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## **Political salience and regime resilience**

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## Abstract

### ***Political salience and regime resilience\****

We study a version of a canonical model of attacks against political regimes where agents have an expressive utility for taking political stances that is scaled by the *salience* of political decision-making. Increases in political salience can have divergent effects on regime stability depending on costs of being on the losing side. When regimes have weak sanctioning mechanisms, middling levels of salience can pose the greatest threat, as regime supporters are insufficiently motivated to act on their preferences and regime opponents are sufficiently motivated to stop conforming. Our results speak to the phenomenon of charged debates about democracy by identifying conditions under which heightened interest in political decision-making can pose a threat to democracy in and of itself.

*Keywords:* Democracy, salience, insurgency.

*JEL classification:* C72, D74

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# 1 Introduction

Alongside rising concerns regarding the resilience of American democracy, there has been a new focus on better understanding why and how democracies become vulnerable. We contribute to this work by returning to a canonical model of collective action and introducing a focus on *political salience* to assess how salience, in and of itself, can contribute to the vulnerability of political regimes.

In some accounts, disinterest in politics threatens democracy, the “slow slump in interest in politics and current events,” according to [Putnam \[2000\]](#), can be one source of vulnerability. Other work highlights the rising stakes of political decision-making. [Levitsky and Ziblatt \[2018\]](#), for instance, describe the erosion of democratic norms as politics become polarized and conflicts more total. There are thus straightforward, if conflicting, logics through which changes in the salience of politics can threaten political regimes.<sup>1</sup>

In this short paper, we point to a critical interplay between political salience on the one hand and regime safeguards on the other.

Following [Kuran \[1989\]](#), [Medina \[2007\]](#) and others, we examine a model in which citizens individually decide whether to take a stance against (“attack”) or in support of (“defend”) a regime. Departing from existing models, citizens’ preferences depend on political salience which scales their heterogeneous expressive values from action and thus determines their intensity. Our interpretation of political salience is that it captures the general public’s “bottom-up” attention to political values, in line with [Bordalo et al. \[2022\]](#). As such, it is likely affected by the behavior of political elites and the media, though in likely rather complex ways; for related evidence that mass polarization follows rather than drives the polarization of political elites see [Cinar and Nalepa \[2022\]](#). We analyze the effects of exogenous changes in political salience while remaining agnostic about their source. Our second key variable captures the regime’s safeguards, i.e., the sanctions imposed on (failed) insurgents, as a moderator of the effect of changes in political salience.

We solve the ensuing simultaneous-move game for Nash equilibria which we require to be stable. In cases with low political salience, “bandwagoning” concerns dominate as strategic citizens conform to avoid sanctioning. In cases with high political salience, citizens act purely expressively. The most interesting cases lie in-between, where there can be a rich array of equilibria and variation across citizens in whether bandwagoning or expressive incentives dominate.

We then focus on how the regime-optimal equilibrium changes when politics becomes more salient, and in particular on how changing salience alters both the

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<sup>1</sup>We leave aside the empirical question of whether political salience is rising or falling. In some accounts it is falling, as in [Putnam \[2000\]](#). In many journalistic accounts it is rising: [Prior and Bouger \[2018\]](#) cites many examples, while also showing that political interest has historically been quite constant on average. Of course, this can mask variation in politically active subgroups.

equilibrium size of protest groups and the size of collective deviations required to transition to a more threatening equilibrium.

The key findings relate to how changes in political salience and, hence, expressive concerns, affect regime resilience. The direction of the effect of salience on resilience depends on whether sanctions for siding with unsuccessful anti-regime movements are low or high relative to sanctions for siding with failing regimes. If low, then increases in salience from lower levels render the regime-optimal equilibrium (“none attack”) less resilient by producing more accessible threat points. This is due to the fact that the equilibrium relies on bandwagoning by its opponents, which gets weakened with greater salience. At middling levels of salience, this can give rise to a unique equilibrium involving full opposition to the regime (“all attack”), whereas at high levels expressive concerns dominate, resulting in outright social conflict with an uncertain outcome. Conversely, when sanctions for siding with unsuccessful anti-regime movements are relatively large, then increases in salience from low to middling ranges gradually remove and then eliminate threat points, rendering regime support robust. Further increases in salience result in anti-regime actions among regime opponents but without gains from bandwagoning by others.

There is thus a very simple message that arises from our analysis. Regime threats depend on the interplay between political salience and safeguards. Threats are greatest when safeguards are weak and salience increases from low to middling ranges. In these settings, small shocks suffice to activate otherwise latent opposition, which then gains further strength from bandwagoning by others. If safeguards are strong however the same changes in salience can have opposite effects, further protecting regimes.

The long-run fate of democracies may, hence, be shaped by how governments react in the aftermath of events such as the attack on Capitol Hill. Our analysis suggests that leniency might generate heightened future threats.

## 2 Model and results

We examine a model in the spirit of the classic accounts of [Granovetter \[1978\]](#) and [Kuran \[1989\]](#) in which a collection of players trade the direct rewards and punishments of taking a stance against the intrinsic gains of acting in line with personal policy preferences over democratic and autocratic outcomes.

[Medina \[2007\]](#) gives perhaps the most comprehensive formal account of games of this form. We build on his work by providing analytic results on equilibria as a function of political salience for a heterogeneous population.

The model has connections with the recent literature on global games ([Carlsson and van Damme \[1993\]](#), [Shadmehr and Bernhardt \[2011\]](#)), though these focus more specifically on information asymmetries, which we bracket here.

Our model also keeps a focus on citizen action rather than elite behavior. Elite

behavior has been a central motivation to the study of democratic backsliding. Much recent work focuses, for instance, on information or preference manipulation by regimes (Edmond [2013], and Grillo and Prato [2023], resp.), or on effects of signals about the regime’s vulnerability (Angeletos et al. [2006]). We do not doubt the importance of elite politics but focus on popular position-taking as a background condition for the success of elite strategies. Our results thus connect to contributions by Svolik [2019] and Miller [2021] on citizen attitudes and backsliding, and Carey et al. [2022] and Gidengil et al. [2022] on citizen support for backsliding elites.

There is a unit mass of citizens (“players”), each deciding whether to take an action to defend or attack a regime. Let  $p(m)$  denote the probability that the incumbent regime is overthrown by the attack when  $m \in [0, 1]$  actors take actions against it, and assume  $p(0) = 0$ ,  $p'(m) > 0$  and  $p(1) = 1$ . Let  $\epsilon_i \sim F$  on  $[-1, \alpha]$  denote a player-specific payoff for attacking (relative to defending) the regime, with  $0 < \alpha < \infty$ ; we assume that  $F$  is strictly increasing and differentiable. Let  $\rho_A > 0$  (resp.,  $\rho_D > 0$ ) denote punishments imposed by winning attackers (resp., winning defenders) on citizens who have taken actions against them. Let “salience”  $\sigma \in [0, 1]$  denote the relative importance of action payoffs to punishment concerns. The expected utility gain from attacking the regime rather than defending it, given  $m$ , is then:

$$\sigma\epsilon_i + (1 - \sigma)(p(m)\rho_A - (1 - p(m))\rho_D),$$

and  $i$  will attack (resp., defend) the regime if this expected utility is positive (resp., negative).

A profile of actions is a Nash equilibrium if, given the actions of other players, no player has an incentive to change their own action. Let  $\mu(m)$  denote the “attack response function:” the share of players that weakly prefer to attack given that a share  $m$  of players choose to attack. A Nash equilibrium is then a fixed point of  $\mu$ .<sup>2</sup> We call an equilibrium  $m^*$  “stable” if there exists some  $\delta > 0$  such that  $|\mu(m) - m^*| < |m - m^*|$  for all  $m$  with  $0 < |m - m^*| < \delta$ . Otherwise we call it unstable.

## 2.1 Application: Attacks on democracy

Many concrete applications may fit this rather general reduced form. Our main application and motivation assumes that the incumbent regime is democratic and describes citizens as attacking or defending democracy vis-à-vis an autocratic agitator.

In the Supplementary Material we provide a concrete microfoundation from a standard median voter setting for this application. It yields an interpretation of  $\epsilon_i$

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<sup>2</sup>We note a small abuse of terminology. A Nash equilibrium is a profile of strategies, not the number of people employing a particular strategy. Here, however, incentives have a threshold structure, so any equilibrium strategy profile, mapping values  $\epsilon_i$  into the binary action, is fully characterized by the share of players attacking.

as citizens' expressive payoffs reflecting their single-peaked preferences over policy outcomes – as they apply to the autocratic policy versus the democratic policy (the median ideal point).<sup>3</sup> For the case of quadratic policy disutility, we explicitly derive  $\epsilon_i$  as  $i$ 's (normalized) net policy gain under a successful autocratic attack. This is, of course, negative for a majority of citizens  $F(0) > 0.5$ .

Substantively, we think of  $\sigma$  as reflecting the psychological importance placed on political action (relative to material costs associated with sanctioning). Our “salience” terminology derives from the psychology of bottom-up attention that is discussed and modeled in the survey of [Bordalo et al. \[2022\]](#). Thus, we consider  $\sigma$  as being determined by the public attention that the political conflict receives. In view of our microfoundation,  $\sigma$  translates into affective polarization [[Iyengar et al., 2019](#)], without political polarization. It measures how intensely the expressive value of action reflects the differences in outcomes that would arise when different groups control government; it thus it the stakes of political control (see also [Chiopris et al. \[2021\]](#) on platform divergence and attitudes to backsliding). It is also similar to a weight placed on civil duty as in [Riker and Ordeshook \[1968\]](#), though with an important difference: Our model features heterogeneity regarding whether such duty inspires attack or defense of the incumbent regime.<sup>4</sup>

Throughout what follows, our exposition emphasizes this microfounded main application of attacks on democracy. The scope of our general results on how political salience and polarization affects regime resilience extends beyond this case, however. For all illustrations with parametrized versions of the model, we generally assume  $F(0) > 0.5$ , indicating that a majority intrinsically favors regime-defending behavior, as is true for our main application.

## 2.2 Equilibrium, stability and salience

Our interest is in how equilibria, stable or unstable, depend on  $\sigma$ . We begin by characterizing the boundary cases.

**Lemma 1.** *Boundary cases:*

- (i) *If  $\sigma = 0$ , there exist three equilibria: share  $m^* = 0$  (“none attack”),  $m^* = 1$  (“all attack”), and  $m^* = m_{\sigma=0} := p^{-1}\left(\frac{\rho_D}{\rho_A + \rho_D}\right) \in (0, 1)$  attack. The two extreme equilibria are stable, the interior equilibrium is unstable.*
- (ii) *If  $\sigma = 1$ , there exists a unique equilibrium: share  $m^* = m_{\sigma=1} := 1 - F(0)$  attack. This equilibrium is stable.*

We will refer to the interior equilibria  $m_{\sigma=0}$  and  $m_{\sigma=1}$  from (i) and (ii) as the “pure coordination” and “pure expression” equilibria. Note that in both cases

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<sup>3</sup>Note that  $\epsilon_i$  is an expressive, psychological payoff, because the policy outcome is fully determined by the aggregate, in which any individual  $i$ 's action is negligible.

<sup>4</sup>Though we do not explore this here, there are plausibly connections to the  $\lambda$  parameter in [Medina \[2007\]](#) at least to the extent that these capture weights placed on strategic considerations only or own actions only, with others' actions treated as fixed.

the most democracy favoring equilibrium is stable: it is the stable “none attack” equilibrium under pure coordination; and (trivially) under pure expression it is the unique equilibrium, which is stable, of course.

Consider now cases with  $\sigma \in (0, 1)$  in which players place weight on both the actions of others, through potential sanctions, and their own policy preferences. A citizen  $i$  is indifferent to taking part in attack against democracy if:

$$\epsilon_i = (-p(m)\rho_A + (1 - p(m))\rho_D)(1 - \sigma)/\sigma.$$

To avoid clutter we will define  $\tilde{\sigma} := \sigma/(1 - \sigma) > 0$ .

The attack response function is then:

$$\mu(m) = 1 - F\left(\frac{1}{\tilde{\sigma}}(-p(m)\rho_A + (1 - p(m))\rho_D)\right).$$

Note that  $\mu$  is differentiable, with  $\mu'$  positive at any interior equilibrium  $m^* \in (0, 1)$ . Stability of equilibrium is then equivalent to  $\mu'(m^*) < 1$ .

For the analysis that follows we will rule out pathological (tangency) cases in which the slope of  $\mu$  is exactly 1 at an equilibrium point, as well as the case that the pure coordination and the pure expression equilibria exactly coincide.

**Assumption 1** (Genericity).  $\mu(m) = m$  implies  $\mu'(m) \neq 1$ , and  $m_{\sigma=0} \neq m_{\sigma=1}$ .

In addition, for equilibrium  $m^*$  given  $\tilde{\sigma}$ , we will abuse notation and write  $m^*(\tilde{\sigma})$  to describe how equilibria vary in the neighborhood of  $m^*$  as a function of  $\tilde{\sigma}$ .

Our main results regarding stability and comparative statics in salience of various equilibria are in the next proposition.

**Proposition 1.** *Given Assumption 1 and  $\sigma \in (0, 1)$ :*

(i) *A stable equilibrium exists. In particular:*

1. “None attack” is an equilibrium if and only if  $\tilde{\sigma} \leq \rho_D/\alpha$ . It is stable if  $\tilde{\sigma} < \rho_D/\alpha$ , and in this case also satisfies  $\frac{\partial m^*}{\partial \tilde{\sigma}} = 0$ .

2. “All attack” is an equilibrium if and only if  $\tilde{\sigma} \leq \rho_A$ . It is stable if  $\tilde{\sigma} < \rho_A$ , and in this case also satisfies  $\frac{\partial m^*}{\partial \tilde{\sigma}} = 0$ .

(ii) *There is no equilibrium  $m^*$  with  $\min\{m_{\sigma=0}, m_{\sigma=1}\} \leq m^* \leq \max\{m_{\sigma=0}, m_{\sigma=1}\}$ .*

(iii) *An interior equilibrium  $m^* < m_{\sigma=1}$  is stable if and only if  $\frac{\partial m^*}{\partial \tilde{\sigma}}$  is positive; an interior equilibrium  $m^* > m_{\sigma=1}$  is stable if and only if  $\frac{\partial m^*}{\partial \tilde{\sigma}}$  is negative.*

Jointly with Lemma 1, Proposition 1 establishes existence of a stable equilibrium and in particular a democracy-optimal stable equilibrium. For low salience, in the sense of  $\tilde{\sigma} < \rho_D/\alpha$  this equilibrium has “none attack.”

Most importantly, Proposition 1 essentially characterizes equilibrium comparative statics via stability.<sup>5</sup> Stable “all attack” and “none attack” equilibria do not respond to marginal changes in salience, of course. However, a lesson of (i) is that increases in  $\sigma$  from intermediate levels can remove both of these (with the former disappearing first if  $\rho_A \leq \rho_D/\alpha$ ).

For interior equilibria, stability and comparative statics in salience are tightly linked, however, and this link is bandwagoning. Specifically, a stable interior equilibrium  $m^* < m_{\sigma=1}$  features bandwagoning by opponents to democracy, and an increase in salience activates this latent opposition. Analogously for the case of a stable interior equilibrium  $m^* > m_{\sigma=1}$  that features bandwagoning by supporters of democracy. By contrast, unstable interior equilibria have the counter-intuitive property that increases in salience increase (rather than decrease) bandwagoning: To restore such equilibrium despite its instability, the increased interest in expressing political values must be countered by greater punishment risk.

A lesson of (ii) and (iii) then concerns the equilibrium effect of an increase in salience from low levels on the unique interior and unstable equilibrium that corresponds to “almost” pure coordination, which then coexists with the stable “all attack” and “none attack” equilibria: Whether an increase in salience increases or decreases the attack size follows immediately from whether  $m_{\sigma=0} > m_{\sigma=1}$  or  $m_{\sigma=0} < m_{\sigma=1}$ . Given there is no equilibrium in the range between the boundary cases of pure coordination and pure expression, there is only one direction for the unstable pure coordination equilibrium to move when salience increases, in line with the counter-intuitive effects on bandwagoning in unstable equilibria. If  $m_{\sigma=0} > m_{\sigma=1}$ , then such an interior equilibrium has  $m^* > m_{\sigma=0}$ , and its attack grows when salience increases, due to a further increase in bandwagoning by supporters of democracy. For the same reason, an interior equilibrium  $m^* < m_{\sigma=0} < m_{\sigma=1}$  that features bandwagoning by opponents to democracy sees its attack shrink when salience increases.

### 2.3 Dynamic considerations and regime resilience

Although our model is static, much of the literature (e.g., Kuran [1997]) has been concerned with shifts between equilibria, which implies a dynamic conceptualization of the problem.

Our model speaks to these concerns to the extent that we think of agents adjusting attack behavior in a given period in response to aggregate attacks in the previous period. In this setting, at an equilibrium point, agents do not have incentives to adjust their behavior. Following a single-period *shock* to behavior, say from equilibrium  $m^*$  to attack  $m = m^* + \delta$ , the effects on next period’s

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<sup>5</sup>We have omitted an explicit characterization for the knife-edge cases of “all attack” and “none attack” equilibria when  $\bar{\sigma} = \rho_A$  and  $\bar{\sigma} = \rho_D/\alpha$ , respectively, in the proposition. However, these may be stable or unstable, and the characterization then is as in part (iii) for interior equilibria.

behavior, and movement toward or away from an equilibrium, can be read from the sign of  $\mu(m) - m$ .

Stability of an equilibrium is a local notion concerned with small shocks. It means that behavioral adjustments following a small shock lead society back to that equilibrium. Here, we will additionally consider a complementary notion of democracies' resilience of stable (democracy-optimal) equilibria, capturing the latent danger of shifting to a higher attack equilibrium in the event of a larger shock. An increase in salience may pose a threat to democracy—in particular, a stable “none attack” equilibrium—not only by directly changing equilibrium itself but also by making it less resilient.

For any stable equilibrium  $m'$  that does not have “all attack” (i.e.,  $m' < 1$ ), consider the interior equilibrium  $m''$  with the smallest attack size greater than  $m'$ . If such  $m''$  exists, it is necessarily unstable: If  $m' = 0$  (“none attack”), then stability implies  $\mu'(0) < 1$ , whereby an interior  $m''$  would have to be one where  $\mu$  crosses the 45-degree line from below (by genericity). Moreover, if such  $m''$  exists, then there also exists a stable equilibrium  $m''' > m''$  adjacent to it (i.e., there are no equilibria  $m \in (m'', m''')$ ), by a similar argument. We then refer to the unstable interior equilibrium  $m''$  as the *threat point* of stable equilibrium  $m'$ , and we take the distance  $m'' - m' > 0$  to measure the *resilience* of  $m'$ : Any shock such that  $m < m''$  attack would not seriously upset the stable equilibrium  $m'$  in the longer run, whereas any shock such that  $m > m''$  would lead society away from stable  $m'$  with a much increased attack size of (at least) *stable*  $m'''$  in the longer run.

Applying this notion to a stable “none attack” equilibrium, Proposition 1’s (ii) and (iii) imply the following result, concerning the effect of salience on democracy’s resilience:

**Corollary 1.** *Given any  $\tilde{\sigma} \geq 0$  and existence of an interior equilibrium, a marginal increase in salience renders a stable “none attack” equilibrium with threat point  $m^*$  less (resp., more) resilient if  $m^*$  is smaller (resp., greater) than  $m_{\sigma=1}$ .*

A special case of this result applies when  $\tilde{\sigma} = \sigma = 0$ , for which Lemma 1’s (i) characterizes equilibrium. The stable “none attack” equilibrium has threat point  $m^* = m_{\sigma=0}$ . In view of Proposition 1, a marginal increase in  $\tilde{\sigma}$  does not change the “none attack” equilibrium directly, since  $\rho_D/\alpha > 0 = \tilde{\sigma}$ , yet moves the threat point closer if  $m_{\sigma=0} < m_{\sigma=1}$  and further away if  $m_{\sigma=0} > m_{\sigma=1}$  (given (ii) and continuity, there is only one direction to move).

More generally, observe that when  $\rho_D$  is relatively low so that  $m_{\sigma=0} < m_{\sigma=1}$ , there exists an unstable equilibrium  $m^* \leq m_{\sigma=0}$ , as a threat point of a stable “none attack” equilibrium. Corollary 1 then tells us that an increase in salience always reduces its resilience. Furthermore, while if there are more equilibria with attack size less than  $m_{\sigma=0}$ , then the increase in salience also increases the attack size in the stable equilibrium that obtains after “none attack” gets upset by a sufficiently large shock, otherwise this long-run resting point has an attack size

even greater than  $m_{\sigma=1}$ , because of Proposition 1's (ii). By contrast, when  $\rho_D$  is relatively high, so that  $m_{\sigma=0} > m_{\sigma=1}$  and there exists no unstable equilibrium  $m^* \leq m_{\sigma=0}$ , then an increase in salience always increases the resilience of a stable “none attack” equilibrium, by raising the threat point (even further).

Our simple model thus points out an essential risk to democracy from increased political salience when its sanctions against insurgents are weak. While no attack whatsoever becomes apparent, yet ever smaller shocks would destroy it and may even move society to an “all attack” equilibrium, with sure autocracy (this when there is but one interior and hence unstable equilibrium).

## 2.4 Illustration

We illustrate using a case for which full analytic solutions are available. In the Supplementary Material we provide additional illustrations for more complex examples.

We imagine  $p(m) = m$  and  $\epsilon_i \sim U[-1, 0.5]$ , so that  $F(x) = \frac{2}{3}(x + 1)$  for  $x \in [-1, 0.5]$ . We have  $m_{\sigma=0} = \frac{\rho_D}{\rho_A + \rho_D}$  and  $m_{\sigma=1} = \frac{1}{3}$ . Thus,  $m_{\sigma=0}$  is larger (resp., smaller) than  $m_{\sigma=1}$  if and only if  $\rho_A < 2\rho_D$  (resp.,  $\rho_A > 2\rho_D$ ). For  $\sigma \in (0, 1)$ , the attack response function is linear in  $m$ :

$$\mu(m) = \frac{1}{3} - \frac{2}{3} \frac{1}{\tilde{\sigma}} (\rho_D - (\rho_A + \rho_D)m),$$

so there is at most one interior equilibrium, which then corresponds to fixed point:

$$m^* = \frac{\tilde{\sigma} - 2\rho_D}{3\tilde{\sigma} - 2(\rho_A + \rho_D)}.$$

Note that, written as a function,  $m^*(\tilde{\sigma})$  approaches  $m_{\sigma=0}$  as  $\sigma$  approaches 0 (and so  $\tilde{\sigma}$  approaches 0) and  $m^*(\tilde{\sigma})$  approaches  $m_{\sigma=1}$  as  $\sigma$  approaches 1 (and so  $\tilde{\sigma}$  approaches infinity). Moreover,  $m^*(\tilde{\sigma})$  is increasing in  $\sigma$  if and only if  $\rho_A < 2\rho_D$ , or, equivalently,  $m_{\sigma=0} > m_{\sigma=1}$ ; analogously, decreasingness in  $\sigma$  is equivalent to  $m_{\sigma=0} < m_{\sigma=1}$ . From Proposition 1's (iii), interior equilibrium  $m^*$  is therefore stable if and only if either democracy's sanctioning is relatively high ( $\rho_A < 2\rho_D$ ) and there is *pro*-democracy bandwagoning ( $m^* < \frac{1}{3}$ ) or autocracy's sanctioning is relatively high ( $\rho_A > 2\rho_D$ ) and there is *anti*-democracy bandwagoning ( $m^* > \frac{1}{3}$ ).

Equilibria are illustrated in Figure 1. The figure confirms:

1. Low salience always yields three equilibria, the two stable “none attack” and “all attack” equilibria as well as the unstable (more or less pure) coordination equilibrium; high salience eliminates these extreme equilibria and results ultimately—when  $\sigma = 1$ —in a unique (stable) pure expression equilibrium with outright conflict and an uncertain outcome

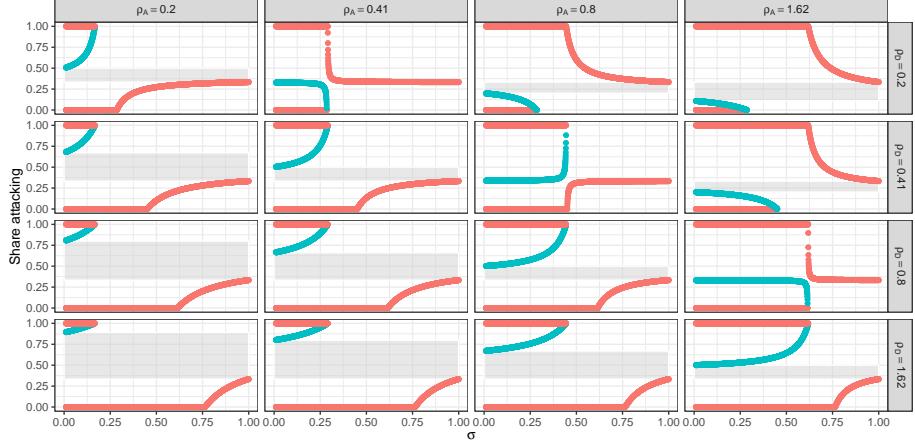


Figure 1: Equilibria in a linear-uniform model (pink = stable). No equilibria in grey areas. In upper right (lower left) panels, the pure coordination equilibrium is lower (higher) than the expressive equilibrium and the interior equilibrium is decreasing (increasing) in  $\sigma$ .

2. Greater salience can increase or reduce risks of attack. In particular:

- when  $m_{\sigma=0} < m_{\sigma=1}$ , an increase in salience from a low to a middling range renders “none attack” less and less resilient by pulling threat points near and may—even in the absence of any shock—not only eliminate this equilibrium but yield a unique equilibrium where instead “all attack”
- when  $m_{\sigma=0} > m_{\sigma=1}$ , an increase in salience from low to middling ranges renders “none attack” more and more resilient by pushing threat points away and may—even in the absence of any shock—turn it into the unique

While Figure 1 highlights effects of changing salience given sanctioning, Figure 2 illustrates the possibly dramatic effects of changing sanctions given salience, showing how equilibrium depends on  $\rho_D$  when  $\rho_A = 1.2$  and  $\sigma = 0.55$ . (For these values there is always a unique equilibrium.) Critically, with this intermediate value of salience a small change in democratic sanctions can have dramatic strategic effects on bandwagoning and the level of system support.

### 3 Conclusion

We study a model of attacks against regimes in a setting in which individuals differ in their desires to attack or defend institutions. Our key innovation is

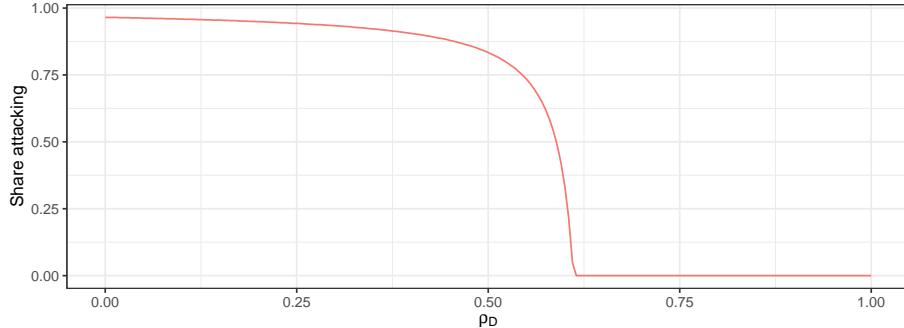


Figure 2: Illustration of (unique) equilibria as a function of  $\rho_D$  when  $\rho_A = 1.2$  and  $\sigma = 0.55$ .

the consideration of a heterogeneous expressive utility component that scales with political salience. Our central results examine how changes in salience affect regime resilience. They hold for all regime-optimal stable equilibria, and, remarkably, for arbitrary distributions of policy preferences.

Applied to the problem of democracy, our results suggest that when democratic sanctions are relatively weak, increases to middling levels of political salience can render democracies especially vulnerable. The intuition is that maintaining the democratic equilibrium relies on continued bandwagoning by latent opponents. Since bandwagoning incentives are stronger for the anti-regime than the pro-regime equilibrium, when increased salience renders bandwagoning incentives less important, democracies may more easily tip.

In situations in which democratic sanctions are strong, increases in salience at high levels also make it more difficult to keep opposition at bay. The intuition is that in a democracy-optimal equilibrium the indifferent agent is indifferent only because of the threatened sanction. On the basis of pure policy preferences she would support the insurrection. An increase in political salience thus shifts the agent to act against the regime.

By the same token, sanctions can have dramatic strategic effects on regime support depending on the level of salience. This finding has bearing on contemporaneous threats to the democratic regimes. If citizens start to care more about political systems it may become important to bolster safeguards for democracy and increase sanctions for its opponents.

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## Appendices

### A Proofs

#### A.1 Proof of Lemma 1

*Proof.* (i) If  $\sigma = 0$ , this is a symmetric game of pure coordination with net utility from attack of  $p(m)\rho_A - (1 - p(m))\rho_D$ . The claim follows from the fact that players are indifferent between attacking and not for  $m = m_{\sigma=0}$ , strictly prefer attacking for  $m > m_{\sigma=0}$  and strictly prefer not attacking for  $m < m_{\sigma=0}$ . Our assumptions on  $p$  imply that  $0 < m_{\sigma=0} < 1$ . To establish stability of the extreme equilibria, take  $\delta < \min\{m_{\sigma=0}, 1 - m_{\sigma=0}\}$ . To establish that the interior equilibrium at  $m^* = m_{\sigma=0}$  is unstable, note that for any  $m \neq m_{\sigma=0}$ , either all or none will attack.

(ii) With  $\sigma = 1$ , utility from attacking equals  $\epsilon_i$ , independent of how many others  $m$  attack. The same share of citizens  $i$  with  $\epsilon_i \geq 0$  will attack, regardless of  $m$ , so  $m^* = 1 - F(0)$  is the unique equilibrium, and it is stable.  $\square$

#### A.2 Proof of Proposition 1

*Proof.* (i) As  $\mu$  is a continuous mapping from the compact interval  $[0, 1]$  to itself, it satisfies the conditions of Brouwer's fixed-point theorem. The stronger result that a stable equilibrium exists follows from:

1. Equilibrium at  $m = 0$  for  $\tilde{\sigma} \leq \rho_D/\alpha$ , and stability for  $\tilde{\sigma} < \rho_D/\alpha$ : Note that  $\mu(0) = 1 - F(\rho_D/\tilde{\sigma})$ , so  $\mu(0) = 0$  if and only if  $\rho_D/\tilde{\sigma} \geq \alpha$ , which is equivalent to  $\rho_D/\alpha \geq \tilde{\sigma}$ . Intuitively, for the most democracy hating person ( $\epsilon_i = \alpha$ ), the psychological reward from attacking  $\tilde{\sigma}\alpha$  is less than the certain punishment  $\rho_D$ . In case of strict inequality  $\tilde{\sigma} < \rho_D/\alpha$ , there is a  $\delta > 0$  such that no one will attack also for any  $m \in (0, \delta)$ , by continuity of expected utility in  $m$ . For the same reason, marginal changes in salience then do not affect equilibrium, i.e.,  $\frac{\partial m^*}{\partial \tilde{\sigma}} = 0$ .
2. Equilibrium at  $m = 1$  for  $\tilde{\sigma} \leq \rho_A$ , and stability for  $\tilde{\sigma} < \rho_A$  as well as  $\frac{\partial m^*}{\partial \tilde{\sigma}} = 0$  in this case: Analogous to 1. above.
3. Stable interior equilibrium if  $\tilde{\sigma} > \max\{\rho_A, \rho_D/\alpha\}$ : From the argument in 1.,  $\tilde{\sigma} > \rho_D/\alpha$  implies  $\mu(0) > 0$  and, analogously,  $\tilde{\sigma} > \rho_A$  implies  $\mu(1) < 1$ . Given this, by its continuity together with the genericity assumption,  $\mu$  must cross the 45-degree line from above at some interior point  $m \in (0, 1)$ , which is then an equilibrium; any such equilibrium  $m^*$  has  $\mu'(m^*) < 1$ , hence is stable.

It remains to establish existence of a stable equilibrium if  $\tilde{\sigma} = \max\{\rho_A, \rho_D/\alpha\}$ . Suppose that  $\tilde{\sigma} = \rho_D/\alpha \geq \rho_A$ , which implies  $\mu(0) = 0$  and  $\mu(1) \leq 1$ . For the case that the “none attack” equilibrium is unstable, the genericity assumption implies that  $\mu'(0) > 1$ , whereby there exists  $\hat{m} \in (0, \frac{1}{2})$  such that  $\mu(\hat{m}) > \hat{m}$ . If  $\mu(1) < 1$ , there exists a stable interior equilibrium by the argument given in

3.; if  $\mu(1) = 1$  and the “all attack” equilibrium is unstable, then the genericity assumption implies that  $\mu'(1) > 1$ , whereby there exists  $\tilde{m} \in (\frac{1}{2}, 1)$  such that  $\mu(\tilde{m}) < \tilde{m}$ , so there exists a stable interior equilibrium  $m^* \in (\tilde{m}, \tilde{m})$ , again by the argument given in 3. Existence of a stable equilibrium when  $\tilde{\sigma} = \rho_A > \rho_D/\alpha$  follows analogously to when  $\tilde{\sigma} = \rho_D/\alpha > \rho_A$ .

(ii) Suppose first that  $m^* \geq m_{\sigma=0}$  for some interior equilibrium  $m^*$ . Then  $p(m^*) \geq p(m_{\sigma=0}) = \frac{\rho_D}{\rho_A + \rho_D}$ . This implies that the indifferent citizen  $i$  in this equilibrium has policy preference

$$\epsilon_i = (\rho_D - p(m^*)(\rho_A + \rho_D))/\tilde{\sigma} \leq \left( \rho_D - \frac{\rho_D}{\rho_A + \rho_D}(\rho_A + \rho_D) \right) \frac{1}{\tilde{\sigma}} = 0$$

That is, the indifferent citizen  $i$  must be weakly leaning towards democracy in such an equilibrium. Hence,  $m^* \geq 1 - F(0) = m_{\sigma=1}$ . Analogously,  $m^* \leq m_{\sigma=0}$  implies  $m^* \leq m_{\sigma=1}$ .

Finally, note that  $\mu(m_{\sigma=0}) = 1 - F(0) = m_{\sigma=1}$ , so neither of  $m_{\sigma=0}$  or  $m_{\sigma=1}$  is an equilibrium, by Genericity.

(iii) Define  $\phi(m) := -p(m)\rho_A + (1 - p(m))\rho_D$ ; then, at an equilibrium point  $m^* = \mu(m^*)$ :

$$m^* - 1 + F(\phi(m^*)/\tilde{\sigma}) = 0$$

Consider then any interior equilibrium  $m^* \in (0, 1)$ . Let  $\phi^* := \phi(m^*)$  and note that  $m^* < m_{\sigma=1}$  (resp.,  $m^* > m_{\sigma=1}$ ) if and only if  $\phi^* > 0$  (resp.,  $\phi^* < 0$ ). From the Implicit Function Theorem:

$$\frac{\partial m^*}{\partial \tilde{\sigma}} = \frac{f(\phi^*/\tilde{\sigma})\phi^*/\tilde{\sigma}^2}{1 - f(\phi^*/\tilde{\sigma})p'(m^*)(\rho_A + \rho_D)/\tilde{\sigma}}$$

The denominator is equal to  $1 - \mu'(m^*)$ , so it is positive (resp., negative) if and only if the equilibrium  $m^*$  is stable (resp., unstable). (Given our genericity assumption it cannot be zero.) Hence,  $\frac{\partial m^*}{\partial \tilde{\sigma}}$  is of the same (resp., opposite) sign as  $\phi^*$  if and only if  $m^*$  is stable (resp., unstable).

Finally, consider a stable “none attack” equilibrium. A marginal change in salience keeps  $\tilde{\sigma} < \rho_D/\alpha$  intact, hence equilibrium unchanged. A similar argument applies to a stable “all attack” equilibrium.

□

### A.3 Proof of Corollary 1

*Proof.* Given the arguments preceding the corollary, threat point  $m^*$  is an unstable interior equilibrium, and by Proposition 1’s (iii), a marginal increase in

salience does not affect “none attack,” whereas  $\frac{\partial m^*}{\partial \tilde{\sigma}}$  is negative if  $m^* < m_{\sigma=1}$ , and  $\frac{\partial m^*}{\partial \tilde{\sigma}}$  is positive if  $m^* > m_{\sigma=1}$ .  $\square$

## B Supplementary material

### B.1 Median voter setting

We show here how our reduced form model can be microfounded by a median voter setting. Let there be a one-dimensional (non-empty and bounded) policy space  $[\underline{v}, \bar{v}]$  over which citizens have preferences that are characterized by their ideal points in this space, such that a citizen  $i$  with ideal point  $v_i$  evaluates policy  $\hat{v}$  with utility function

$$u(\hat{v}|v_i) = \bar{u} - \tau \cdot |v_i - \hat{v}|^2, \quad (1)$$

for some preference parameters  $\bar{u} > 0$  (the political “bliss” value when  $\hat{v} = v_i$ ) and  $\tau > 0$  (the sensitivity to deviations of  $\hat{v}$  from  $v_i$ ). Let citizens’ ideal points  $v_i$  be distributed over the policy space according to a distribution function (cdf)  $G$  that is strictly increasing and differentiable. Under democracy, the policy outcome shall be the median voter’s ideal point  $v^D = G^{-1}(0.5)$ ; without loss, let the policy outcome under the alternative regime be some  $v^A > v^D$ , and define  $w := (v^A + v^D)/2$ .

It is straightforward to derive that, for any ideal point  $v_i$ ,

$$u(v^A|v_i) - u(v^D|v_i) = 2\tau \cdot (v^A - v^D) \cdot (v_i - w).$$

This relative policy gain under a successful attack on democracy by the alternative regime is linearly increasing in a citizen’s ideal point  $v_i$ , from a minimum of  $2\tau \cdot (v^A - v^D) \cdot (\underline{v} - w) < 0$  to a maximum of  $2\tau \cdot (v^A - v^D) \cdot (\bar{v} - w) > 0$ . Mapping any ideal point  $v_i$  into  $\epsilon_i$  as

$$\epsilon_i := \frac{1}{2\tau \cdot (v^A - v^D) \cdot (w - \underline{v})} \cdot (u(v^A|v_i) - u(v^D|v_i)) = \frac{v_i - w}{w - \underline{v}},$$

we have that the range of  $\epsilon_i$  equals  $[-1, \alpha]$  for  $\alpha = (\bar{v} - w)/(w - \underline{v}) > 0$ , and its distribution inherits the strict increasingness and differentiability from  $G$ ; moreover,  $F(0) > 0.5$ , since  $\epsilon_i = 0$  if and only if  $v_i = w > v^D$ .

It should be clear that a similar though significantly more tedious derivation of our reduced form can be obtained for any policy preferences such that the square in (1) gets replaced by some other exponent greater than one. The linear case is special in that it results in a distribution  $F$  with two atoms, one at each end of the support. This is because all citizens with ideal points  $v_i \leq v^D$  then have the same (negative) relative policy gain of  $-(v^A - v^D)$ , and this is similarly true for all citizens with ideal points  $v_i \geq v^A$ , who all gain  $(v^A - v^D)$ . There may then arise equilibria in which an atom of citizens are indifferent and break their indifference in a particular way; clearly, however, no such equilibrium is stable, whereby the main insights from our analysis carry over.

## B.2 Additional examples and visualization

### B.2.1 Multimode distribution

We imagine a distribution of preferences with many modes, in which  $p$  is linear, and in which  $m_{\sigma=1} = 1 - F(0) < m_{\sigma=0} = \frac{\rho_D}{\rho_A + \rho_D} = \frac{1}{3}$ .

Figure 3 then shows how equilibria change as  $\sigma$  changes, plotting  $\mu$  against  $m$ . Fixed points are equilibria. The boundary cases of Proposition 1 can be seen at the extremes, with a multiplicity of equilibria possible for intermediate values of  $\sigma$ .

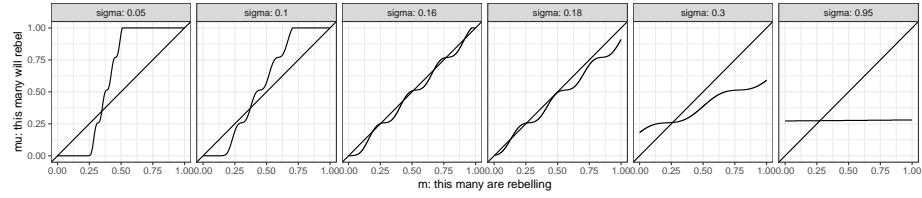


Figure 3: When  $\sigma$  is small there are generically three equilibria generated by a symmetric coordination game. One of these is the interior, unstable, ‘**pure coordination**’ equilibrium. When  $\sigma$  is large there is a unique ‘**pure expression**’ equilibrium, which is stable. At intermediate levels there can be many equilibria.

The full set of equilibria over the range of  $\sigma$  is shown for this example in Figure 4. We see again the equilibria identified by Lemma 1 at the boundaries. A grey block marks the region where there are no equilibria (Proposition 1 (iii)). Note also that below this region (where fewer are rebelling than would want to, absent sanctions), stable equilibria are increasing in  $\sigma$  and unstable equilibria are decreasing, indicating a generally higher risk of rebellion, locally. Above this region (where more are rebelling than would want to, absent sanctions), stable equilibria are decreasing in  $\sigma$  and unstable equilibria are increasing,

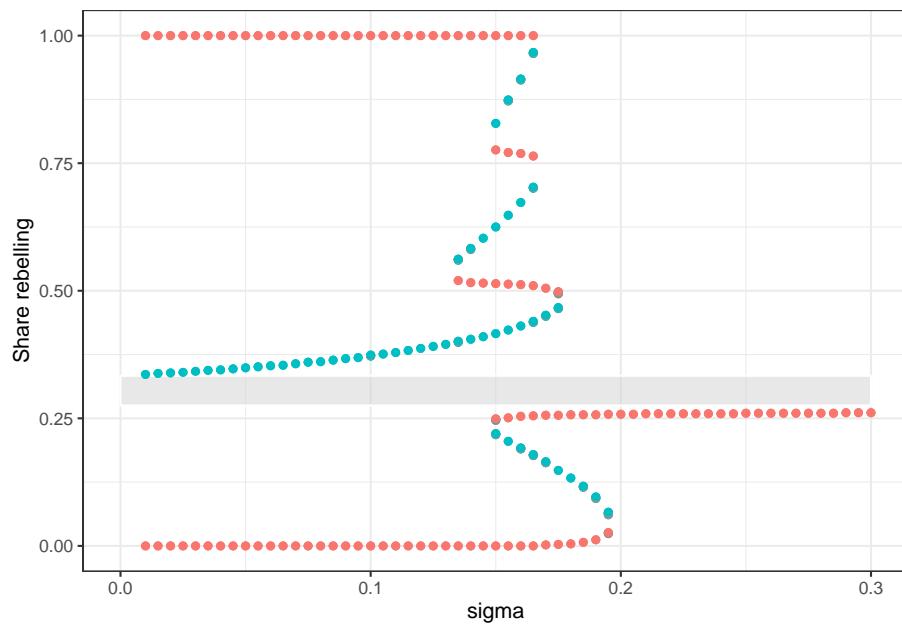


Figure 4: Summary of equilibria as a function of  $\sigma$  for the same parameters as in Figure 3.

### B.2.2 Beta distribution

In Figure 5 we illustrate equilibria for a setting with Beta-distributed preferences, assuming  $\alpha = 1$ , and success probabilities that are convex in participation ( $p(m) = m^{3/2}$ ).

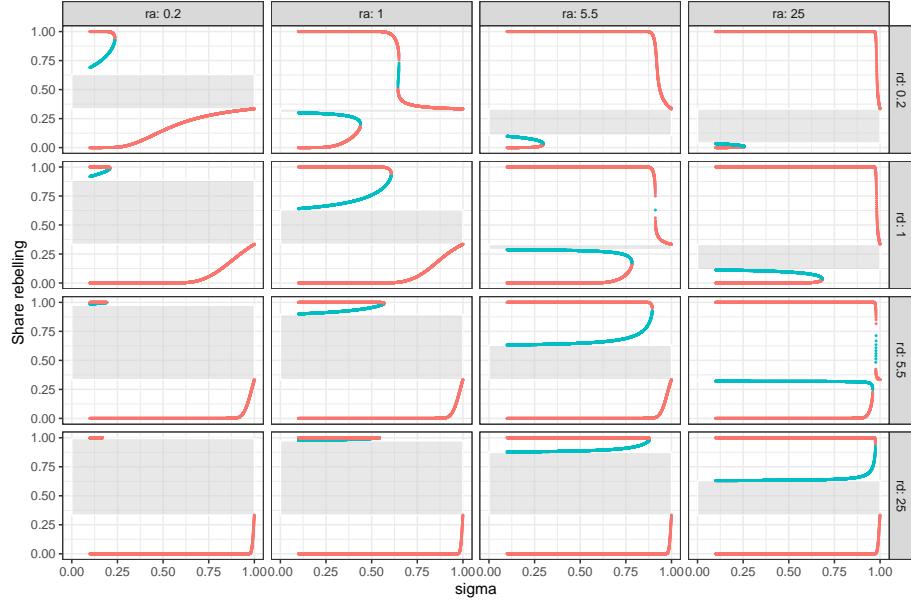


Figure 5: Equilibria in a quadratic/Beta model (pink = stable). No equilibria in grey areas. In upper right panels, the pure coordination equilibrium is lower than the expressive equilibrium. In the lower left panels, the pure coordination equilibrium is higher than the expressive equilibrium.

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