

Online Appendix for  
“Democracy by Deterrence:  
Norms, Constitutions, and Electoral Tilting”

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## A SUPPORTING INFORMATION FOR BASELINE MODEL

This section proves every statement for the baseline formal model presented in the article. We first formally define a strategy profile with forbearance and grim-trigger punishment phases. We then explain why the assigned actions in the punishment phase and for no unilateral obstruction are incentive compatible for all parameter values. Then we present the recursive equations needed to derive the incentive-compatibility conditions for each party to not have a profitable deviation to upholding forbearance, followed by a formal proof of Proposition 1. We then prove and provide additional intuition for Proposition 2, followed by a statement and proof of a proposition for patience.

**Definition A.1** (Strategy profile). *Consider a generic period  $t = z$ .*

- **Forbearance phase.** *Suppose for all periods  $j < z$  that the winning party chose  $b_j = 0$  and the losing party did not obstruct. Then:*
  - *The losing party does not obstruct in period  $z$ .*
  - *If the losing party does not obstruct in period  $z$ , then the winning party chooses  $b_z = 0$ . If instead the losing party obstructed in period  $z$ , then the winning party tilts maximally, hence A chooses  $b_z = b_x$  and B chooses  $b_z = b_y$ .*
- **Punishment phase.** *Suppose for at least one period  $j < z$  that either  $b_j \neq 0$  or a party obstructed. Then:*
  - *The losing party obstructs in period  $z$ .*
  - *The winning party tilts maximally, hence A chooses  $b_z = b_x$  and B chooses  $b_z = b_y$ .*

### A.1 PUNISHMENT PHASE

The grim-trigger punishment profile is incentive compatible for all parameter values. The losing party knows that, regardless of their action, the winning party will tilt maximally toward their preferred voter bloc. Consequently, the losing party prefers to obstruct and consume  $\epsilon$ , rather than 0. The contemporaneous winning party knows that—regardless of their action—future-period winners will maximally exploit their legal bound, which removes any incentive to not tilt themselves.

Also note that by specifying grim-trigger punishments, if Definition A.1 fails to constitute an equilibrium, then perpetual forbearance is not possible in any equilibrium.

### A.2 NO UNILATERAL OBSTRUCTION

Setting the losing party’s gain from obstruction to be infinitesimal,  $\epsilon \rightarrow 0$ , ensures that neither party unilaterally obstructs in the forbearance phase. That is, the strategy profile defined in Definition

A.1 never fails to hold as an equilibrium because the *losing* party triggers the punishment phase by unilaterally obstructing. Such an action would provide an infinitesimally small boost in contemporaneous consumption for the losing party. This negligible benefit from unilateral obstruction is strictly exceeded by the non-negligible cost, which arises endogenously for the following reason. The winning party moves immediately afterwards within that period, and obstruction triggers the winning party to maximally tilt the election rules in their favor. This action discretely lowers the obstructing party's probability of winning the election in the next period. Thus, in the forbearance phase, the losing party strictly prefers to not obstruct, and consequently to not trigger the winning party to rig the electoral rules.

However, this calculus differs if the parties are in the punishment phase, in which case the losing party obstructs in every period. The losing party benefits from obstruction because  $\epsilon > 0$ , but does not suffer a cost because the winning party tilts maximally regardless of the losing party's choice.

### A.3 UPHOLDING FORBEARANCE

The following derives incentive-compatibility constraints for party *A* and party *B* to each prefer upholding forbearance over deviating and initiating the grim-trigger punishment phase. Because we are considering single deviations from a path with perpetual forbearance, the supposition is that if one player upholds forbearance in a particular period, then both players will continue along this path in the future.

Choosing  $b_t = 0$  in every period is incentive compatible for party *A* if and only if:

$$\underbrace{1 + \frac{\delta}{1-\delta} \cdot \frac{1}{2}}_{\text{Forbearance}} \geq \underbrace{1 + \delta \cdot [p_A^{\max} \cdot V_A^A + (1 - p_A^{\max}) \cdot V_B^A]}_{\text{Deviate}}, \quad (\text{A.1})$$

for:

$$V_A^A = 1 - \phi + \delta \cdot [p_A^{\max} \cdot V_A^A + (1 - p_A^{\max}) \cdot V_B^A] \quad (\text{A.2})$$

$$V_B^A = \delta \cdot [p_B^{\max} \cdot V_A^A + (1 - p_B^{\max}) \cdot V_B^A]. \quad (\text{A.3})$$

The expected future consumption term for the forbearance phase reflects that *A* wins the election in each period with probability  $\frac{1}{2}$ , consumes 1 in every period they win, and 0 in every period they lose. The entire future consumption stream is multiplied by  $\frac{\delta}{1-\delta}$  because of discounting over the infinite time horizon.

We express two continuation values for *A* in the deviation phase,  $V_A^A$  and  $V_B^A$ , as recursive equations. The superscript refers to the actor, and the subscript to which party is in power in the specified period. To explain Equation A.2, suppose that *A* wins the election in some period  $t$ . In equilibrium, this yields contemporaneous consumption of  $1 - \phi$  because, given the prior deviation, the strategy profile requires that *B* obstructs. Then, *A* sets  $b_{t+1} = b_x$ . Thus, with probability  $p_A^{\max}$ , *A* retains power in period  $t + 1$ , in which case we start over again with  $V_A^A$ , discounted by a period. With complementary probability, *A* loses power and their continuation value is  $V_B^A$ , defined in Equation A.3. In any period that *A* is out of power, they consume  $\epsilon$  from obstructing, although we

take the limit to 0. Going forward from such a period, with probability  $1 - p_B^{\max}$ ,  $B$  retains power and  $A$ 's continuation value remains  $V_B^A$ , discounted by a period. With complementary probability,  $A$  regains power and the continuation value moves to  $V_A^A$ .  $A$ 's probability of winning bounces around between  $p_A^{\max}$  and  $p_B^{\max}$  across periods because the party in power always pushes to the legal limits to maximize their advantage, as illustrated in Figure 2.

Solving Equations A.2 and A.3, substituting them into Equation A.1, and simplifying yields the following incentive-compatibility constraint for  $A$ :

$$\mathbf{A's\ IC\ constraint:} \quad \frac{1}{2} \geq \frac{(1 - \delta) \cdot p_A^{\max} + \delta \cdot p_B^{\max}}{1 - \delta \cdot (p_A^{\max} - p_B^{\max})} \cdot (1 - \phi). \quad (\text{A.4})$$

The intuition for  $B$ 's incentive-compatibility constraint is identical:

$$\underbrace{1 + \frac{\delta}{1 - \delta} \cdot \frac{1}{2}}_{\text{Forbearance}} \geq \underbrace{1 + \delta \cdot [(1 - p_B^{\max}) \cdot V_B^B + p_B^{\max} \cdot V_A^B]}_{\text{Deviate}}, \quad (\text{A.5})$$

for:

$$V_B^B = 1 - \phi + \delta \cdot [(1 - p_B^{\max}) \cdot V_B^B + p_B^{\max} \cdot V_A^B] \quad (\text{A.6})$$

$$V_A^B = \delta \cdot [(1 - p_A^{\max}) \cdot V_B^B + p_A^{\max} \cdot V_A^B]. \quad (\text{A.7})$$

Solving Equations A.6 and A.7, substituting them into Equation A.5, and simplifying yields the following incentive-compatibility constraint for  $B$ :

$$\mathbf{B's\ IC\ constraint:} \quad \frac{1}{2} \geq \left( 1 - \frac{p_B^{\max}}{1 - \delta \cdot (p_A^{\max} - p_B^{\max})} \right) \cdot (1 - \phi). \quad (\text{A.8})$$

#### A.4 PROOF OF PROPOSITION 1

The proof proceeds in five steps. The first step is preliminary and shows that higher probability-of-winning terms for  $A$  strictly increase  $A$ 's incentives to deviate while strictly decreasing  $B$ 's. The next two steps characterize threshold values of each party's maximum-probability-of-winning term at which the party is indifferent between upholding forbearance and deviating. Step 4 proves the "only if" part of the statement, and Step 5 proves the "if" part.

**Step 1.** The following preliminary results show that the right-hand side of Equation A.4 strictly increases in each of  $p_A^{\max}$  and  $p_B^{\max}$ , and that the right-hand side of Equation A.8 strictly decreases in each of  $p_A^{\max}$  and  $p_B^{\max}$ .

$$\frac{\partial}{\partial p_A^{\max}} \left[ \frac{(1 - \delta) \cdot p_A^{\max} + \delta \cdot p_B^{\max}}{1 - \delta \cdot (p_A^{\max} - p_B^{\max})} \cdot (1 - \phi) \right] = \frac{1 - \delta \cdot (1 - p_B^{\max})}{[1 - \delta \cdot (p_A^{\max} - p_B^{\max})]^2} \cdot (1 - \phi) > 0 \quad (\text{A.9})$$

$$\frac{\partial}{\partial p_B^{\max}} \left[ \frac{(1 - \delta) \cdot p_A^{\max} + \delta \cdot p_B^{\max}}{1 - \delta \cdot (p_A^{\max} - p_B^{\max})} \cdot (1 - \phi) \right] = \frac{\delta \cdot (1 - p_A^{\max})}{[1 - \delta \cdot (p_A^{\max} - p_B^{\max})]^2} \cdot (1 - \phi) > 0 \quad (\text{A.10})$$

$$\frac{\partial}{\partial p_A^{\max}} \left[ \left( 1 - \frac{p_B^{\max}}{1 - \delta \cdot (p_A^{\max} - p_B^{\max})} \right) \cdot (1 - \phi) \right] = - \frac{\delta \cdot p_B^{\max}}{[1 - \delta \cdot (p_A^{\max} - p_B^{\max})]^2} \cdot (1 - \phi) < 0 \quad (\text{A.11})$$

$$\frac{\partial}{\partial p_B^{\max}} \left[ \left( 1 - \frac{p_B^{\max}}{1 - \delta \cdot (p_A^{\max} - p_B^{\max})} \right) \cdot (1 - \phi) \right] = - \frac{1 - \delta \cdot p_A^{\max}}{[1 - \delta \cdot (p_A^{\max} - p_B^{\max})]^2} \cdot (1 - \phi) < 0. \quad (\text{A.12})$$

**Step 2.** The  $\hat{p}_A$  threshold is implicitly defined as  $\Omega_A(\hat{p}_A) = 0$ , for:

$$\Omega_A(p_A^{\max}) \equiv \frac{1}{2} - \frac{(1 - \delta) \cdot p_A^{\max} + \delta \cdot p_B^{\max}}{1 - \delta \cdot (p_A^{\max} - p_B^{\max})} \cdot (1 - \phi). \quad (\text{A.13})$$

To prove that  $\hat{p}_A \in (\frac{1}{2}, 1)$  exists, we show that the IVT (intermediate value theorem) conditions hold. To establish the lower bound, at  $p_A^{\max} = \frac{1}{2}$ , we have:

$$\Omega_A\left(\frac{1}{2}\right) = \frac{1}{2} - \frac{(1 - \delta) \cdot \frac{1}{2} + \delta \cdot p_B^{\max}}{1 - \delta \cdot (\frac{1}{2} - p_B^{\max})} \cdot (1 - \phi).$$

Equation A.10 implies that  $\Omega_A$  strictly decreases in  $p_B^{\max}$ , which implies that this function reaches its lower bound at  $p_B^{\max} = \frac{1}{2}$ . *NB: for  $p_A^{\max} = \frac{1}{2}$ , this is the only feasible value of  $p_B^{\max}$  consistent with assuming  $p_A^{\max} \geq 1 - p_B^{\max}$ .* Substituting in  $p_B^{\max} = \frac{1}{2}$  and simplifying yields  $\frac{1}{2} \cdot \phi > 0$ . To establish the upper bound, at  $p_A^{\max} = 1$ , we have:

$$\Omega_A(1) = \frac{1}{2} - (1 - \phi),$$

which is strictly negative for any  $\phi < \frac{1}{2}$ . Finally,  $\Omega_A(p_A^{\max})$  is continuous in  $p_A^{\max}$ , which establishes that the IVT conditions hold. The unique threshold claim follows from the strictly monotonic relationship established in Equation A.9.

**Step 3.** The  $\hat{p}_B$  threshold is implicitly defined as  $\Omega_B(\hat{p}_B) = 0$ , for:

$$\Omega_B(p_B^{\max}) \equiv \frac{1}{2} - \left( 1 - \frac{p_B^{\max}}{1 - \delta \cdot (p_A^{\max} - p_B^{\max})} \right) \cdot (1 - \phi). \quad (\text{A.14})$$

To prove that  $\hat{p}_B \in (0, \frac{1}{2})$  exists, we show that the IVT conditions hold. To establish the lower bound, at  $p_B^{\max} = 0$ , we have:

$$\Omega_B(0) = \frac{1}{2} - (1 - \phi),$$

which is strictly negative for any  $\phi < \frac{1}{2}$ . To establish the upper bound, at  $p_B^{\max} = \frac{1}{2}$ , we have:

$$\Omega_B\left(\frac{1}{2}\right) = \frac{1}{2} - \left( 1 - \frac{\frac{1}{2}}{1 - \delta \cdot (p_A^{\max} - \frac{1}{2})} \right) \cdot (1 - \phi).$$

Equation A.11 implies that  $\Omega_B$  strictly increases in  $p_A^{\max}$ , which implies that this function reaches its lower bound at  $p_A^{\max} = \frac{1}{2}$ . *NB: for  $p_B^{\max} = \frac{1}{2}$ , this is the only feasible value of  $p_A^{\max}$  consistent with assuming  $p_A^{\max} < 1 - p_B^{\max}$ .* Substituting in  $p_A^{\max} = \frac{1}{2}$  and simplifying yields  $\frac{1}{2} \cdot \phi > 0$ . Finally,

$\Omega_B(p_B^{\max})$  is continuous in  $p_B^{\max}$ , which establishes that the IVT conditions hold. The unique threshold claim follows from the strictly monotonic relationship established in Equation A.12.

**Step 4.** The “only if” part of the statements follow directly from the previous steps. If  $p_A^{\max} > \hat{p}_A$ , then by construction of  $\hat{p}_A$ , Equation A.4 is violated. If  $1 - p_B^{\max} > 1 - \hat{p}_B$ , then by construction of  $\hat{p}_B$ , Equation A.8 is violated.

**Step 5.** We separately prove the “if” part of each statement. We first show that if  $p_A^{\max} \geq 1 - p_B^{\max}$  and  $p_A^{\max} \leq \hat{p}_A$ , then both IC constraints hold. By the converse logic as presented in step 4, the latter inequality implies that  $A$ ’s IC constraint (Equation A.4) holds. The following shows that  $B$ ’s IC constraint (Equation A.8) also holds. We are currently assuming  $p_A^{\max} \geq 1 - p_B^{\max}$ , which easily rearranges to  $p_B^{\max} \geq 1 - p_A^{\max}$ . Among all such  $p_B^{\max}$ , Equation A.12 implies that  $\Omega_B$  hits its lower bound at  $p_B^{\max} = 1 - p_A^{\max}$ . We can express:

$$\Omega_B(1 - p_A^{\max}) = \frac{1}{2} - \frac{p_A^{\max} - \delta \cdot (2p_A^{\max} - 1)}{1 - \delta \cdot (2p_A^{\max} - 1)} \cdot (1 - \phi).$$

It is straightforward to show that this is identical to  $\Omega_A$  evaluated at  $p_B^{\max} = 1 - p_A^{\max}$ . That term is strictly positive because we are currently assuming  $p_A^{\max} < \hat{p}_A$ , which implies that  $A$ ’s IC constraint holds.

An identical set of steps show that if  $p_A^{\max} < 1 - p_B^{\max}$  and  $1 - p_B^{\max} \leq 1 - \hat{p}_B$ , then both IC constraints hold. By the converse logic as presented in step 4, the latter inequality implies that  $B$ ’s IC constraint (Equation A.8) holds. The following shows that  $A$ ’s IC constraint (Equation A.4) also holds. We are currently assuming  $p_A^{\max} < 1 - p_B^{\max}$ . Among all such  $p_A^{\max}$ , Equation A.9 implies that  $\Omega_A$  hits its lower bound at  $p_A^{\max} = 1 - p_B^{\max}$ . We can express:

$$\Omega_A(1 - p_B^{\max}) = \frac{1}{2} - \frac{1 - p_B^{\max} - \delta \cdot (1 - 2p_B^{\max})}{1 - \delta \cdot (1 - 2p_B^{\max})} \cdot (1 - \phi).$$

It is straightforward to show that this is identical to  $\Omega_B$  evaluated at  $p_A^{\max} = 1 - p_B^{\max}$ . That term is strictly positive because we are currently assuming  $1 - p_B^{\max} < 1 - \hat{p}_B$ , which implies that  $B$ ’s IC constraint holds. ■

## A.5 PROOF OF PROPOSITION 2

The proof proceeds in three steps. The first step is preliminary. The next two steps each consider a specific case, which collectively exhaust the range of parameters.

**Step 1.**

$$\frac{\partial p(b_t)}{\partial b_t} = s - \frac{1}{2} > 0 \tag{A.15}$$

$$\frac{\partial p(b_t)}{\partial s} = b_t >< 0 \tag{A.16}$$

$$\frac{\partial^2 p(b_t)}{\partial b_t \partial s} = 1, \tag{A.17}$$

for  $p(b_t)$  defined in Equation 1.

**Step 2.** Assume  $b_x \geq -b_y$ . This is equivalent to assuming  $p_A^{\max} \geq 1 - p_B^{\max}$ . Thus, given Proposition 1, the claim about  $b_x$  follows from substituting  $b_x$  for  $b_t$  in Equation A.15. Additionally, if  $b_t = b_x > 0$ , then Equation A.16 is strictly positive. This establishes the first-order claim about  $s$  for this case.

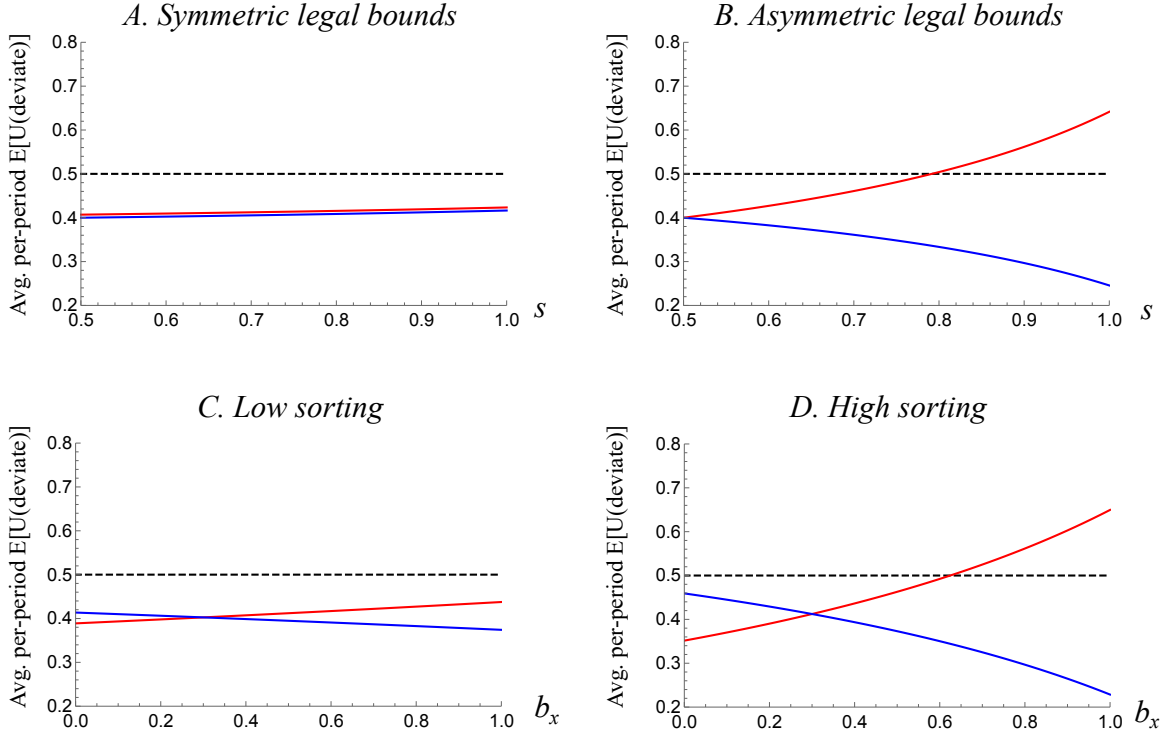
**Step 3.** Assume  $b_x < -b_y$ . This is equivalent to assuming  $p_A^{\max} < 1 - p_B^{\max}$ . Thus, given Proposition 1, the claim about  $b_y$  follows from substituting  $b_y$  for  $b_t$  in Equation A.15. Additionally, if  $b_t = b_y < 0$ , then Equation A.16 is strictly negative. This establishes the first-order claim about  $s$  for this case because we are taking the derivative of  $1 - p(b_y)$ .

Equation A.17 establishes the second-order claim about  $s$ . ■

Figure A.1 depicts the relationships presented in Proposition 2. In each panel, the y-axis is each party's average per-period expected utility if they deviate during the forbearance phase, with the red curves corresponding to party A and the blue curves to Party B. Whenever a curve is above 0.5 (the dashed black line that corresponds with the per-period expected utility to perpetual forbearance), that party deviates. We highlight the interaction effect in two different ways. First, in Panels A and B, we fix every parameter except for sorting,  $s$ , which we allow to vary along the x-axis. In Panel A, symmetric legal bounds imply that increases in sorting only minimally enhance incentives to deviate, and neither the red nor blue curves ever exceed 0.5. By contrast, in Panel B, the legal bounds are asymmetrically tilted toward party A, who optimally tilts when sorting is high enough. Second, in Panels C and D, we fix every parameter except for the legal bounds for party A,  $b_x$ , which we allow to vary along the x-axis. In Panel C, low sorting implies that a more permissive legal bound for party A only minimally enhances their incentive to deviate, and thus the red curve never exceeds 0.5. By contrast, in Panel D, high sorting induces party A to deviate when their legal bound becomes sufficiently permissive.



**Figure A.1: Interaction Effect between Asymmetric Legal Bounds and High Sorting**



Parameter values:  $\delta = 0.9$ ,  $\phi = 0.15$ , and  $b_y = -0.3$ . In Panel A,  $b_x = 0.3$ . In Panel B,  $b_x = 0.8$ . In Panel C,  $s = 0.6$ . In Panel D,  $s = 0.9$ .

## A.6 DISCOUNT FACTOR AND FORBEARANCE

**Proposition A.1** (Discount factor and forbearance). *The range of parameter values in which the favored party (see Proposition 1) upholds forbearance increases in  $\delta$ .*

**Proof.** Applying the implicit function theorem to  $\Omega(\hat{p}_A)$  (see Equation A.13) and  $\Omega(\hat{p}_B)$  (see Equation A.14) yields:

$$\frac{d\hat{p}_A^{\max}}{d\delta} = \frac{(1 - p_A^{\max}) \cdot (p_A^{\max} - p_B^{\max})}{1 - \delta \cdot (1 - p_B^{\max})} > 0$$

$$\frac{d\hat{p}_B^{\max}}{d\delta} = -\frac{p_B^{\max} \cdot (p_A^{\max} - p_B^{\max})}{1 - \delta \cdot p_A^{\max}} < 0. \quad \blacksquare$$

## B MODEL EXTENSIONS

The following provides additional formal details and empirical examples for the extensions with federalism (Appendix B.1), unbalanced partisan competition (Appendix B.2), and endogenous sorting (Appendix B.3).

### B.1 COUNTERMAJORITARIAN PROVISIONS

In the article, we summarized an extension in which, due to countermajoritarian constitutional provisions, the winning party might be unable to change the electoral rules (captured by the parameters  $\kappa_A$  and  $\kappa_B$ ). Here we provide formal details, discuss a historical application to Republican state-packing in the nineteenth century, and also comment on reversible versus legally irreversible reforms. The core mechanism highlighted in this extension resembles that from the baseline model: asymmetries in the countermajoritarian provisions cause forbearance to break down.

#### B.1.1 Formal Details

Assume a setup identical to the baseline model except that, conditional on winning an election in some period  $t$ , there is a  $1 - \kappa_A$  chance for  $A$  and a  $1 - \kappa_B$  chance for  $B$  that, conditional on winning, countermajoritarian provisions block them from changing the rules; for  $(\kappa_A, \kappa_B) \in (0, 1)^2$ . If blocked, the winning party must choose  $b_{t+1} = b_t$ . Consequently, we now need to express the continuation values as a function of the status-quo bias term. Equation B.1 is the analog to Equation A.1 for  $A$ 's incentive-compatibility constraint. The only difference is that the continuation values are expressed a function of the bias term chosen in the period of the deviation, which in this case is  $b_x$ .

$$1 + \frac{\delta}{1 - \delta} \cdot \frac{1}{2} \geq 1 + \delta \cdot \left[ p_A^{\max} \cdot V_A^A(b_x) + (1 - p_A^{\max}) \cdot V_B^A(b_x) \right]. \quad (\text{B.1})$$

To characterize the continuation values, along the equilibrium path,  $b_t \in \{b_x, b_y\}$  for any period  $t$  in the deviation phase. This reduces to four the number of information sets necessary to derive equilibrium values. Equations B.2 and B.3 are the analogs of Equations A.2 and A.3, respectively. The only alteration is writing the continuation values as a function of  $b_t$ . If  $A$  wins an election and  $b_t = b_x$ , or if  $B$  wins and  $b_t = b_y$ , then clearly the winning party will leave that policy in place even if they have an opportunity to change the rules because the existing policy already maximizes their probability of winning. Hence, the expressions are qualitatively unchanged from the baseline model.

$$V_A^A(b_x) = 1 - \phi + \delta \cdot \left[ p_A^{\max} \cdot V_A^A(b_x) + (1 - p_A^{\max}) \cdot V_B^A(b_x) \right] \quad (\text{B.2})$$

$$V_B^A(b_y) = \delta \cdot \left[ p_B^{\max} \cdot V_A^A(b_y) + (1 - p_B^{\max}) \cdot V_B^A(b_y) \right]. \quad (\text{B.3})$$

For Equations B.4 and B.5, the winning party inherits their least-preferred bias term, and clearly wants to change the rules. However, they get this opportunity only with probability  $\kappa$  (specifically,  $\kappa_A$  for  $A$  and  $\kappa_B$  for  $B$ ), whereas otherwise  $b_t$  stays in place.

$$V_A^A(b_y) = 1 - \phi + \delta \cdot \left\{ \kappa_A \cdot \left[ p_A^{\max} \cdot V_A^A(b_x) + (1 - p_A^{\max}) \cdot V_B^A(b_x) \right] + (1 - \kappa_A) \cdot \left[ p_B^{\max} \cdot V_A^A(b_y) + (1 - p_B^{\max}) \cdot V_B^A(b_y) \right] \right\} \quad (\text{B.4})$$

$$V_B^A(b_x) = \delta \cdot \left\{ \kappa_B \cdot \left[ p_B^{\max} \cdot V_A^A(b_y) + (1 - p_B^{\max}) \cdot V_B^A(b_y) \right] + (1 - \kappa_B) \cdot \left[ p_A^{\max} \cdot V_A^A(b_x) + (1 - p_A^{\max}) \cdot V_B^A(b_x) \right] \right\}. \quad (\text{B.5})$$

Solving the system of equations characterized by Equations B.2 through B.5 and substituting them into Equation B.1 enables us to write  $A$ 's incentive-compatibility constraint in terms of parameters. Note that the right-hand side of Equation B.6 simplifies to that in Equation A.4 if  $\kappa_A = \kappa_B = 1$ .

$$\frac{1}{2} \geq \frac{(1 - \delta) \cdot p_A^{\max} + \delta \cdot p_B^{\max} \cdot [\kappa_B \cdot (1 - p_A^{\max}) + \kappa_A \cdot p_A^{\max}]}{1 - \delta \cdot [1 - \kappa_A \cdot p_B^{\max} - \kappa_B \cdot (1 - p_A^{\max})]} \cdot (1 - \phi). \quad (\text{B.6})$$

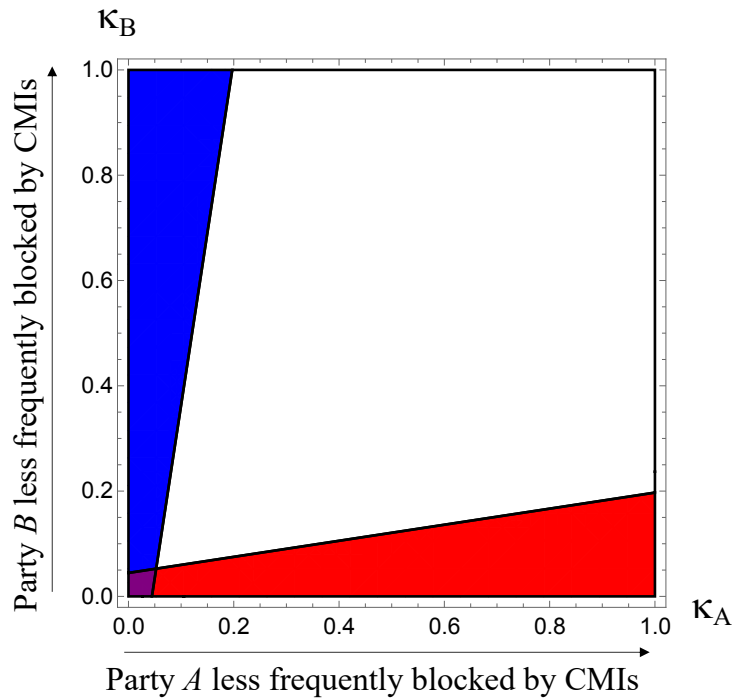
The expressions that characterize  $B$ 's incentive-compatibility constraint follow an identical logic and yield:

$$\frac{1}{2} \geq \left( 1 - \frac{(1 - \delta) \cdot p_B^{\max} + \delta \cdot p_B^{\max} \cdot [\kappa_B \cdot (1 - p_A^{\max}) + \kappa_A \cdot p_A^{\max}]}{1 - \delta \cdot [1 - \kappa_A \cdot p_B^{\max} - \kappa_B \cdot (1 - p_A^{\max})]} \right) \cdot (1 - \phi). \quad (\text{B.7})$$

The main result for this extension is qualitatively similar to that for asymmetric legal bounds in the baseline model. Figure B.1 visually summarizes the result, and a similar statement as Proposition 1 characterizes the equilibrium strategy profile for this extension. The parameter values in the figure correspond with those for point 2 in Figure 3, at which point both parties uphold forbearance in the baseline model. The incentive-compatibility constraints are identical to those the baseline model if each party can change the rules in any period they win, i.e.,  $\kappa_A = \kappa_B = 1$  in the upper-right corner of the figure. However, if we move far enough left or down from that point, then one or both players deviate. If  $\kappa_B$  is very low (i.e., low value on the y-axis), then even upon winning,  $B$  is quite unlikely to have a chance to change the rules. This emboldens  $A$  to deviate from the status quo, as expressed in the red deviation region. Similar to the core intuition in the baseline model, deterrence breaks down because  $B$  cannot credibly threaten to punish  $A$ . Also notable, the size of the “low  $\kappa_B$ ” range increases in  $\kappa_A$ . Even when  $\kappa_B$  is low, because this probability is strictly positive,  $B$  can *sometimes* shift the rules in their favor across the infinite horizon. In such circumstances, higher  $\kappa_A$  creates more frequent opportunities for  $A$  to shift the rules back in their

favor—hence emboldening  $A$  to deviate from the status quo. The converse intuition explains the blue deviation region for  $B$ .

**Figure B.1: Countermajoritarian Institutions and Equilibrium Forbearance**



Parameter values:  $\delta = 0.9$ ,  $\phi = 0.15$ ,  $s = 0.9$ ,  $b_x = 0.3$ ,  $b_y = -0.3$ .

### B.1.2 Application: Historical State Expansion

Many countermajoritarian provisions are hardwired into the U.S. constitution, such as the existence of an upper legislative chamber and the requirement that all states have the same number of U.S. senators. Yet certain types of statutes (as opposed to needing an amendment) enable politicians to directly influence the partisan bias of these institutions, i.e., influence the  $\kappa$  parameters. Republicans’ strategy of “state packing” in the nineteenth century provides a clear historical example of lowering  $\kappa$  for the opposing party. Stewart and Weingast (1992) describe how Republicans used their control of the federal government at various periods between the 1860s and 1890s to strategically admit Republican-leaning territories as states while denying statehood for Democratic-leaning territories (in Appendix C.4, we discuss the legal bounds associated with adding states to the Union). This strategy included adding Nevada despite a tiny population, carving West Virginia out of Virginia during the Civil War, and splitting the Dakota territory into two separate states. Despite boosting Republican representation in the House and electoral college as well, the main effect was to advantage Republicans in the Senate because each state receives two senators regardless of population. Partisan state expansion enabled Republicans to maintain a majority in the Senate in almost every year before World War I, even as Democrats increased their popular vote share and—in many years—controlled a majority in the House. Republicans passed an initial program of

activist government in the 1860s and early 1870s, which they insulated from Democratic reversals by capturing one branch of the federal government (i.e., lowering  $\kappa$  for the Democrats).

In this case, deterrence failed not because of sizable asymmetries in the legal bounds, but instead because of partisan-induced asymmetries in the countermajoritarian provisions of the U.S. constitution. The viability of adding numerous Republican-leaning states enabled Republicans to set a low value for the Democrats'  $\kappa$  parameter. Thus, Democrats lacked the ability to retaliate until far in the future.

### **B.1.3 Comment on Irreversible Reforms**

The state-packing example just discussed highlights a qualitatively different type of reform—one that is irreversible—from our main substantive examples in the article. A party can overturn an unfavorable partisan gerrymander by gaining control of the statehouse. By contrast, any states added to the Union are legally irreversible. Article IV of the federal constitution provides a procedure for adding, but not subtracting, states. Thus, unlike partisan gerrymanders, one party cannot punish the other by removing a previously admitted state.

The core strategic logic of our model is qualitatively unaffected by whether the reforms in question are irreversible. Two converse examples highlight this point. First, even if the potential reforms are irreversible, the  $\kappa$  terms can still be symmetric. Although a party cannot *remove* an existing state, they can potentially *add* a new state expected to vote for their party. If the set of territories that could feasibly gain statehood are balanced in partisanship, then the  $\kappa$  parameters are symmetric. Second, even if the potential reforms are reversible, the  $\kappa$  terms can still be asymmetric. The examples from the article support this point. Republicans' advantages in controlling statehouses combined with the leeway to enact certain anti-democratic policies at the state level contrast with Democrats' need to gain unified control of the federal government (and clear the filibuster pivot) to pass countermeasures. Hence the countermajoritarian provisions of the U.S. constitution bite less hard for the Republican party than for the Democratic party, i.e., asymmetric  $\kappa$ .

## B.2 RELAXING SIMPLIFYING ASSUMPTIONS

In the article, we summarized an extension in which we add numerous parameters that relax simplifying assumptions from the baseline model: differential size of the voter blocs, asymmetric sorting, an S-curve relationship between vote share and the probability of winning, and positive consumption for the losing party. Here we provide formal details. These alterations yield two additional findings. First, we highlight conditions under which forbearance is hardest to sustain when the parties are close to parity. Second, asymmetric sorting (while holding fixed the total amount of sorting) toward the party favored on the legal bounds decreases prospects for forbearance.

### B.2.1 Setup

The four new elements are:

- *Differential size of the voter blocs.* The measure of  $x$  voters is normalized to 1, whereas the measure of  $y$  voters is  $n > 0$ . Therefore,  $x$  voters are more numerous than  $y$  voters if  $n < 1$ , and less numerous otherwise. The baseline model is a special case with  $n = 1$ .
- *Asymmetric sorting.* Assume that party  $A$  gains support from  $s_x \in (0.5, 1]$  percent of  $x$  voters and  $s_y \in [0, 0.5)$  percent of  $y$  voters. Sorting is asymmetric if, for example,  $y$  voters strongly support  $B$  ( $s_y = 0.1$ , indicating 90% support for  $B$ ) but  $x$  voters only moderately support  $A$  ( $s_x = 0.6$ , indicating 60% support for  $A$ ). The baseline model is a special case of symmetric sorting with  $s_y = 1 - s_x$ . In that case, if  $y$  voters support  $B$  at 90%, then  $x$  voters must also support  $A$  at 90%.

These first two alterations imply that the effective fraction of voters that support  $A$  (after accounting for the bias) is:

$$z(b_t) \equiv \frac{(1 + b_t) \cdot s_x + (1 - b_t) \cdot s_y \cdot n}{1 + b_t + (1 - b_t) \cdot n}. \quad (\text{B.8})$$

One informative special case is perfect sorting into parties, i.e.,  $s_x = 1$  and  $s_y = 0$ . Substituting these terms into Equation B.8, multiplying the numerator and denominator by  $\frac{1}{1+n}$ , and simplifying yields:

$$z(b_t, v) = \frac{(1 + b_t) \cdot v}{(1 + b_t) \cdot v + (1 - b_t) \cdot (1 - v)}, \quad (\text{B.9})$$

in which  $A$ 's fraction of voter support is:

$$v = \frac{1}{1 + n}. \quad (\text{B.10})$$

- *S-curve.* Given  $A$ 's underlying voter support  $z(b_t)$  defined in Equation B.8, we assume this

maps into a probability of winning via the following function:

$$p(b_t) = \frac{\left(\frac{z(b_t)}{1-z(b_t)}\right)^\rho}{1 + \left(\frac{z(b_t)}{1-z(b_t)}\right)^\rho}, \quad (\text{B.11})$$

for  $\rho \geq 1$ . The baseline model is a special case of perfect proportionality with  $\rho = 1$ , in which case this equation simplifies to  $p = z$ . Any  $\rho > 1$  induces an S-shaped relationship between vote share and the probability of winning (see figures below). This is a common functional form in the literature on districting (e.g., King and Browning 1987, 1253; Cox and Katz 2002, 34).

- *Positive consumption for the losing party.* Assume that, in each period, the winning party consumes  $\pi \in (0.5, 1]$  and the losing party consumes  $1 - \pi$ . The baseline model is a special case with  $\pi = 1$ .

Given these alterations,  $A$ 's incentive-compatibility constraint is now:

$$\underbrace{p(0) \cdot \pi + (1 - p(0)) \cdot (1 - \pi)}_{\text{Forbearance}} \geq \underbrace{\left[ q(p_A^{\max}, p_B^{\max}) \cdot \pi + (1 - q(p_A^{\max}, p_B^{\max})) \cdot (1 - \pi) \right] \cdot (1 - \phi)}_{\text{Deviation}}, \quad (\text{B.12})$$

with:

$$q(p_A^{\max}, p_B^{\max}) \equiv \frac{(1 - \delta) \cdot p_A^{\max} + \delta \cdot p_B^{\max}}{1 - \delta \cdot (p_A^{\max} - p_B^{\max})}. \quad (\text{B.13})$$

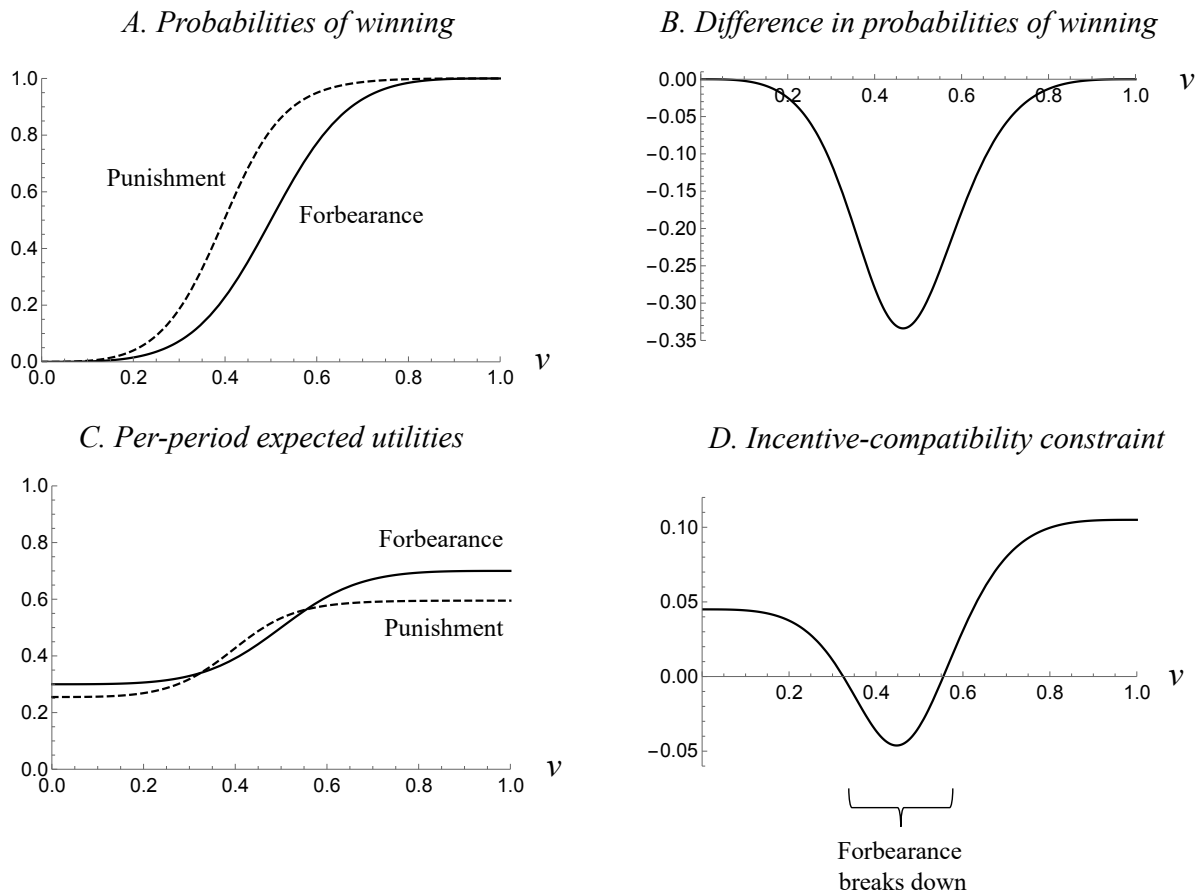
The last term is the right-hand side of Equation A.4 except the  $1 - \phi$  term. Additionally, we are now defining  $p_A^{\max}$  and  $p_B^{\max}$  using the terms from Equations B.8 and B.11. The structure of the incentive-compatibility constraint differs from the baseline model only because  $A$  gains positive consumption even in periods they lose.

## B.2.2 Analysis of Competitiveness of Elections

This extension enables us to assess an important question in contemporary American politics: does rough parity in voter support for the two parties create incentives to deviate from mutual forbearance? We highlight a set of parameter values in which this is indeed the case. In the following example, favorable legal bounds for party  $A$  imply that they can increase their (average) probability of winning by deviating, which creates incentives to do so. Yet this effect is insufficient to induce  $A$  to deviate. Because of the permanent cost  $\phi$  incurred by the winning party in each period of the punishment phase,  $A$  deviates only if their gain in probability of winning is sufficiently large. The S-curve relationship between voter support  $v$  (see Equation B.10) and the probability of winning implies that this gain is largest at intermediate values of  $v$ . To focus on the elements most relevant for studying tight partisan competition, we set some parameters to their values in the baseline model:  $s_x = 1$  and  $s_y = 0$ .

The four panels in Figure B.2 summarize the constituent elements that generate this finding, using  $z(b_t, v)$  as defined in Equation B.9,  $p(b_t)$  defined in Equation B.11, and parameter values stated in the note accompanying the figure. In every panel,  $v$  is on the x-axis, with higher values indicating higher voter support for  $A$ . We consider only  $A$ 's incentives to deviate because we assume that  $A$  is favored on legal bounds,  $b_x > -b_y$ . Consequently, analyzing  $A$ 's incentive-compatibility constraint is sufficient to assess if an equilibrium exists with perpetual forbearance (see Proposition 1).

**Figure B.2: Breakdown of Forbearance Under Highly Competitive Elections**



Parameter values:  $\delta = 0.7$ ,  $\phi = 0.15$ ,  $b_x = 0.3$ ,  $b_y = 0$ ,  $\rho = 3$ ,  $\pi = 0.7$ .

In Panel A, we compare  $A$ 's probability of winning under perpetual forbearance (solid curve) to the average in the punishment phase (dashed curve), as expressed in Equation B.13.<sup>1</sup> What ultimately matters for  $A$ 's incentive to deviate is the *difference* in the probabilities of winning, which Panel B directly assesses. The difference is negative for all values of  $v$  (i.e.,  $A$  wins with higher probability

<sup>1</sup> Each curve depicts the S-shaped relationship between  $A$ 's fraction of voter support and their probability of winning. At very low and very high values of  $v$ , small increases in  $v$  minimally affect  $A$ 's probability of winning. However, at intermediate values of  $v$ , the effect is large. The forbearance curve is perfectly symmetrical and unbiased:  $A$ 's probability of winning equals 50% at  $v = 0.5$  because  $b_t = 0$ ,  $n = 1$ , and  $s_y = 1 - s_x$ . By contrast,  $A$ 's probability of winning is higher in the punishment phase because of favorable legal bounds,  $b_x = 0.3$  and  $b_y = 0$ .



during the punishment phase than under forbearance) because the legal bounds favor  $A$ . Yet this difference is largest in magnitude for intermediate values of  $v$  because of the S-curve. If instead  $v$  is very small, then only upon raising  $b_x$  to very high levels is there a discernible effect on  $A$ 's probability of winning. Similarly, if  $v$  is very large, then  $A$  wins with very high probability even without bias.<sup>2</sup>

The probability-of-winning terms in Panel A are a key component of the expressions that ultimately determine whether forbearance is self-enforcing:  $A$ 's lifetime expected utility under perpetual forbearance (left-hand side of Equation B.12) versus the punishment phase (right-hand side), shown in Panel C. Marginal changes in  $v$  exert discernible effects on each of  $A$ 's expected utility terms only for intermediate values of  $v$ , and for reasons just discussed, the marginal effects are larger for the punishment curve than for the forbearance curve. By contrast, at very high  $v$ ,  $A$  wins with close to probability 1; thus, under forbearance, their per-period expected utility is essentially  $\pi = 0.7$ , and under punishment, it is  $1 - \phi$  multiplied by this amount. Conversely, at very low  $v$ ,  $A$  wins with close to probability 0; thus, under forbearance, their per-period expected utility is essentially  $1 - \pi = 0.3$ , and  $1 - \phi$  times this amount for punishment. Consequently, forbearance is necessarily preferred at low and high  $v$ , but not necessarily at intermediate values. Panel D shows clearly that  $A$  deviates only at intermediate values of  $v$  by presenting the difference between the two expected utility curves in Panel C, which is  $A$ 's incentive-compatibility constraint.

This discussion is an existence proof in the sense that the overall relationship between  $v$  and forbearance breakdown is indeterminate—the more complicated expressions in this extension make it impossible to generate analytic solutions and characterize more general conditions under which the previous result holds. However, it is possible to highlight some necessary components for the previous result: the S-curve mapping between vote share and probability of winning ( $\rho > 1$ ) and positive consumption for the losing party ( $\pi < 1$ ). The role of the former assumption is straightforward, and plays an important role in the preceding discussion; under perfect proportionality, we do not get an effect like the one shown in Panel B. Assuming  $\pi < 1$  plays a more subtle role. If  $\pi = 1$  (as in the baseline model), then when  $v$  is low,  $A$  certainly deviates because they suffer essentially no cost to doing so. They are out of power in nearly every period and therefore almost never suffers the inefficiency cost of obstruction. Thus, they prefer to tilt and gain the higher probability of winning—despite the fact that deviating only minimally raises their probability of winning (as shown for low values of  $v$  in Panel A). However, for  $\pi < 1$ ,  $A$  consumes even in periods they lose, and hence suffers a non-trivial cost if a fraction  $1 - \phi$  of consumption is lost in every period. When  $\pi$  is small enough—which indicates a larger share for the losing party—this

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<sup>2</sup> A subtle observation from Panel B is that the greatest difference in the probability-of-winning terms occurs at a value of  $v$  strictly less than 0.5, which is true for any parameter values. To see why, the forbearance curve hits its unique inflection point at  $v = 0.5$ , whereas the pro- $A$  bias in the punishment curve implies that curve hits its unique inflection point at some  $v < 0.5$ . Consequently, for any  $v$  strictly less than but within a neighborhood of 0.5, the second derivative is negative for the punishment curve (i.e., the curve is increasing and concave) but positive for the forbearance curve (i.e., increasing and convex). Therefore, decreasing  $v$  slightly below 0.5 necessarily increases the gap between these probabilities. The substantive importance of this observation is that even for parameters in which interior values of  $v$  cause deviation,  $A$ 's strongest incentives to deviate are at value of  $v$  lower than exact partisan parity.

effect dominates the small gains in probability of winning. Hence, this is a necessary condition to induce  $A$  to uphold forbearance at low  $v$ , which in turn generates the non-monotonic relationship shown in Panel D.

One implication from the discussion surrounding Figure B.2 corresponds with Lee’s (2016) argument that close partisan parity between Democrats and Republicans diminishes their incentives to cooperate in Congress. She conceptualizes cooperation (or what we term “forbearance”) as incentives for minority parties to adopt compromises with the majority party, as opposed to engaging in obstruction and gridlock. Her logic, which differs somewhat from ours, is as follows. When minority parties have low prospects for regaining the majority in the near future, then their only possible gains arise from cooperating with the majority party. By contrast, if the minority party is more competitive, then their members face incentives to obstruct the majority party’s agenda; by pandering to their constituency, they expect to bolster their prospects in the next election. According to this logic, the largest gains occur when the two parties are evenly matched, as our extension captures.

Perhaps surprising, the following countervailing effect does not muddy the relationship: although dominant parties gain less from deviating, they are also more immune to punishments by the opposing party—who is less likely to gain power. The effect we highlight dominates because hegemonic parties have a huge advantage over their opponent even without tilting the rules, and therefore do not want to incur the costs of obstruction that would arise in reaction to tilting. This explains why our result differs from that in De Figueiredo (2002). In his model, parties rotate in power over time and, in any period they choose policy, can pursue a compromise policy or a partisan policy. He assumes that if one party ever defects from the compromise policy, then in all future periods they play a grim trigger strategy in which the party in power always plays the partisan policy. In this game, parties can sustain *forbearance* only if they are *roughly balanced* in their partisan support. If instead one party is hegemonic, then they have incentives to deviate because, in the future, they expect to usually control the government.

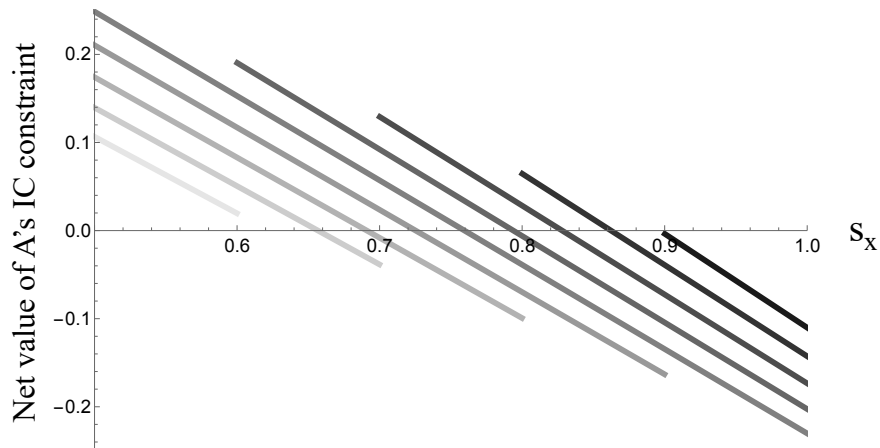
The key difference from our model is that in De Figueiredo (2002), the party that deviates *increases* the average amount consumed in each period they win by deviating to a more extreme (and more preferred) policy, in contrast to the  $1 - \phi$  penalty from obstruction during the punishment phase in our model. Instead, the gains from tilting in our model arise from endogenously changing the probability of winning, whereas these probabilities are exogenous in De Figueiredo (2002). Thus, in our model, dominant parties that tilt the rules gain a minimal boost in their probability of winning but lower consumption in periods they win, producing a disincentive to deviate that differs from De Figueiredo’s (2002) logic.

### B.2.3 Analysis of Asymmetric Sorting

Another important question in contemporary American politics is how asymmetries in polarization or sorting among the two parties affects prospects for a collapse in forbearance. Given the additional parameters for asymmetric sorting, we can hold fixed the *overall* degree of sorting between the two parties and vary the extent to which each voter bloc sorts into the two parties. As with our core analysis, asymmetric legal bounds matter for understanding the consequences of sorting in

American politics: more extreme sorting by legally favored voters makes forbearance more likely to break down.

**Figure B.3: Asymmetric Sorting and Equilibrium Forbearance**



Parameter values:  $\delta = 0.9$ ,  $\phi = 0.15$ ,  $b_x = 0.5$ ,  $b_y = 0$ . Darker colors indicate higher aggregate sorting.

To isolate the effects of asymmetric sorting, we return to several elements of the baseline model by assuming  $n = 1$ ,  $\rho = 1$ , and  $\pi = 1$ . Then, using  $z(b_t)$  as defined in Equation B.8, we assess how changes in  $s_y$  and  $s_x$  affect prospects for forbearance. In Figure B.3, we assume that  $A$  has the legal advantage ( $b_x = 0.3$  and  $b_y = 0$ ). Each line shows the value of  $A$ 's incentive-compatibility function, with positive values indicating that  $A$  exercises forbearance and negative values that  $A$  deviates. Each line fixes aggregate partisan sorting, with darker colors indicating higher values.<sup>3</sup> On the horizontal axis, we vary the extent to which  $x$  voters sort into party  $A$ . Recall that we always assume  $A$  is advantaged among these voters, hence the lower bound of the horizontal axis is 0.5. Thus, when focusing attention on a particular line but moving rightward along the horizontal axis, we are increasing the fraction of aggregate sorting that comes from  $x$  voters supporting Party  $A$ ; and, to keep aggregate sorting fixed, we are decreasing the fraction of  $y$  voters that associate with  $B$ . In the baseline model, aggregate sorting is  $2s - 1$ , which ranges between 0 and 1 because  $s \in (.5, 1]$ , and  $x$  and  $y$  voters each contribute a fraction 0.5 to total sorting. In this extension, aggregate sorting is  $s_x - s_y$ , which ranges between 0 and 1 because  $s_x \in (0.5, 1]$  and  $s_y \in [0, 0.5)$ . Given the extra parameter, increases in  $s_x$  and decreases in  $s_y$  independently enhance aggregate partisan sorting.

Every line is downward sloping in the figure. This implies that regardless of aggregate sorting, Party  $A$  is more likely to deviate when  $x$  voters are more extremely sorted.

<sup>3</sup> For the lighter lines, the highest possible value of  $s_x$  is truncated because larger  $s_x$  would cause aggregate sorting to exceed the fixed amount specified for the line. For the darker lines, the lowest possible value of  $s_x$  is truncated because smaller  $s_x$  would cause aggregate sorting to be lower than the fixed amount specified for the line. Partisan sorting is symmetric at the midpoint of each line segment.

### B.3 ENDOGENOUS PARTISAN SORTING

In the article, we summarized an extension with endogenous partisan sorting, and here we provide formal details. Allowing political actors to make strategic choices that affect partisan sorting does not qualitatively change our main implications about how legal bounds affect prospects for forbearance. Instead, we show how asymmetric legal bounds can encourage actions that induce extreme sorting. We highlight a complementarity between tilting the electoral rules and pursuing culturally divisive appeals, which resonates with patterns in contemporary American politics.

Starting from the baseline model, we incorporate two elements of the setup from Appendix B.2: differential size of the voter blocs and asymmetric sorting.<sup>4</sup> Here, we add one additional element. At the outset of the game,  $A$  decides whether to emphasize economic or cultural issues in their campaign platforms and legislation. This one-time choice determines the value of the sorting parameters, which are then fixed for the remainder of the game. To align the setup with empirical intuition, we adopt substantive labels:  $A$  is the conservative party, members of the  $x$  voter bloc are rural, and members of the  $y$  voter bloc are urban. The following assumptions restrict attention to substantively interesting parameter values:

- There is common knowledge that the conservative party wins the election in the first period. Thus, their initial choice of economic versus cultural appeals coincides with a period in which they can also choose whether to tilt the institutional rules.
- Cultural appeals generate more extreme sorting than economic appeals by increasing the conservative party's support among rural voters and decreasing its support among urban voters. Specifically, we assume perfect sorting under cultural appeals (every rural voter supports the conservative party and every urban voter supports the other party) and imperfect sorting under economic appeals, denoted by  $s_x \in (0.5, 1)$  and  $s_y \in (0, 0.5)$ .
- The conservative party's policy platform determines whether the path of play is forbearance or punishment. Specifically, if the conservative party chooses an economic appeal, then forbearance holds along the equilibrium path; but if the conservative party chooses a cultural appeal, then they deviate. Formally, this means that we set the parameters such that each party's incentive-compatibility constraint (Equations A.4 and A.8) holds when the sorting parameters are interior values of  $s_x$  and  $s_y$ , but the conservative party's IC constraint (Equation A.4) fails with  $s_x = 1$  and  $s_y = 0$ ; while using Equation B.8 to denote the conservative party's effective voter support.<sup>5</sup>

Given these scope conditions, we can use Equations A.4 and B.8 to show that the conservative party chooses cultural appeals if their lifetime expected utility to a punishment equilibrium with cultural appeals exceeds their lifetime expected utility to a forbearance equilibrium with economic appeals:

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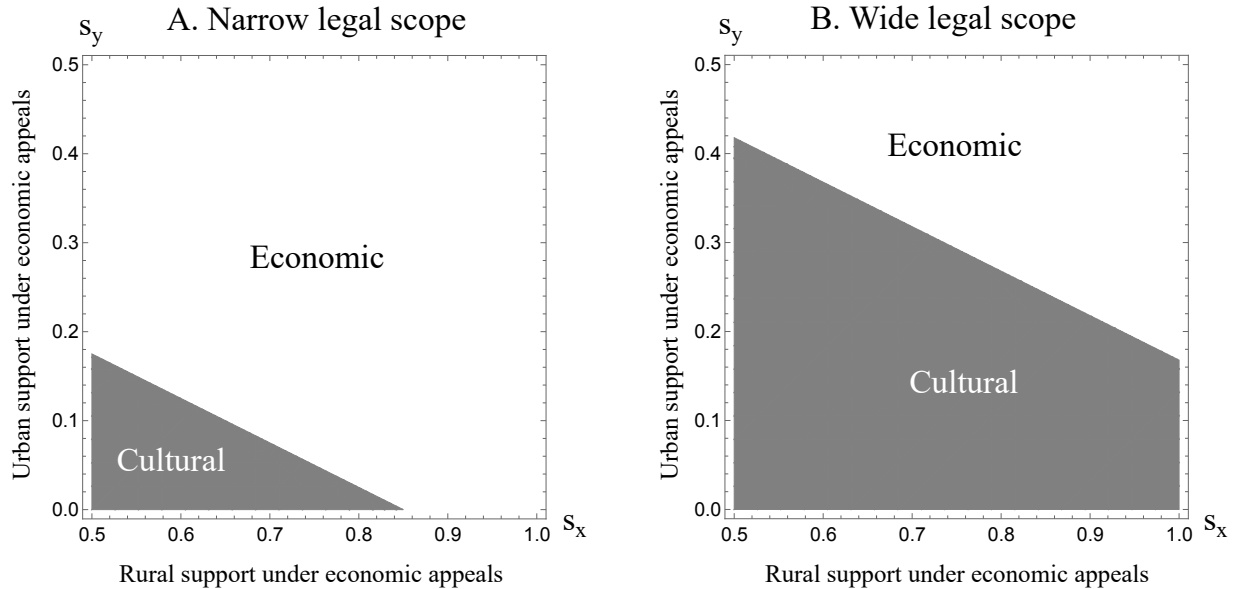
<sup>4</sup> The other elements of that extension are superfluous for the present purposes, so here we set  $\rho = 1$  and  $\pi = 1$ .

<sup>5</sup> For the analysis, it does not matter whether party  $B$ 's IC constraint (Equation A.8) holds or fails with  $s_x$  and  $s_y$  at interior values.

$$\underbrace{\frac{s_x + s_y \cdot n}{1 + n}}_{\text{Economic appeals and forbearance}} < \underbrace{\frac{(1 - \delta) \cdot \frac{1+b_x}{1+b_x+(1-b_x)\cdot n} + \delta \cdot \frac{1+b_y}{1+b_y+(1-b_y)\cdot n}}{1 - \delta \cdot \left( \frac{1+b_x}{1+b_x+(1-b_x)\cdot n} - \frac{1+b_y}{1+b_y+(1-b_y)\cdot n} \right)}}_{\text{Cultural appeals and punishment}} \cdot (1 - \phi)$$

This extension yields intuitive comparative statics, given the preceding findings. Figure B.4 visually summarizes the main insights.<sup>6</sup> Each panel is a region plot in which the shaded region corresponds with parameter values in which the conservative party chooses cultural appeals. We vary the conservative party's support among rural voters under economic appeals ( $s_x$ ) on the horizontal axis and its support among urban voters under economic appeals ( $s_y$ ) on the vertical axis. Recall that we assume perfect sorting if the conservative party chooses cultural appeals, and hence the sorting parameters under economic appeals can easily be interpreted *relative* to their respective values under cultural appeals. Panel A isolates the effects of endogenous sorting, as opposed to other elements in our model, by assuming that neither player has any legal leeway to tilt the playing field,  $b_x = b_y = 0$ . By contrast, in Panel B, the legal bounds asymmetrically favor party A because  $b_x = 0.6$  whereas  $b_y = 0$ .

**Figure B.4: Support for Conservative Party and Equilibrium Forbearance**



Parameters:  $\delta = 0.9$ ,  $\phi = 0.15$ ,  $b_y = 0$ ,  $n = 2$ . In Panel A,  $b_x = 0$ . In Panel B,  $b_x = 0.6$ .

Figure B.4 highlights three factors that encourage the conservative party to focus on cultural appeals:

1. Relatively low support from rural  $x$  voters under economic appeals, i.e., moving leftward in either panel. In this case, the conservative party has much to gain by switching the focus to

<sup>6</sup> Unlike with Figure B.2 in Appendix B.2, the intuition from this figure is straightforward to generalize for a broader set of parameter values.

cultural issues because their cultural appeals resonate considerably better with rural voters than do their economic policies.

2. Low support from urban  $y$  voters under economic appeals, i.e., moving downward in either panel. In this case, the conservative party has little to lose by switching the focus to cultural issues given its low support among urban  $y$  residents regardless of its policy platform. These first two results are notable because they do not hinge on asymmetric legal bounds, as Panel A demonstrates.
3. Wide legal bounds that asymmetrically favor the conservative party, i.e., moving from Panel A to Panel B. Wider legal bounds raise the conservative party's benefit to deviating by creating more leeway to favor rural  $x$  voters. This last finding highlights that introducing endogenous sorting does not qualitatively alter the core intuition from the baseline model.

These factors also highlight two distinct motivations for conservative parties to switch from economic to cultural appeals that carry different normative implications for the health of democracy.

- **Competing for votes.** With  $b_x = 0$ , the conservative party deviates only if the amount of support it gains among rural  $x$  voters is large relative to the amount of support it loses among urban  $y$  voters. This is consistent with the core idea in democratic competition that parties should shift their platforms to win popular support, even if the consequence of extreme polarization is normatively undesirable for other reasons.
- **Tilting the playing field.** Higher  $b_x$  complements these incentives to deviate. This case is highly inconsistent with basic notions of democracy. The conservative party is encouraged to pursue divisive policies because it enjoys considerable leeway to over-weight its supporters—that is, changing the rules rather than adopting popular policies. Anti-democratic tilting enlarges the conservative party's gains from maximizing its support from urban  $x$  relative to rural  $y$  voters. This is similar to the baseline model, with the addition that the conservative party takes strategic actions that induce extreme sorting—which highlights for conservative parties a complementarity between tilting the electoral rules and pursuing culturally divisive appeals.

## C SUPPLEMENTARY INFORMATION FOR EMPIRICAL APPLICATIONS

The first two sections provide supporting information about gerrymandering and voting rights, as discussed in the article. The following sections consider additional applications summarized briefly in the discussion section of the article: state-level separation of powers and state expansion.

### C.1 GERRYMANDERING

#### C.1.1 Geographic Concentration and Biased Districting

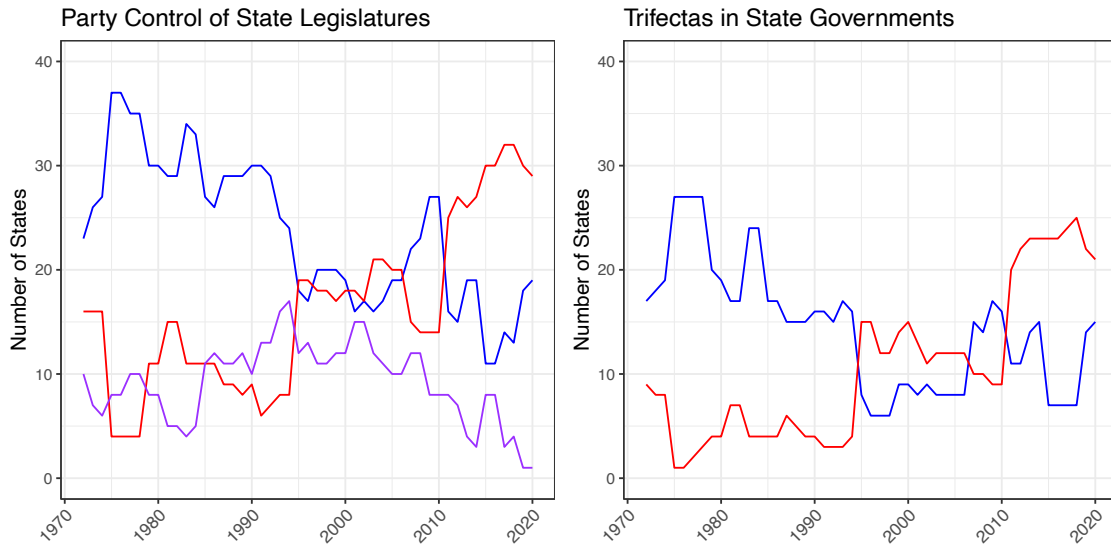
In the article, we briefly discussed why extreme partisan sorting disadvantages Democrats if they wanted to draw biased legislative districts to favor them (without violating legal bounds). Extreme geographic sorting usually enables Republicans to draw highly favorable maps if they control districting, whereas Democratic map-drawers face greater constraints. If the size of the district is smaller than the city, then tight concentration of Democratic voters in urban areas enables Republican map-drawers to pack Democratic voters into the same district. Alternatively, if the size of the district is larger than the city, then Republican map-drawers can crack the city to prevent its residents from electing a preferred representative (Rodden, 2019; Eubank and Rodden, 2019). In fact, packing minority populations into single districts is mandated by the Voting Rights Act, which compels politicians to create districts with a majority of minority groups wherever possible. By contrast, Democrats that control districting cannot draw commensurately packed Republican districts, whose support is more geographically diffuse. A particularly important legal constraint is district contiguity. Otherwise, Democratic map-drawers could draw non-contiguous districts in which densely Democratic city blocks overwhelm Republican strongholds in rural areas merged into the same district. Existing scholarship provides various pieces of evidence that Democratic voters are inefficiently geographically concentrated for the purposes of districting: Chen and Rodden (2013) use automated districting simulations, Sussell (2013) and Martin and Webster (2018) use voter registration files to show the concentration of neighborhoods by party, and Rodden (2019) demonstrates a strong correlation between population density and Democratic vote share.

The requirement for contiguous districts dates back to a 1842 statute, and thus would not require a federal amendment to alter. Thus, in principle, Democrats could conceivably eliminate this source of bias. However, the absurdity of allowing for non-contiguous districts indicates the extent of impediments that Democrats face to eliminating structural biases.

Furthermore, even if somehow Democrats were able to win unified control of the federal government and get their caucus on board with eliminating the requirement for contiguous districts, they would not be able to capitalize on their legislative victory without controlling statehouses. Yet natural geographic concentration and asymmetric possibilities for gerrymandering also create a disadvantage for Democrats to control statehouses—which is needed to gain the opportunity to draw the districts. This contributed to Republicans’ disproportionate control over districting following the 2010 census. In the 2010 elections, Republicans achieved a trifecta in government for multi-district states that totaled 204 seats, compared to 47 for Democrats; the remaining states had independent commissions or divided government. One contributing factor was natural regression

for the governing party, the Democrats, in midterm elections. However, rather than a simple mean-reversion story, Republican control of state legislatures and trifectas in fact accelerated *after* 2010 (see [Figure C.1](#)). Overall, the same geographic and racial factors that naturally pack Democratic voters into U.S. House districts also create disadvantages in state houses and senates (Rodden, 2019), which Republicans aggressively sought to capitalize on for post-2010 redistricting (Daley, 2017; Hertel-Fernandez, 2019).

**Figure C.1: State-Level Partisan Control, 1972–2020**



Blue lines are number of Democratic-controlled states, red are Republican-controlled states, and purple is split (plus Nebraska).

Data sources for party control:

- 1972–2009: Klarner (2013)
- 2010–2020: <https://www.ncsl.org/research/about-state-legislatures/partisan-composition.aspx>



## C.1.2 Court Cases Against Unconstitutional Gerrymanders

Table C.1 lists every post-2010 districting plan that a court struck down. We interpret these cases as evidence both that Republicans are seeking to push their advantages to the legal maximum and that Democrats are pushing back.

**Table C.1: Successful Court Challenges to Republican Redistricting Plans Post-2010**

<i>State</i>	<i>Outcome</i>	<i>Details on legal challenges</i>
Florida	State court strikes down map for violating state constitution	Legislative privilege on the release of legislative communications about redistricting and state constitutional challenges (specifically, a 2010 state constitutional amendment to ban partisan gerrymandering). The case was bought by the “League of Women Voters, Common Cause and coalition of Democrat-leaning voters” (Tampa Bay Times).
North Carolina	Federal court strikes down map for violating Voting Rights Act (VRA)	In November 2011, state Democrats (later joined by community groups) filed suit on the grounds of racial packing and split precincts. Congressional plan was struck down (on the unjustified use of race) by federal court in 2016. Subsequent remedial plan struck down by state court “as a partisan gerrymander in violation of the state constitution.”
Pennsylvania	State court strikes down map for violating state constitution	Partisan challenge; “On June 15, 2017, the League of Women Voters of Pennsylvania and a group of Democratic Pennsylvania voters challenged the state’s 2011 congressional map in state court as an unconstitutional partisan gerrymander under the state constitution” (NCSL).
Texas	Federal court strikes down map for violating VRA	Plaintiffs in the challenges bought against the Texas Congressional plans include the League of United Latin American Citizens, the Mexican American Legislative Caucus, the Texas State Conference of N.A.A.C.P. Units, three members of Congress and Texas voters (NYT). Many challenges and back-and-forth between lower courts and Supreme Court. Equal population, Equal Protection, and racial (VRA) challenges; federal court found that “the racially discriminatory intent and effects that it previously found in the 2011 plans carry over into the 2013 plans where those district lines remain unchanged” (NCSL).
Virginia	Federal court strikes down map for violating VRA	Racial (equal protection) challenges; Court ruled in favor of Democratic plaintiffs and struck down plan in 2014, based on “unjustified predominant use of race; on Jan. 7, 2016, the court drew a remedial plan itself” (All About Redistricting).

*Notes:* The table lists every post-2010 districting plan that a court (either state or federal) struck down. In every case, Republicans drew the maps and were the defendant in court.

*Sources:*

Information about the state, party control of redistricting, and challenge from <https://live-all-about-redistricting.pantheonsite.io/resources/maps-across-the-cycle-2010-congress>.

Information about the nature of the challenge from <https://www.ncsl.org/research/redistricting/redistricting-case-summaries-2010-present.aspx>.

Florida:

- Tampa Bay Times: <https://www.tampabay.com/news/politics/stateroundup/documents-reveal-secret-florida-senate-process-to-draw-district-maps/2242077/>
- Vox: <https://www.vox.com/2015/12/5/9851152/florida-gerrymandering-ruling>
- Washington Post: <https://www.washingtonpost.com/news/morning-mix/wp/2015/07/10/one-of-americas-snakiest-congressional-districts-has-just-been-trashed-by-the-florida-supreme-court/>

- Washington Post: <https://www.washingtonpost.com/news/the-fix/wp/2014/08/05/the-tricky-racial-politics-of-undoing-gerrymandering-in-florida/>

North Carolina:

- Ballotpedia: [https://ballotpedia.org/Redistricting\\_in\\_North\\_Carolina\\_after\\_the\\_2010\\_census](https://ballotpedia.org/Redistricting_in_North_Carolina_after_the_2010_census)
- All About Redistricting: <https://redistricting.ils.edu/state/north-carolina/?cycle=2020&level=Congress&startdate=>
- New York Times: <https://www.nytimes.com/2019/06/27/us/what-is-gerrymandering.html>

Pennsylvania:

- National Conference of State Legislatures (NCSL): <https://www.ncsl.org/research/redistricting/redistricting-case-summaries-2010-present.aspx>
- Brennan Center: <https://www.brennancenter.org/our-work/analysis-opinion/pennsylvanias-partisan-gerrymandering-saga-ends-victory-voters>
- New York Times: <https://www.nytimes.com/interactive/2018/02/19/upshot/pennsylvania-new-house-districts-gerrymandering.html>
- NPR: <https://www.npr.org/2018/03/19/594993409/supreme-court-delivers-blow-to-republicans-declines-to-take-up-pa-redistricting>

Texas:

- NCSL: <https://www.ncsl.org/research/redistricting/redistricting-case-summaries-2010-present.aspx>
- NPR: <https://www.npr.org/2012/01/20/145532526/high-court-scrap-lesser-courts-redistricting-maps>
- New York Times: <https://www.nytimes.com/2017/08/15/us/texas-districts-unconstitutional.html>

Virginia:

- All About Redistricting: <https://redistricting.ils.edu/state/virginia/?cycle=2020&level=Congress&startdate=>
- Washington Post: [https://www.washingtonpost.com/local/virginia-politics/court-throws-out-virginia-congressional-map/2014/10/07/97fb866a-4e56-11e4-8c24-487e92bc997b\\_story.html](https://www.washingtonpost.com/local/virginia-politics/court-throws-out-virginia-congressional-map/2014/10/07/97fb866a-4e56-11e4-8c24-487e92bc997b_story.html)

## C.2 VOTER SUPPRESSION

**Data for Figure 5.** Numerous studies examine the relationship at the state level between party control, switches in party control, and the adoption of policies either expand or contract voting rights (e.g., Yoshinaka and Grose, 2005; Bentele and O’Brien, 2013; Rocha and Matsubayashi, 2014; Biggers and Hanmer, 2015, 2017; Grumbach, 2018). We draw from this literature to compile several variables that measure different aspects of voting restrictions at the state level. Our starting point for the variables was existing studies with data on years that a policy was enacted, or panel data for a subset of years in our temporal sample. We supplemented these datasets with additional sources to create panel variables with complete data on each restriction in place between 1972 and 2020 in every state (although we omit Nebraska from the sample because of its non-partisan state legislature).

- STRICT PHOTO VOTER ID

- *Description:* Variable equals 1 in any year a state requires voters to present a valid photo ID to vote, and 0 otherwise.
- Our starting point was Table 2 of Highton (2017), which indicates the year in which a state passed a strict photo ID law (in almost all cases, the requirement that a voter show a photo ID in order to cast a ballot) for any state that did so between 2005 (the first year such a law was enacted) and 2015. We converted this information into a panel variable and updated the information through 2020 using data from the National Conference of State Legislatures (NCSL; <https://www.ncsl.org/research/elections-and-campaigns/voter-id.aspx>) and additional sources listed below. The following lists every state that at one point adopted a strict photo voter ID law, but the law was changed or struck down at some point before or during 2020.
  - \* Arkansas: ended in 2014 (<https://www.brennancenter.org/our-work/analysis-opinion/arkansas-photo-id-law-struck-down-violates-state-constitution>).
  - \* Missouri: ended in 2006 (<https://www.ncsl.org/documents/LSSS/VoterIDdoc.pdf>).
  - \* North Carolina: ended in 2015 (<https://www.ncsl.org/research/elections-and-campaigns/voter-id.aspx>).
  - \* North Dakota: ended in 2016 (<https://www.ncsl.org/research/elections-and-campaigns/voter-id.aspx>).
  - \* Pennsylvania: ended in 2014 (<https://www.nytimes.com/2014/01/18/us/politics/pennsylvania-voter-id-law-struck-down.html>).
  - \* Texas: ended in 2017 (<https://www.ncsl.org/research/elections-and-campaigns/states-and-election-reform-the-canvass-june-2017.aspx>).
  - \* Virginia: ended in 2020 ([https://www.thecentersquare.com/virginia/photo-identification-no-longer-needed-to-vote-in-virginia/article\\_b478018e-c235-11ea-9b45-d734b44a9abd.html](https://www.thecentersquare.com/virginia/photo-identification-no-longer-needed-to-vote-in-virginia/article_b478018e-c235-11ea-9b45-d734b44a9abd.html)).

- \* Alabama: 2011–2020. Although two election officials can sign sworn statements saying they know the voter, we follow Highton (2017) in coding this as strict photo voter ID given the high threshold to voting without a photo ID.

- EX-FELON DISENFRANCHISEMENT

- *Description*: Main variable (used in Figure 5) equals 1 in any year a state permanently disenfranchises anyone convicted of a felony, and 0 otherwise. The variables used in Figure C.2 are similarly structured as indicators for whether parolees or probationers are restricted from voting.
- For the main felon disenfranchisement variable, we use Behrens, Uggen and Manza’s (2003) panel variable for 1972–2002. We updated the data for 2003–2019 using the Sentencing Project (Table 2. Felony Disenfranchisement Policy Changes, 1997–2019, <https://www.sentencingproject.org/publications/felony-disenfranchisement-a-primer>), and for 2020 as well (*Table 1: Summary of State Felony Disenfranchisement Restrictions in 2020*: <https://www.sentencingproject.org/publications/locked-out-2020-estimates-of-people-denied-voting-rights-due-to-a-felony-conviction>).
- Indicators for whether the state adopted and keeps parolees or probationers restricted from voting come from the Sentencing Project. In order to create that dataset, we take *Table 1: Categories of Felons Disenfranchised under State Law* (<https://www.sentencingproject.org/wp-content/uploads/2016/01/Losing-the-Vote-The-Impact-of-Felony-Disenfranchisement-Laws-in-the-United-States.pdf>) as the starting point to anchor the state policies in place in 1998. We update the states that changed policies with *Table 2: Felony Disenfranchisement Policy Changes, 1997-2016* (<https://www.sentencingproject.org/publications/felony-disenfranchisement-a-primer>) and updating to 2020 and verifying with various annual Sentencing Project Reports and information from *Table A3.2: Summary of State Felon Disfranchisement Restrictions* in Manza and Uggen (2008):
  - \* <https://web.archive.org/web/20081022231012/http://www.sentencingproject.org/tmp/File/table7.pdf>
  - \* <https://sentencingproject.org/wp-content/uploads/2016/01/State-Level-Estimates-of-Felon-Disenfranchisement-in-the-United-States-2010.pdf>
  - \* <https://www.sentencingproject.org/publications/6-million-lost-voters-state-level-estimates-felony-disenfranchisement-2016>
  - \* <https://www.sentencingproject.org/publications/felony-disenfranchisement-a-primer>
  - \* <https://www.sentencingproject.org/publications/locked-out-2020-estimates-of-people-denied-voting-rights-due-to-a-felony-conviction>
- Some of the 1998 Sentencing Project listings exhibit discrepancies with other sources:
  - \* Texas: Although the Sentencing Project categorizes TX as permanently disenfranchising ex-felons, in 1998, the legislature allowed ex-felons to vote post-

sentencing (<https://www.opensocietyfoundations.org/uploads/63a2cd15-c53c-4e72-b7ef-dcf7ceb8031d/legchanges-report.pdf>), which we incorporate into our coding.

- \* Louisiana: The Sentencing Project lists LA as permitting parolees and probationers to vote in 1998, and switching to restricting both categories in 2010. However, the actual interpretation by state officials is that no voting is allowed during any part of the sentence (<https://www.prisonlegalnews.org/media/publications/2005%20sentencing%20project%20report%20on%20voting%20laws.pdf>). Thus, we code parolees and probationers as disenfranchised throughout the time period.
- \* Idaho: The Sentencing Project lists Idaho as permitting parolees and probationers to vote in 1998, whereas Manza and Uggen (2008) list both categories as restricted in 2002. However, there were no changes to state law listed in <https://www.sentencingproject.org/publications/felony-disenfranchisement-a-primer>, so we code both categories as restricted throughout the entire time period.

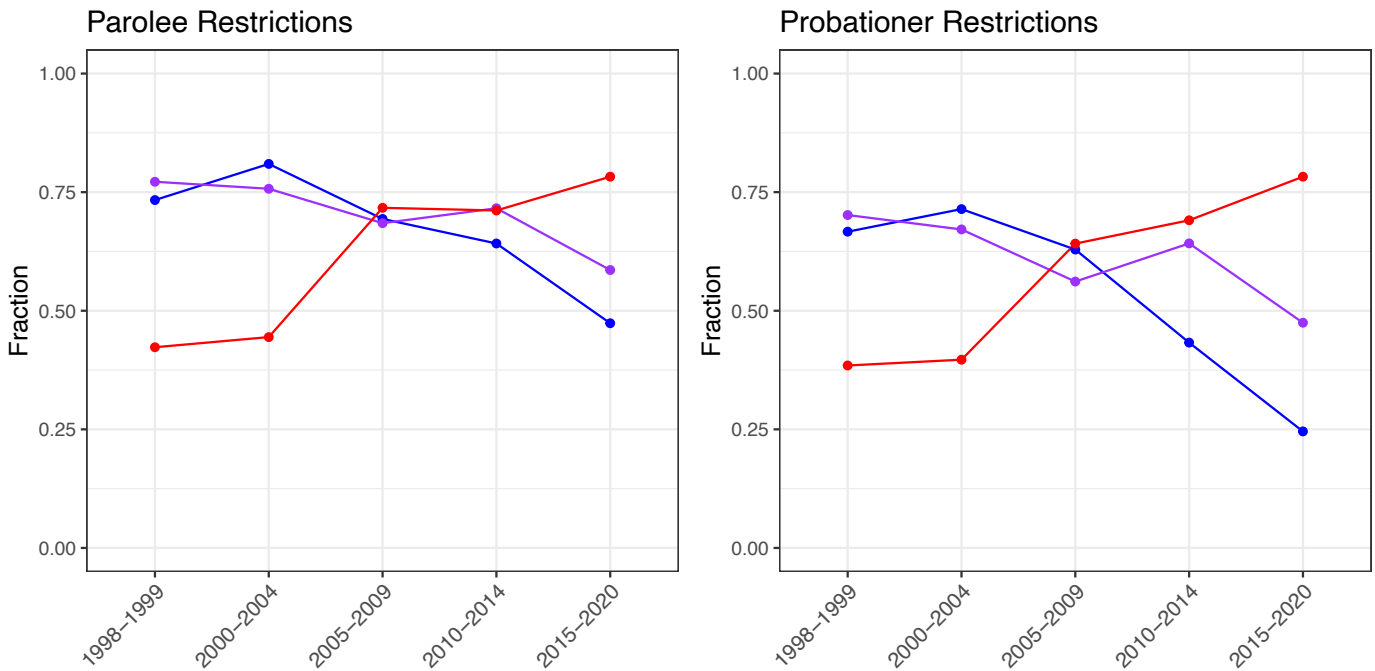
- RESTRICTIONS ON ABSENTEE VOTING

- *Description*: Variable equals 1 in any year a state lacks no-excuse absentee voting, and 0 otherwise. This keeps with our convention of positive values indicating voter restrictions.
- Biggers and Hanmer (2015) provide state-level panel data on no-excuse absentee voting policies from from 1972–2010. NCSL or Ballotpedia provide lists of states that have no-excuse absentee voting in 2020 (<https://www.ncsl.org/research/elections-and-campaigns/vopp-table-1-states-with-no-excuse-absentee-voting.aspx>; [https://ballotpedia.org/Absentee/mail-in\\_voting,\\_2020](https://ballotpedia.org/Absentee/mail-in_voting,_2020)). We use NCSL and Ballotpedia to update Biggers and Hanmer (2015) to 2020. If either NCSL or Ballotpedia list the state as having no-excuse absentee voting in 2020 but the state is not listed as having no-excuse absentee voting in the Biggers and Hanmer (2015) dataset, we consulted the additional sources listed below to discern in which year the policy was implemented.
  - \* Michigan adopted no-excuse absentee voting in 2018 via ballot initiative (<https://www.liebertpub.com/doi/pdf/10.1089/elj.2020.066>).
  - \* Minnesota adopted no-excuse absentee voting in 2013 (Hassell 2017; <https://www.startribune.com/no-excuse-needed-to-vote-absentee-in-minnesota/264181781/>).
  - \* Virginia adopted no-excuse absentee voting in 2020 (<https://lis.virginia.gov/cgi-bin/legp604.exe?201+sum+HB1>; <https://www.whsv.com/content/news/Va-lawmakers-pass-bill-to-allow-no-excuse-absentee-voting-568146341.html>).

- One coding assumption we use to complete the panel data is that once a state adopts no-excuse absentee voting, we code it as having this provision through 2020. To justify this assumption, we analyzed Biggers and Hanmer’s (2015) replication data as well as annual reports from the Brennan Center, which do not contain any counterexamples.
  - \* While Minnesota “adopted no-excuse absentee voting on a trial basis in 1991, permitting residents to vote in this manner only for the 1992 presidential election,” because of the temporary nature, Biggers and Hanmer (2015) code the state as never enacting this policy (Biggers and Hanmer, 2015, Supplemental Appendix). Every other state in their replication dataset unambiguously supports our aforementioned coding assumption of no switching back.
  - \* Several states proposed bills in 2014 to roll back absentee voting, but none were enacted (<https://www.brennancenter.org/our-work/research-reports/voting-laws-roundup-2015>). In several instances, bills to restrict no-excuse absentee voting passed one, but not both, chambers (e.g., the Kentucky House in 2018 <https://www.brennancenter.org/our-work/research-reports/voting-laws-roundup-2018> and the Georgia Senate in 2020 <https://www.brennancenter.org/our-work/research-reports/voting-laws-roundup-2020>). Some states passed legislation to alter who can collect and turn in absentee ballots, but without repealing no-excuse absentee voting (e.g., <https://www.brennancenter.org/our-work/research-reports/voting-laws-roundup-2016> and <https://www.brennancenter.org/our-work/research-reports/voting-laws-roundup-2017>).
  - \* Although our coding assumption appears accurate for the previous decade, scholars who extend the dataset past 2020 will need to incorporate reversals that various Republican-controlled state legislatures passed in the first half of 2021 (<https://www.brennancenter.org/our-work/research-reports/voting-laws-roundup-may-2021>).

**Additional patterns in ex-felon disenfranchisement.** In Figure 5, we use a measure with long temporal coverage that indicates whether ex-felons are *permanently* disenfranchised. To provide more insights into divergent patterns of ex-felon disenfranchisement between Democratic- and Republican-controlled states, we bring together a range of systematic state-level data on different categories of ex-felon disenfranchisement over the past two decades. States that allow ex-felons to vote in some capacity (i.e., score a 0 on our main measure) do so to different degrees. Some states allow felons to vote even while imprisoned, others while on parole, and others while on probation. Figure C.2 present plots for state restrictions on parolee and probationer voting rights. Note that any state that disenfranchises parolees also disenfranchises probationers, hence the right panel is the more restrictive measure. The patterns are qualitatively similar to those in Figure 5 for permanent ex-felon disenfranchisement: a reversal of fortunes over the time period such that Republican-controlled states are now considerably more likely than are Democratic-controlled states to restrict voting rights for ex-felons.

**Figure C.2: Parolee/Probationer Restrictions by Partisan Control of Statehouses, 1998–2020**



### C.3 STATE-LEVEL SEPARATION OF POWERS

Since 2016, Republican-controlled legislatures in four states (North Carolina, Wisconsin, Michigan, Kansas) have attempted to strip key prerogatives from the governor after a Democrat was elected to replace a Republican governor. In North Carolina, a series of bills passed in a special session mandated that the incoming governor’s cabinet appointments must receive legislative approval, cut the size of the governor’s administration, changed the Board of Elections to be controlled by Republicans in election years, and gave the Republican-controlled appeals court the first right to hear lawsuits instead of the Democratic-controlled state Supreme Court. Election law scholar Rick Hasen claimed that North Carolina set a “precedent in playing a kind of political hardball that we haven’t seen in other places.”<sup>7</sup> The Republican House Speaker in Wisconsin, Robin Vos, explicitly stated the partisan intent of their rule changes: “we are going to have a very liberal governor who is going to enact policies that are in direct contrast to what many of us believe in.” Although state courts have struck down many of these laws for violating separation-of-powers clauses in the state constitution, a back and forth between the courts and legislature continues as Republican legislators attempt to modify the laws to survive judicial review.<sup>8</sup>

Our theory, which highlights the importance of permissive legal bounds combined with extreme partisan sorting, suggests the following strategic motivation. Aside from the obvious short-term gains from these actions, over the longer term, Republicans benefit from a weakened governor because of their comparative advantage in controlling state legislatures. In swing states, the relationship between vote share and legislative seats (with single-member districts) is biased in favor of Republicans for the same reasons as discussed for partisan sorting in the section on gerrymandering.<sup>9</sup> However, Republicans lack this advantage in at-large gubernatorial elections. Thus, in states like North Carolina, a scenario in which a Democrat occupies the governor’s office while the Republicans hold a majority in both state legislative chambers is more likely than the converse. This creates an incentive to exploit legal leeway to weaken the powers of the governor. Moreover, Republicans can anticipate the ability to block possible future Democratic attempts to strengthen gubernatorial powers even further because, in these four states, Republicans’ comparative advantage in controlling the state legislature is also an absolute advantage.

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<sup>7</sup> <https://www.vox.com/policy-and-politics/2018/12/5/18125544/north-carolina-power-grab-wisconsin-michigan-lame-duck>.

<sup>8</sup> <https://www.nytimes.com/2018/12/05/us/politics/wisconsin-governor-legal-challenge.html>.

<sup>9</sup> By contrast, in heavily Republican states, the geographic concentration of Democrats can work to their advantage by making it impossible to make each district a microcosm of the state (in which case Republicans could win every seat). Rodden (2019) discusses the examples of Alabama and Utah for U.S. House districting, although the same point applies to state legislatures.



## C.4 STATE EXPANSION

Another important component of contemporary debates over voting rights and representation is the prospect of statehood for Washington, D.C. and Puerto Rico (see Appendix B.1.2 for historical cases of adding states). This discussion is somewhat more speculative because it concerns only actions *not* yet taken, but offers a clear example of a unilateral action that Democrats could take to bias institutions in their favor given the expectation that both states would tend to elect Democrats. Yet as with the possible actions we highlight for Democrats with regard to gerrymandering and voting rights, these institutional reforms would expand rather than contract voting rights.

**Legal leeway and sorting.** The most concrete legal bound on adding states comes from Article IV, Section 3 of the federal constitution: “New States may be admitted by the Congress into this Union; but no new States shall be formed or erected within the jurisdiction of any other State; nor any State be formed by the Junction of two or more States, or parts of States, without the Consent of the Legislatures of the States concerned as well as of the Congress.” Another possible legal bound arises from the minimum size of territories for statehood, as set in the Northwest Ordinance of 1787. However, state-size guidelines were routinely violated in the nineteenth century (Stewart and Weingast, 1992), and lack legal standing.

An additional specific stipulation for D.C. arises in Article I, Section 8 of the federal constitution: Congress will exercise exclusive jurisdiction of a federal “District (not exceeding ten Miles square) as may, by Cession of particular States, and the Acceptance of Congress, become the Seat of the Government of the United States.” Some argue that this poses an inconsequential restriction. That is, D.C. can be added as a state by the standard process, as opposed to only by constitutional amendment. The new state of D.C. would simply exclude the White House, Congress, and National Mall, which would remain as the federal district (American Civil Liberties Union, 2019). However, others challenge this legal position by arguing that either (a) this is an unconstitutional work-around of the “enclave clause” or (b) a vote from Maryland’s state legislature would also be needed because Maryland originally ceded the land for the contemporary federal district (Heritage Foundation, 1993).

Unlike the legal bounds for gerrymandering and voting rights, controlling individual statehouses is not sufficient to make institutional changes that pertain to adding states. Instead, politicians can add a state only by passing a bill at the federal level, in conjunction with political actors in the territory targeted for statehood and in any state containing territory that would be affected. Thus, although the *number* of restrictions on adding states is relatively small, the requirement that changes are made at the federal level (in addition to the specific legal difficulties to adding D.C. as a state) implies that the legal bounds are more restrictive on this dimension of institutional reform than for gerrymandering or voting rights.

Currently, the constitutional process for adding states favors Democrats because the two most viable territories to add as states support Democrats. Residents of D.C. have participated in presidential elections since 1964, and the Democratic candidate has received at least 75% of the vote in every presidential election, and at least 90% in each since 2008. Blacks are the plurality group in D.C. and, in the past, were the majority. The partisan loyalties of voters in predominantly Spanish-speaking Puerto Rico are less clear-cut because legislators in their territorial body are

distinguished by their stance on statehood rather than by Democrat/Republican. However, suggestive of their partisan lean, a Washington Post survey after Hurricane Maria in 2017 found that more than twice as many Puerto Ricans identify as Democrats versus Republicans, although a high percentage of respondents answered “Other/none” and “Don’t know/Refused” (Washington Post, 2018). Among Puerto Ricans that live on the mainland, as of 2017, 56% identified as Democrats, 28% as Independents, and 16% as Republicans (Ansolabehere and Schaffner, 2017). Other rearrangements of states are possible, such as Texas or California either dissolving into multiple states or seceding, or disaffected parts of certain states switching to a neighboring state,<sup>10</sup> but these are considerably more far-fetched. Furthermore, any initiative involving multiple states requires the additional hurdle of gaining approval from the legislature in each affected state.

**Strategic rationales for inaction by Democrats.** Despite a latent advantage on this dimension, Democrats have added neither D.C. nor Puerto Rico as a state. Democrats would need unified control the federal government and to eliminate the Senate filibuster to add either. The legal bounds prevent Democratic-controlled state legislatures from directing this process, and Republicans intensely oppose statehood for either D.C. or Puerto Rico. In 2019, Republican Senate majority leader Mitch McConnell decried Democrats’ “plan to make the District of Columbia a state—that’d give them two new Democratic senators—Puerto Rico a state, that would give them two more new Democratic senators . . . this is a full bore socialism on the march in the House.”<sup>11</sup>

Indirect effects related in part to geographical sorting exacerbate this challenge. The malapportioned U.S. Senate requires Democrats to win in some redder states to gain a majority because the median state is more conservative than the median national voter. The same racial composition of D.C. and Puerto Rico that generates support for Democrats also creates political impediments for Democratic senators in red states. Historically, states that were not overwhelmingly white and English-speaking faced considerable delays to gaining statehood (Arizona, New Mexico, Oklahoma, Alaska, Hawaii; and, for similar discriminatory reasons, Mormons in Utah), and gained admission only after the white/English-speaking population increased (Frymer, 2017). A statehood push for D.C. would “risk antagonizing white swing-state voters who may be less sympathetic to the plight of a city whose two major constituencies are African Americans and white liberal elites. Picking up two reliably blue Senate seats might not matter if the Claire McCaskills or Joe Manchins of the Senate lose theirs in the process.”<sup>12</sup>

Puerto Rico’s admission as a state would likely animate fears of white decline, which many scholars argue is an important source of Republican voter support (Mutz, 2018). These reasons contributed to the decision by Democrats to not prioritize adding these states in 2009 when they controlled the presidency, the House, and (briefly) a filibuster-proof majority in the Senate; they instead used their floor time to debate and pass the Affordable Care Act (Faris, 2018, 54).

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<sup>10</sup> For example, merging parts of western Virginia into West Virginia (<https://apnews.com/article/d9ee8611eb59aedff84160ae1be27d14>).

<sup>11</sup> <https://nymag.com/intelligencer/2019/06/mcconnell-representative-democracy-is-full-bore-socialism.html>.

<sup>12</sup> <https://washingtonmonthly.com/magazine/july-august-2018/political-capital>. NB: McCaskill lost re-election in 2018.

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