-0.019,0.028]	[-0.025,0.014]	[-0.008,0.018]	[-0.008,0.021]	[-0.106,-0.012]	[-0.049,-0.002]
	(0.082)	(0.692)	(0.595)	(0.426)	(0.383)	(0.014)	(0.033)
Transparency	-0.008	-0.007	0.004	0.004	0.002	-0.021**	-0.004
$\times$ Growth	[-0.034,0.018]	[-0.021,0.008]	[-0.008,0.017]	[-0.001,0.010]	[-0.005,0.008]	[-0.038,-0.005]	[-0.017,0.008]
	(0.530)	(0.383)	(0.493)	(0.136)	(0.570)	(0.011)	(0.507)
Not Free	-0.572*	-0.615***	-0.307	-0.261	0.205	-0.742*	-0.438
	[-1.218,0.074]	[-1.036,-0.193]	[-0.676,0.062]	[-0.645,0.123]	[-0.300,0.711]	[-1.575,0.092]	[-0.979,0.103]
	(0.082)	(0.004)	(0.103)	(0.183)	(0.426)	(0.081)	(0.113)
Constant	-0.849**	-0.917***	-1.083***	3.537	10.903	10.426	-0.535*
	[-1.614,-0.084]	[-1.319,-0.515]	[-1.449,-0.717]	[-2.069,9.142]	[-92.673,114.478]	[-683.356,704.208]	[-1.094,0.024]
	(0.030)	(0.000)	(0.000)	(0.216)	(0.837)	(0.977)	(0.061)
#Obs	511	808	846	791	566	423	522
#Countries	40	62	65	56	40	30	37

Fixed-effects negative binomial regressions of levels of unrest as a function of transparency and growth. Measures of unrest are drawn from (Banks, 1979). All models include a lagged dependent variable, the coefficient on which is reported in the first row of the table. * denotes significance at the 10 percent level, ** denotes significance at the 5 percent level, and *** denotes significance at the 1 percent level. 95 percent confidence intervals are presented in brackets, while p-values are presented in parentheses.

Table 10: Fixed-Effects Negative Binomial Models of Unrest, Including KOF Control

	General Strikes	Riots	Demonstrations	Revolutions	Guerrilla	Coups	Assassinations
Lag Unrest	0.200*	0.081***	0.096***	0.135***	0.616***	-0.057	0.030
	[-0.008,0.407]	[0.034,0.128]	[0.060,0.132]	[0.046,0.224]	[0.353,0.878]	[-0.987,0.872]	[-0.055,0.115]
	(0.059)	(0.001)	(0.000)	(0.003)	(0.000)	(0.904)	(0.491)
Transparency	0.620**	0.159	0.331***	0.087	0.161	1.615**	-0.069
	[0.105,1.136]	[-0.071,0.388]	[0.143,0.519]	[-0.088,0.262]	[-0.054,0.375]	[0.150,3.079]	[-0.325,0.186]
	(0.018)	(0.175)	(0.001)	(0.332)	(0.141)	(0.031)	(0.595)
Growth	-0.027*	0.005	-0.015	-0.000	-0.002	-0.037	-0.045***
	[-0.057,0.003]	[-0.020,0.029]	[-0.035,0.006]	[-0.018,0.017]	[-0.020,0.016]	[-0.113,0.038]	[-0.069,-0.021]
	(0.077)	(0.695)	(0.167)	(0.961)	(0.842)	(0.332)	(0.000)
Transparency	-0.020	-0.014	0.007	0.004	-0.006	-0.009	-0.008
× Growth	[-0.046,0.007]	[-0.034,0.006]	[-0.008,0.023]	[-0.010,0.018]	[-0.020,0.009]	[-0.112,0.094]	[-0.026,0.011]
	(0.149)	(0.165)	(0.358)	(0.573)	(0.434)	(0.864)	(0.423)
GDP *per capita*	-0.089	1.075*	0.269	2.107**	-0.318	-9.510	0.804
	[-1.812,1.633]	[-0.087,2.237]	[-0.597,1.136]	[0.484,3.730]	[-1.812,1.175]	[-23.412,4.391]	[-0.563,2.170]
	(0.919)	(0.070)	(0.542)	(0.011)	(0.676)	(0.180)	(0.249)
Party	0.771*	-0.093	-0.138	0.071	0.502	0.899**	0.685**
	[-0.031,1.573]	[-0.568,0.383]	[-0.556,0.280]	[-0.339,0.482]	[-0.104,1.109]	[0.002,1.795]	[0.081,1.288]
	(0.060)	(0.703)	(0.517)	(0.734)	(0.105)	(0.049)	(0.026)
Military	0.428	-0.216	-0.084	-0.322	-0.386	-0.154	-0.159
	[-0.478,1.334]	[-0.772,0.340]	[-0.568,0.401]	[-0.784,0.140]	[-1.129,0.358]	[-1.202,0.895]	[-0.855,0.538]
	(0.355)	(0.446)	(0.736)	(0.172)	(0.309)	(0.774)	(0.655)
Fuel Exporter	-0.580	0.411	-0.091	0.970	-0.021	4.229	-0.527
	[-3.503,2.343]	[-1.025,1.847]	[-1.095,0.913]	[-1219.402,1221.342]	[-267.959,267.917]	[-103.945,112.403]	[-1.930,0.877]
	(0.697)	(0.575)	(0.859)	(0.999)	(1.000)	(0.939)	(0.462)
KOF Restrictions	0.043	-0.001	0.003	0.054***	0.052**	-0.008	0.022
	[-0.012,0.097]	[-0.028,0.026]	[-0.019,0.025]	[0.019,0.090]	[0.006,0.099]	[-0.113,0.096]	[-0.014,0.058]
	(0.129)	(0.967)	(0.792)	(0.003)	(0.028)	(0.875)	(0.229)
Constant	-4.160***	-1.550**	-0.995	11.609	8.516	4.524	-0.710
	[-6.920,-1.399]	[-2.846,-0.255]	[-2.213,0.222]	[-344.938,368.157]	[-67.166,84.198]	[-7.276,16.325]	[-2.877,1.458]
	(0.003)	(0.019)	(0.109)	(0.949)	(0.825)	(0.452)	(0.521)
Cubic Time							
Polynomial	✓	✓	✓	✓	✓	✓	✓
#Obs	549	831	859	847	552	403	532
#Countries	39	57	61	56	36	27	35

Fixed-effects negative binomial regressions of levels of unrest as a function of transparency and growth. Measures of unrest are drawn from (Banks, 1979). All models include a lagged dependent variable, the coefficient on which is reported in the first row of the table. * denotes significance at the 10 percent level, ** denotes significance at the 5 percent level, and *** denotes significance at the 1 percent level. 95 percent confidence intervals are presented in brackets, while p-values are presented in parentheses.

Table 11: Fixed-Effects Negative Binomial Models of Unrest, Including KOF Control

	General Strikes	Riots	Demonstrations	Revolutions	Guerrilla	Coups	Assassinations
Lag Unrest	0.301***	0.076***	0.077***	0.169***	0.709***	-0.075	0.068*
	[0.105,0.497]	[0.032,0.120]	[0.046,0.108]	[0.081,0.257]	[0.464,0.953]	[-0.911,0.762]	[-0.008,0.144]
	(0.003)	(0.001)	(0.000)	(0.000)	(0.000)	(0.861)	(0.079)
Transparency	0.501**	0.167	0.339***	0.045	-0.004	1.071	-0.078
	[0.078,0.924]	[-0.041,0.376]	[0.172,0.506]	[-0.109,0.199]	[-0.181,0.174]	[-0.267,2.410]	[-0.304,0.147]
	(0.020)	(0.116)	(0.000)	(0.567)	(0.967)	(0.117)	(0.496)
Growth	-0.027*	0.001	-0.014	0.005	-0.004	-0.060	-0.039***
	[-0.055,0.002]	[-0.023,0.025]	[-0.035,0.006]	[-0.012,0.022]	[-0.022,0.014]	[-0.133,0.012]	[-0.063,-0.015]
	(0.070)	(0.937)	(0.176)	(0.543)	(0.652)	(0.103)	(0.002)
Transparency	-0.012	-0.013	0.009	0.005	-0.007	-0.003	-0.002
$\times$ Growth	[-0.038,0.013]	[-0.034,0.007]	[-0.007,0.025]	[-0.008,0.018]	[-0.021,0.007]	[-0.101,0.095]	[-0.021,0.017]
	(0.342)	(0.200)	(0.271)	(0.463)	(0.304)	(0.948)	(0.815)
KOF Restrictions	0.031*	0.014	0.015*	0.038**	0.010	0.009	0.053***
	[-0.004,0.065]	[-0.005,0.032]	[-0.002,0.032]	[0.009,0.067]	[-0.029,0.048]	[-0.071,0.090]	[0.023,0.082]
	(0.080)	(0.144)	(0.091)	(0.010)	(0.630)	(0.821)	(0.000)
Constant	-2.200***	-1.635***	-1.683***	24.908	12.308	2.997	-2.765***
	[-3.571,-0.829]	[-2.261,-1.009]	[-2.258,-1.108]	.	[-276.909,301.526]	[-26.238,32.233]	[-3.839,-1.691]
	(0.002)	(0.000)	(0.000)	.	(0.934)	(0.841)	(0.000)
#Obs	549	831	859	847	552	403	532
#Countries	39	57	61	56	36	27	35

Fixed-effects negative binomial regressions of levels of unrest as a function of transparency and growth. Measures of unrest are drawn from (Banks, 1979). All models include a lagged dependent variable, the coefficient on which is reported in the first row of the table. * denotes significance at the 10 percent level, ** denotes significance at the 5 percent level, and *** denotes significance at the 1 percent level. 95 percent confidence intervals are presented in brackets, while p-values are presented in parentheses.

Table 12: Fixed-Effects Negtative Binomial Models of Unrest, Including Wacziarg & Welch Control

	General Strikes	Riots	Demonstrations	Revolutions	Guerrilla	Coups	Assassinations
Lag Unrest	0.179	0.070***	0.091***	0.165***	0.567***	-0.153	0.018
	[-0.041,0.399]	[0.024,0.115]	[0.056,0.127]	[0.086,0.243]	[0.370,0.765]	[-1.029,0.723]	[-0.063,0.100]
	(0.110)	(0.003)	(0.000)	(0.000)	(0.000)	(0.732)	(0.662)
Transparency	0.834***	0.267***	0.362***	0.032	0.030	-0.210	0.110
	[0.273,1.394]	[0.065,0.469]	[0.191,0.532]	[-0.078,0.142]	[-0.093,0.152]	[-0.686,0.267]	[-0.122,0.343]
	(0.004)	(0.009)	(0.000)	(0.570)	(0.635)	(0.388)	(0.351)
Growth	-0.028*	0.005	-0.011	0.003	0.007	-0.049**	-0.041***
	[-0.059,0.002]	[-0.017,0.027]	[-0.029,0.006]	[-0.010,0.016]	[-0.008,0.022]	[-0.097,-0.001]	[-0.063,-0.018]
	(0.066)	(0.642)	(0.209)	(0.668)	(0.354)	(0.043)	(0.000)
Transparency	-0.015	-0.006	0.002	0.002	0.003	-0.020**	-0.011*
× Growth	[-0.042,0.012]	[-0.018,0.005]	[-0.009,0.013]	[-0.003,0.008]	[-0.004,0.009]	[-0.038,-0.003]	[-0.023,0.000]
	(0.277)	(0.289)	(0.727)	(0.435)	(0.474)	(0.024)	(0.056)
GDP *per capita*	0.691	0.886**	0.438	0.799	0.101	-5.803	0.866*
	[-0.794,2.175]	[0.040,1.732]	[-0.360,1.237]	[-0.214,1.813]	[-1.128,1.331]	[-17.198,5.591]	[-0.116,1.847]
	(0.362)	(0.040)	(0.282)	(0.122)	(0.872)	(0.318)	(0.084)
Party	0.748*	0.071	-0.080	-0.053	0.162	1.146***	0.766***
	[-0.018,1.515]	[-0.376,0.519]	[-0.481,0.321]	[-0.377,0.271]	[-0.275,0.600]	[0.379,1.913]	[0.214,1.318]
	(0.056)	(0.755)	(0.697)	(0.749)	(0.467)	(0.003)	(0.007)
Military	0.391	-0.053	-0.049	-0.366*	-0.549*	-0.266	0.068
	[-0.475,1.257]	[-0.568,0.462]	[-0.514,0.417]	[-0.762,0.030]	[-1.111,0.014]	[-1.175,0.642]	[-0.623,0.758]
	(0.377)	(0.840)	(0.838)	(0.070)	(0.056)	(0.566)	(0.848)
Fuel Exporter	-1.471	0.104	-0.490	1.745	0.402	1.324	-1.253*
	[-4.029,1.088]	[-1.240,1.447]	[-1.409,0.429]	[-220.147,223.638]	[-255.384,256.188]	[-978.195,980.842]	[-2.586,0.081]
	(0.260)	(0.880)	(0.296)	(0.988)	(0.998)	(0.998)	(0.066)
Wacziarg-Welch	-0.817	-1.052***	-0.440*	-0.582**	-0.462	0.291	-0.554
	[-1.917,0.283]	[-1.636,-0.468]	[-0.949,0.069]	[-1.100,-0.064]	[-1.145,0.222]	[-0.943,1.525]	[-1.303,0.195]
	(0.146)	(0.000)	(0.090)	(0.028)	(0.186)	(0.644)	(0.147)
Constant	-2.594**	-0.948*	-0.742	9.523	10.615	9.034	-0.107
	[-4.865,-0.323]	[-2.011,0.115]	[-1.748,0.265]	[-64.744,83.790]	[-58.381,79.610]	[-132.847,150.916]	[-1.803,1.589]
	(0.025)	(0.081)	(0.149)	(0.802)	(0.763)	(0.901)	(0.902)
Cubic Time							
Polynomial	✓	✓	✓	✓	✓	✓	✓
#Obs	590	986	1014	1002	671	514	635
#Countries	42	66	70	65	43	33	41

Fixed-effects negative binomial regressions of levels of unrest as a function of transparency and growth. Measures of unrest are drawn from (Banks, 1979). All models include a lagged dependent variable, the coefficient on which is reported in the first row of the table. * denotes significance at the 10 percent level, ** denotes significance at the 5 percent level, and *** denotes significance at the 1 percent level. 95 percent confidence intervals are presented in brackets, while p-values are presented in parentheses.

Table 13: Fixed-Effects Negative Binomial Models of Unrest, Including Wacziarg & Welch Control

	General Strikes	Riots	Demonstrations	Revolutions	Guerrilla	Coups	Assassinations
Lag Unrest	0.279***	0.076***	0.083***	0.217***	0.548***	-0.186	0.069*
	[0.075,0.483]	[0.031,0.120]	[0.051,0.116]	[0.140,0.295]	[0.358,0.738]	[-1.001,0.629]	-0.006,0.143]
	(0.007)	(0.001)	(0.000)	(0.000)	(0.000)	(0.654)	(0.071)
Transparency	0.793***	0.267***	0.373***	-0.025	0.000	-0.193	0.024
	[0.253,1.333]	[0.073,0.461]	[0.212,0.533]	[-0.131,0.081]	[-0.109,0.110]	[-0.627,0.241]	[-0.179,0.226]
	(0.004)	(0.007)	(0.000)	(0.645)	(0.995)	(0.384)	(0.820)
Growth	-0.027*	0.003	-0.010	0.005	0.005	-0.065***	-0.038***
	[-0.057,0.002]	[-0.018,0.024]	[-0.028,0.008]	[-0.008,0.018]	[-0.009,0.019]	[-0.112,-0.018]	[-0.062,-0.014]
	(0.070)	(0.754)	(0.282)	(0.411)	(0.482)	(0.007)	(0.002)
Transparency	-0.010	-0.006	0.005	0.004	0.002	-0.023***	-0.010
$\times$ Growth	[-0.036,0.016]	[-0.019,0.006]	[-0.007,0.017]	[-0.002,0.010]	[-0.005,0.008]	[-0.039,-0.006]	[-0.023,0.004]
	(0.430)	(0.342)	(0.451)	(0.171)	(0.570)	(0.006)	(0.155)
Wacziarg-WelchW	-0.603	-0.687**	-0.109	-0.398	-0.623*	0.263	0.510
	[-1.656,0.449]	[-1.227,-0.146]	[-0.588,0.369]	[-0.889,0.094]	[-1.266,0.021]	[-0.898,1.424]	[-0.140,1.159]
	(0.261)	(0.013)	(0.655)	(0.113)	(0.058)	(0.657)	(0.124)
Constant	-0.921**	-1.075***	-1.239***	2.547**	12.650	11.097	-1.071***
	[-1.685,-0.157]	[-1.431,-0.718]	[-1.544,-0.933]	[0.583,4.511]	[-187.894,213.194]	[-752.221,774.416]	[-1.531,-0.611]
	(0.018)	(0.000)	(0.000)	(0.011)	(0.902)	(0.977)	(0.000)
#Obs	590	986	1014	1002	671	514	635
#Countries	42	66	70	65	43	33	41

Fixed-effects negative binomial regressions of levels of unrest as a function of transparency and growth. Measures of unrest are drawn from (Banks, 1979). All models include a lagged dependent variable, the coefficient on which is reported in the first row of the table. * denotes significance at the 10 percent level, ** denotes significance at the 5 percent level, and *** denotes significance at the 1 percent level. 95 percent confidence intervals are presented in brackets, while p-values are presented in parentheses.

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