

# Online Appendix for

## *Strategic Power Sharing: Commitment, Capability, and Authoritarian Survival*

### A.1 CONTRIBUTIONS RELATIVE TO EXISTING FORMAL LITERATURE

The present findings relate to a recent and growing formal literature on authoritarian power sharing. One closely related article is Paine (2021). In that model, a dictator chooses between sharing power with, or excluding, a challenger. This binary choice affects the subsequent one-shot bargaining interaction. Sharing power (1) increases the probability with which the challenger prevails in a conflict against the dictator and (2) increases (in expectation) the maximum amount of spoils that the dictator is able to offer by raising an upper bound on the total transfer the ruler can make. The first part of the tradeoff is identical to how I model the “threat-enhancing effect” here, but the second part differs. In the present model, I endogenize the amount of spoils the dictator can offer by modeling an infinite horizon with stochastic anti-regime mobilization. The effect of power sharing on the frequency of the challenger’s moments in the sun produces the “commitment effect.” Thus, constraints on the dictator’s ability to distribute spoils arise as a *consequence* of the power-sharing choice rather than by assumption. The present modeling setup also enables connecting my findings to the well-known mechanism by which shifts in the distribution of power combined with limited commitment ability affect conflict (Powell 2004; Acemoglu and Robinson 2006). Hence, the present model integrates largely separate literatures on authoritarian institutions/power sharing and dynamic conflict bargaining models.

Another closely related model is Meng (2019; 2020 ch. 2). A dictator and challenger interact over two periods, and power shifts exogenously toward the dictator between periods 1 and 2. The ruler can share power to prevent the challenger from initiating a conflict in period 1. Specifically, sharing power blunts the shift in power away from the challenger in period 2. This makes credible the ruler’s promise to offer concessions in period 2, similar to the “commitment effect” in the present model. In equilibrium, Meng demonstrates that the dictator shares power if initially weak. This corresponds with the strategic power-sharing range in my model. Thus, I recover her important finding about how power sharing can enhance regime survival. However, I also explain how sharing power can, in other circumstances, *trigger* conflict (if the challenger is weak enough such that the parameters align with the opportunistic exclusion range), and why a dictator might choose not to share power even though doing so would prevent conflict (greedy exclusion).

Christensen and Gibilisco (2020) incorporate a different element into the power-sharing tradeoff: the budget constraint fluctuates across periods. In a one-shot decision problem, the dictator would optimally incorporate a broad strata of elites if the state of the world is “economic boom,” but would craft an exclusionary regime if the state is “economic bust” because they have less to distribute. However, in a dynamic setting in which the state of the world fluctuates across periods, the ruler faces a tradeoff that yields two possibilities. First, the dictator may prefer to exclude rivals *even in boom times* if they anticipate busts in the future, given the future costs they would incur to removing rivals to achieve their static optimum in the bust periods. Alternatively, boom periods can engender persistent power sharing given the difficulties of reversing inclusionary policies *in bust periods*. Christensen and Gibilisco show that this can help to explain why, empirically, commodity booms tend to foster large ruling coalitions well beyond the initial price shock.

Other recent formal models extend Acemoglu and Robinson (2006) to provide alternative perspectives on

authoritarian power sharing, although without modeling how sharing power bolsters the coercive capability of challengers. One simplification in Acemoglu and Robinson (2006) is that ruling elites can *transfer* power entirely but not *share* power while retaining an authoritarian regime. Either elites (i.e., the dictator) set the tax rate for the entire economy in all periods, or—as is possible in their extension with democratization—the masses (i.e., challenger) do. Dower et al. (2018) introduce the possibility of partial democratization, which is conceptually similar to power sharing. Rather than make a binary choice between democracy and continued autocracy, the dictator makes a continuous proposal over the fraction of future periods in which the challenger can choose the tax rate. In both models, sharing power enables the ruler to commit to distribute more spoils, but these models do not incorporate the countervailing “threat-enhancing effect.”

Two recent working papers highlight various ways in which power-sharing deals can break down. In Powell (2020), the dictator can propose power-sharing deals that enable the challenger to permanently control a (continuously chosen) percentage of the budget in future periods—but only if the deal goes through. A friction arises because during any period in which the dictator proposes and the challenger accepts a power-sharing deal, the ruler cannot commit to not exert costly effort to prevent the deal from taking hold. In equilibrium, the challenger considers accepting a power-sharing deal only if the probability that such an effort succeeds is sufficiently low, which Powell interprets as “strong institutions.”

In Fearon and Francois (2020), power-sharing deals may break down because the *masses* cannot commit to reneging on a deal with elites (the following is easier to follow using the labels “elite” and “masses” instead of “dictator” and “challenger,” respectively). Following a transition to democracy that transforms the masses into the ruling group, the former authoritarian elite can continue to gain rents allocated to them in a gamed constitution that they wrote before relinquishing power. However, for the gamed constitution to be self-enforcing following the transition, the masses must prefer to continue ceding rents to the autocratic elite rather than walk out on the authoritarian-written constitution—the cost of which depends on the elite’s ability to stage a coup. If the elite’s capabilities to stage a coup diminish too quickly after relinquishing power, then the masses cannot commit to uphold the gamed institution. This, in turn, implies that—when still in power—the autocratic elite does not initiate a democratic transition despite Fearon and Francois’ assumption that prolonged autocracy is inefficient.

Finally, Shadmehr (2015) studies a distinct strategic setting, but characterizes a tradeoff related to the one faced by the dictator in the current model when the lower bound on power sharing is intermediate. In his model, the challenger chooses the extremity of its agenda. The ruler may repress heavily to decrease the likelihood that revolutions succeed—despite causing successful revolutions to be more extreme, which is bad for the dictator. This mechanism exhibits conceptual similarities to greedy exclusion in my model.

## A.2 SUMMARY OF NOTATION

- $D$ : dictator
- $C$ : challenger
- $t$ : time indicator
- $\delta$ : discount factor
- $p$ :  $D$ ’s power-sharing choice
- $p^{\min}$ : exogenously fixed lower bound on power-sharing choice
- $\mu(p)$ : in any period  $t$ , ex ante probability that  $C$  can mobilize

- $\gamma$ : the assumed functional form for  $\mu(p)$  is  $p^\gamma$ ; higher  $\gamma$  implies that at low  $p$ , small increases in  $p$  have little effect on raising  $C$ 's per-period probability of mobilization
- $\hat{\gamma}$ : conflict cannot occur in equilibrium if  $\gamma$  is lower than this threshold (see Lemma A.1)
- $x_t$ :  $D$ 's transfer proposal for  $C$  in any period  $t$  that  $C$  mobilizes
- $x^*(p)$ : equilibrium proposal (see Equation 1 solved with equality)
- $\phi$ : costliness of fighting
- $\hat{p}$ : value of power sharing that maximizes  $x^*(p)$  (see Lemma A.2)
- $\underline{p}$  and  $\bar{p}$ : lower and upper bounds, respectively, of the intermediate region in which fighting occurs along the equilibrium path; conflict never occurs in equilibrium if  $p < \underline{p}$  or  $p > \bar{p}$  (see Lemma A.2)
- $\tilde{p}$ : threshold value of  $p^{\min}$  at which  $D$  jumps from greedy exclusion to strategic power sharing (see Proposition 1)
- $p^{\max}$ : exogenously fixed upper bound on  $D$ 's power-sharing choice. This parameter implicitly equals 1 in the main model. In Appendix A.7, I parameterize  $p^{\max} \in (p^{\min}, 1]$ .

### A.3 ONE-TIME CHOICE OVER POWER SHARING

The model assumes that  $D$  chooses how much power to share only once, at the outset of the game. This simplification aligns well with empirical findings. Authors studying measures of regime personalism (Geddes, Wright and Frantz 2018), constitutional rules such as term limits and whether the dictator designates a successor (Meng 2020, 136-38), and the structure of the secret police (Greitens 2016) each show that rulers are more likely to create (or undermine) institutional constraints early in their leadership tenures.

Another way to state this simplifying assumption is that (1) initially,  $D$  can freely choose any value of  $p$  within the exogenously fixed bounds, whereas any value outside the bounds (implicitly) imposes an infinite cost, and (2)  $D$  can never alter  $p$  again (or, implicitly, pays an infinite cost to doing so). For point 1, an alternative way to set up the initial choice is to assume that  $D$  pays a fixed cost to implementing any value of  $p$  and that this cost is higher for lower  $p$  (hence creating a penalty for sharing less power). However, in the present model, I show that parameter ranges exist in which  $D$  chooses  $p > p^{\min}$  despite the absence of a fixed cost that penalizes low power sharing. Thus, introducing a fixed cost would obscure which mechanism drives the results without qualitatively changing the intuition. For point 2,  $D$ 's optimal power-sharing strategy would not change if  $D$  could freely choose  $p$  at the beginning of every period. All periods in which the history does not feature a conflict are strategically identical (i.e., prior to Nature deciding whether  $C$  can mobilize in the period). An open question is how modeling power sharing as a dynamic state variable would change the results, as the conclusion to the article discusses briefly.

### A.4 INTUITION FOR HOW THE FREQUENCY OF MOBILIZATION AFFECTS CONFLICT

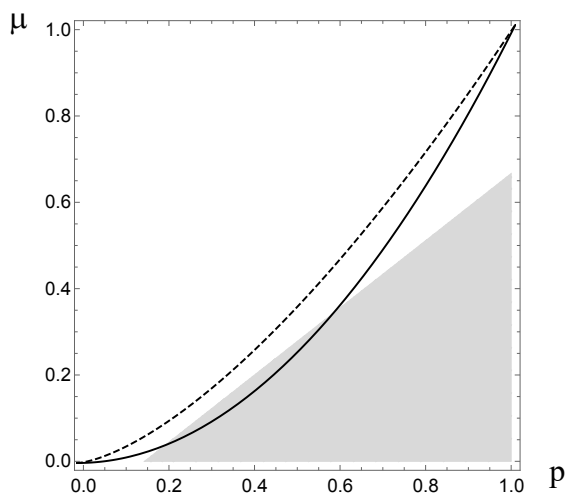
In the model, the non-monotonic relationship between power sharing,  $p$ , and the equilibrium transfer in a mobilization period,  $x^*(p)$ , arises from assuming that  $p$  affects both (1)  $C$ 's probability of winning (via the identity function) and (2) the frequency of mobilization,  $\mu(p)$ . To highlight the distinct effects of each, I summarize the logic for how  $p$  and  $\mu$  independently affect the equilibrium bargaining offer. That is, in the following, I assume that  $\mu$  is not a function of  $p$  and that  $x^*(p, \mu) = \frac{p \cdot (1 - \phi)}{1 - \delta \cdot (1 - \mu)}$ . This discussion also explains how my model recovers a general mechanism for bargaining breakdown in dynamic conflict models (see Powell 2004).

$D$  cannot offer more than the entire per-period budget of 1 in any period. If  $x^*(p, \mu) < 1$ , then bargaining is peaceful along the equilibrium path. If  $x^*(p, \mu) > 1$ , then along the equilibrium path, conflict occurs in the first mobilization period. To explain why bargaining failure is possible, we can compare outcomes at extreme values of  $\mu$ . If  $\mu = 1$ , then  $C$  mobilizes in every period. This makes irrelevant  $D$ 's inability to commit to granting concessions in *non-mobilization* periods.  $D$  can buy off  $C$  by offering  $x^*(p, 1) = p \cdot (1 - \phi) < 1$  in every period.

Lowering  $\mu$  increases the fraction of periods in which  $C$  consumes 0, which (for a fixed  $x$ ) diminishes  $C$ 's future continuation value along a peaceful path,  $\frac{\delta}{1-\delta} \cdot \mu \cdot x$  (see Equation 1 for this expression). Given  $C$ 's reservation value to fighting (again, see Equation 1), this effect causes  $C$  to demand higher  $x_t$  in each mobilization period. Low-enough  $\mu$  can cause  $C$ , during his rare moments in the sun, to accept only offers that strictly exceed 1, which are infeasible for  $D$  to propose. Conflict occurs in equilibrium because  $C$  anticipates a large adverse shift in the future distribution of power. This is a general mechanism that triggers fighting (Powell 2004). However, even if  $\mu = 0$  (i.e.,  $C$  will never mobilize again), equilibrium fighting is not guaranteed. Only if  $p$  is high,  $p > \frac{1-\delta}{1-\phi}$ , do we have  $x^*(p, 0) = \frac{p \cdot (1-\phi)}{1-\delta} > 1$ . If instead  $p$  is low, then  $C$ 's opportunity cost of forgoing conflict in a mobilization period is low.

Figure A.1 presents a region plot with  $p$  on the horizontal axis and  $\mu$  on the vertical axis. The shaded region depicts where equilibrium bargaining breaks down, i.e.,  $x^*(p, \mu) > 1$ , which occurs if  $p$  is high relative to  $\mu$ . In Appendix A.5, I describe the two curves overlaid onto the region plot.

**Figure A.1: Conditions for Equilibrium Conflict**



*Notes:* This figure is a region plot with  $p$  on the horizontal axis and  $\mu$  on the vertical axis (that is,  $\mu$  is independent of  $p$ ). The other parameters are  $\phi = 0.3$  and  $\delta = 0.9$ . In the gray shaded region,  $x^*(p, \mu) > 1$ ; whereas  $x^*(p, \mu) < 1$  in the white region. I also overlay two curves in which  $\mu(p)$  is a function of  $p$ . These should be interpreted as curves on a single dimensional plot with  $p$  on the horizontal axis and  $\mu(p)$  on the vertical axis. The dashed curve sets  $\gamma = 1.5$  and the solid curve sets  $\gamma = 2$ .

## A.5 FORMAL DETAILS FOR NON-MONOTONIC EFFECT OF POWER SHARING ON CONFLICT

A necessary condition for bargaining to break down in equilibrium is that sharing more power,  $p$ , does not increase the frequency with which the challenger mobilizes,  $\mu(p)$ , too rapidly. Otherwise, the commitment effect is always large enough in magnitude that  $x^*(p)$  never exceeds 1. To show this, I overlay two curves in which  $\mu(p)$  is a function of  $p$  onto the region plot in Figure A.1 (see Appendix A.4). These should be

interpreted as curves on a single dimensional plot with  $p$  on the horizontal axis and  $\mu(p)$  on the vertical axis. Overlaying them onto this region plot provides intuition about the role of  $\gamma$ , which encapsulates the responsiveness of  $\mu(p)$  to increases in  $p$ . For the solid curve,  $\gamma = 2$ ; and for the dashed curve,  $\gamma = 1.5$ . Because  $\mu(p) = p^\gamma$ , increases in  $p$  translate less rapidly into gains in  $\mu(p)$  for the solid curve. The key difference is that the solid curve lies in the shaded conflict region for intermediate values of  $p$ , but the dashed curve does not. The low and high values of  $p$  at which the solid curve intersects the shaded region are  $\underline{p}$  and  $\bar{p}$ , respectively. Note that these are the same parameter values used in Figure 1.

The following presents the formal statements. Note that Lemma A.1 is the only statement and proof that incorporates the functional form  $\mu(p) = p^\gamma$ , with  $\gamma > 1$  parameterizing the steepness of convexity. Given this functional form assumption, it is straightforward to characterize conditions under which the frequency-of-mobilization function exhibits steep-enough convexity that  $x^*(p) > 1$  for at least one value of  $p$  (a necessary condition for equilibrium conflict).

**Lemma A.1** (Steep-enough convexity and conflict).

*Part a.* If  $\gamma < \frac{1}{\delta}$ , then  $p = 1$  maximizes  $x^*$ . If  $\gamma > \frac{1}{\delta}$ , then a unique  $\hat{p} \in (0, 1)$  exists that maximizes  $x^*$ .

*Part b.* A threshold  $\hat{\gamma} > \frac{1}{\delta}$  exists such that if  $\gamma < \hat{\gamma}$ , then  $x^*(\hat{p}) < 1$ ; and if  $\gamma > \hat{\gamma}$ , then  $x^*(\hat{p}) > 1$ .

**Proof of Lemma A.1, part a.** The first-order condition for  $x^*(p)$  (see Equations 1 and 2) yields a single extremum at  $p = \hat{p} \equiv \left(\frac{1-\delta}{\delta \cdot (\gamma-1)}\right)^{\frac{1}{\gamma}}$ . The second derivative at this point is  $-\frac{1}{\hat{p}} \cdot \frac{(\gamma-1)^2}{\gamma} \cdot \frac{1-\phi}{1-\delta} < 0$ , which implies that  $\hat{p}$  is a maximizer. The sign of the inequality follows because the expression is strictly negative if and only if  $\hat{p} > 0$ ; this is true for any  $\gamma > 1$ , which I assume in the model setup.

To establish the bounds, setting  $\hat{p} < 1$  simplifies to  $\gamma > \frac{1}{\delta}$ , whereas otherwise the maximizer is the corner solution  $p = 1$ . Setting  $\hat{p} > 0$  simplifies to  $\gamma > 1$ , hence, strict positivity is satisfied for all assumed values of  $\gamma$ . Note that the maximizer is continuous at  $\gamma = \frac{1}{\delta}$  because  $\hat{p}\left(\frac{1}{\delta}\right) = 1$ .

**Proof of part b.** First establish the claim for  $\gamma < \frac{1}{\delta}$ . Part a shows that  $p = 1$  maximizes  $x^*(p)$  in this range, which yields  $x^*(1, \gamma) = 1 - \phi < 1$ .

Next establish the claim for  $\gamma > \frac{1}{\delta}$ . Given  $\hat{p}(\gamma)$  defined in part a, can implicitly characterize  $\hat{\gamma}$  as:

$$x^*(\hat{p}(\hat{\gamma}), \hat{\gamma}) \equiv \frac{\hat{p}(\hat{\gamma}) \cdot (1 - \phi)}{1 - \delta \cdot (1 - \hat{p}(\hat{\gamma})^{\hat{\gamma}})} = 1.$$

Showing that the conditions for the intermediate value theorem hold establishes existence:

- Lower bound:  $x^*(\hat{p}\left(\frac{1}{\delta}\right), \frac{1}{\delta}) = 1 - \phi < 1$ .
- Upper bound:  $\lim_{\gamma \rightarrow \infty} x^*(\hat{p}(\gamma), \gamma) = \frac{1-\phi}{1-\delta} > 1$ , which follows from the imposed assumption  $\delta > \phi$ .
- $x^*(\hat{p}(\gamma), \gamma)$  is continuous in  $\gamma$ .

Proving strict monotonicity establishes the unique threshold claim:

$$\frac{dx^*(\hat{p}(\gamma), \gamma)}{d\gamma} = -\hat{p} \cdot \frac{\gamma - 1}{\gamma^3} \cdot \frac{1 - \phi}{1 - \delta} \cdot \ln \left( \frac{1 - \delta}{\delta \cdot (\gamma - 1)} \right) > 0.$$

The sign follows from (a)  $\hat{p} > 0$  for all  $\gamma > 1$  and (b) the term inside the logarithm is strictly less than 1 for all  $\gamma > \frac{1}{\delta}$ , and hence the entire natural log term is strictly negative. ■

**Lemma A.2** (Intermediate power sharing and conflict). *Suppose  $\gamma > \hat{\gamma}$ . Then unique thresholds  $0 < \underline{p} < \hat{p} < \bar{p} < 1$  exist such that if  $p \in (\underline{p}, \bar{p})$ , then  $x^*(p) > 1$ ; and otherwise  $x^*(p) < 1$ .*

**Proof of Lemma A.2.** Can implicitly characterize a threshold  $\underline{p} \in (0, \hat{p})$  such that:

$$\frac{\underline{p} \cdot (1 - \phi)}{1 - \delta \cdot (1 - \mu(\underline{p}))} = 1. \quad (\text{A.1})$$

Showing that the conditions for the intermediate value theorem hold establishes existence:

- Lower bound:  $x^*(0) = 0 < 1$
- Upper bound:  $x^*(\hat{p}) > 1$  follows from the assumption in the statement that  $\gamma > \hat{\gamma}$ .
- $x^*(p)$  is continuous.

The left-hand side of Equation A.1 strictly increases in  $p$  for  $p < \hat{p}$  because  $\hat{p}$  is the unique maximizer for  $x^*(p)$ , which establishes the unique threshold claim.

Can implicitly characterize a threshold  $\bar{p} \in (\hat{p}, 1)$  such that:

$$\frac{\bar{p} \cdot (1 - \phi)}{1 - \delta \cdot (1 - \mu(\bar{p}))} = 1. \quad (\text{A.2})$$

Showing that the conditions for the intermediate value theorem hold establishes existence:

- Lower bound:  $x^*(\hat{p}) > 1$  follows from the assumption in the statement that  $\gamma > \hat{\gamma}$ .
- Upper bound:  $x^*(1) = 1 - \phi < 1$ .
- $x^*(p)$  is continuous.

The left-hand side of Equation A.1 strictly decreases in  $p$  for  $p > \hat{p}$  because  $\hat{p}$  is the unique maximizer for  $x^*(p)$ , which establishes the unique threshold claim. ■

**Proposition A.1** (Equilibrium bargaining for fixed  $p$ ).

**Part a.** If  $\gamma > \hat{\gamma}$ , for  $\hat{\gamma}$  defined in Lemma A.1, then in equilibrium:

- **Peaceful path.** If  $p \in (0, \underline{p}) \cup (\bar{p}, 1)$ , then in every period  $t$  in which  $C$  mobilizes,  $D$  offers  $x_t = x^*(p)$  (see Equation 1) and  $C$  accepts any  $x_t \geq x^*(p)$ . Along the equilibrium path, conflict never occurs.
- **Conflictual path.** If  $p \in (\underline{p}, \bar{p})$ , then in every period  $t$  in which  $C$  mobilizes,  $D$  offers any  $x_t \in [0, 1]$  and  $C$  rejects any offer. Along the equilibrium path, conflict occurs in the first mobilization period.

**Part b.** If  $\gamma < \hat{\gamma}$ , then in every period  $t$  in which  $C$  mobilizes,  $D$  offers  $x_t = x^*(p)$  and  $C$  accepts any  $x_t \geq x^*(p)$ . Along the equilibrium path, conflict never occurs.

**Proof.** The ranges of  $p$  follow from Lemma A.2. The only non-trivial condition to check is that  $D$  cannot profitably deviate to making an offer  $x_t < x^*(p)$  that triggers conflict. Thus, it suffices to show:

$$1 - x^*(p) + \frac{\delta}{1 - \delta} \cdot (1 - \mu \cdot x^*(p)) > (1 - p) \cdot \frac{1 - \phi}{1 - \delta}.$$

Substituting in  $x^*(p)$  from Equation 1 (solved with equality) and rearranging yields  $\phi > 0$ , which I assume is true. ■

## A.6 FORMAL DETAILS FOR EQUILIBRIUM POWER SHARING

Along a peaceful path,  $D$  consumes 1 in  $1 - \mu(p)$  percent of periods and  $1 - x^*(p)$  in the remainder. Hence, denoting  $V_{\text{peace}}^D$  as her future continuation value, we can recursively express  $V_{\text{peace}}^D = 1 - \mu(p) \cdot x^*(p) + \delta \cdot V_{\text{peace}}^D$ . This solves to:

$$V_{\text{peace}}^D = \frac{1 - \mu(p) \cdot x^*(p)}{1 - \delta}. \quad (\text{A.3})$$

Along a conflictual path,  $D$  consumes 1 in every period until the first time that  $C$  mobilizes, when she consumes her conflict continuation value, hence  $V_{\text{fight}}^D = [1 - \mu(p)] \cdot (1 + \delta \cdot V_{\text{fight}}^D) + \mu(p) \cdot (1 - p) \cdot \frac{1 - \phi}{1 - \delta}$ . This solves to:

$$V_{\text{fight}}^D = \frac{(1 - \delta) \cdot [1 - \mu(p)] + \mu(p) \cdot (1 - p) \cdot (1 - \phi)}{(1 - \delta) \cdot [1 - \delta \cdot (1 - \mu(p))]} \quad (\text{A.4})$$

Part a of Lemma A.3 shows that for a fixed value of  $p$ ,  $D$  prefers a peaceful to a conflictual equilibrium path of play. This is standard and follows from the assumed costliness of fighting,  $\phi > 0$ .

Part b characterizes the effect of  $p$  on  $D$ 's lifetime expected utility along each path of play. For  $V_{\text{fight}}^D$ , higher  $p$  exerts two effects that each decrease  $D$ 's utility: higher probability of losing the conflict (term 1 in Equation A.5), and fewer periods in expectation until the conflict occurs because  $\mu'(p) > 0$  (term 2).

The logic for how higher  $p$  affects  $V_{\text{peace}}^D$  is qualitatively similar. First,  $p$  directly decreases  $D$ 's utility by increasing  $C$ 's demand in a mobilization period (because  $C$  wins with higher probability; term 1 in Equation A.6). Second,  $p$  exerts countervailing effects through its effect on raising  $\mu(p)$ , although the net effect lowers  $V_{\text{peace}}^D$ .  $D$  makes concessions more frequently (term 2a), but  $C$  demands less in each mobilization period

(term 2b). From the perspective of any period, the first effect is a present-period effect and the latter is a future-period effect because  $C$  reaps the benefit of higher  $\mu(p)$  only in future periods. Thus,  $\delta < 1$  implies that term 2a strictly exceeds term 2b in magnitude.

**Lemma A.3.**

**Part a.** For fixed  $p$ ,  $V_{\text{peace}}^D > V_{\text{fight}}^D$

**Part b.**  $V_{\text{peace}}^D$  and  $V_{\text{fight}}^D$  each strictly decrease in  $p$ .

**Proof of part a.**

$$V_{\text{peace}}^D - V_{\text{fight}}^D = \frac{p \cdot \mu(p)}{(1 - \delta) \cdot [1 - \delta \cdot (1 - \mu(p))]} \cdot \phi > 0.$$

**Part b.**

$$\frac{\partial V_{\text{fight}}^D}{\partial p} = -\frac{1}{1 - \delta \cdot (1 - \mu(p))} \cdot \left[ \underbrace{\frac{(1 - \phi) \cdot \mu(p)}{1 - \delta}}_{\textcircled{1}} + \underbrace{\frac{\phi + (1 - \phi) \cdot p}{1 - \delta \cdot (1 - \mu(p))} \cdot \mu'(p)}_{\textcircled{2}} \right] < 0. \quad (\text{A.5})$$

$$\frac{\partial V_{\text{peace}}^D}{\partial p} = -\frac{1 - \phi}{(1 - \delta) \cdot (1 - \delta \cdot (1 - \mu(p)))} \cdot \left[ \underbrace{\mu(p)}_{\textcircled{1}} + p \cdot \left( \underbrace{1}_{\textcircled{2a}} - \underbrace{\frac{\delta \cdot \mu(p)}{1 - \delta \cdot (1 - \mu(p))}}_{\textcircled{2b}} \right) \cdot \mu'(p) \right] < 0. \quad (\text{A.6})$$

■

**Proof of Proposition 1.** For opportunistic exclusion, exogenous power sharing, and part b,  $p^* = p^{\min}$  follows directly from the fact that  $V_{\text{peace}}^D$  strictly decreases in  $p$  (see part b of Lemma A.3), and the statements for equilibrium conflict follow from Proposition A.1.

For greedy exclusion and strategic power sharing, implicitly define  $\tilde{p}$  as  $V_{\text{peace}}^D(\bar{p}) = V_{\text{fight}}^D(\tilde{p})$ . We then know that  $V_{\text{peace}}^D(\bar{p}) = V_{\text{fight}}^D(\tilde{p}) < V_{\text{peace}}^D(\tilde{p})$ , where the inequality follows from part a of Lemma A.3. Then,  $\tilde{p} < \bar{p}$  follows because  $V_{\text{peace}}^D(p)$  strictly decreases in  $p$  (see part b of Lemma A.3). The uniqueness of  $\tilde{p}$  follows because  $V_{\text{fight}}^D(p)$  strictly decreases in  $p$  (again see part b of Lemma A.3). ■



## A.7 UPPER BOUND ON POWER SHARING

In the article, I assume that the dictator is unconstrained in her upper-bound choice of  $p$ . This assumption implies that  $D$  can always choose to share enough power to prevent conflict, that is, setting  $p \geq \bar{p}$  is always feasible because  $\bar{p} < 1$ . Here I discuss what happens if we instead parameterize the upper bound on  $p$ , that is, assume that  $D$ 's initial choice is  $p \in [p^{\min}, p^{\max}]$ , for  $p^{\max} \in (p^{\min}, 1]$ .

Proposition 1 is mostly unchanged. In the opportunistic exclusion, greedy exclusion, and exogenous power sharing ranges,  $p^{\max} < 1$  does not bind because  $p^* = p^{\min}$ . However, the following two cases replace the original single case for strategic power sharing, with the alterations highlighted in blue:

**Strategic power sharing.** If  $p^{\min} \in (\underline{p}, \bar{p})$  and  $p^{\max} \geq \bar{p}$ , then  $D$  chooses  $p = \bar{p}$  and conflict does not occur.

**Strategic exclusion.** If  $p^{\min} \in (\underline{p}, \bar{p})$  and  $p^{\max} < \bar{p}$ , then  $D$  chooses  $p = p^{\min}$  and the per-period probability of overthrow equals  $\mu(p^{\min}) \cdot p^{\min}$ .

Low-enough  $p^{\max}$  eliminates the strategic power sharing range.  $D$  would like to share enough power to prevent conflict, but cannot. Instead, conflict occurs regardless of  $D$ 's choice because  $D$  is stuck in the intermediate conflict range, i.e., the only feasible choices of  $p$  lie strictly between  $\underline{p}$  and  $\bar{p}$ . Conditional on facing conflict regardless, we know from Lemma A.3 that  $D$  wants to minimize  $p$ . Consequently,  $p^* = p^{\min}$ . This scenario encapsulates *strategic exclusion*.

Two types of examples motivate the substantive relevance of the strategic exclusion region characterized by  $\underline{p} < p^{\min} < p^{\max} < \bar{p}$ . Suppose an opposition coalition electorally defeats the incumbent dictator, or the ruler agrees to a power-sharing arrangement with a rebel army to settle a civil war. As Nalepa (2020) discusses, newly elected leaders ( $D$ ) often face overwhelming popular pressure to implement transitional justice measures against high-ranking members of the old regime ( $C$ ), which reduces  $p^{\max}$ . Similarly, rulers face limitations on the extent to which they can integrate members of a rebel military ( $C$ ) into the existing state military given the credible threat of a coup attempt by military insiders that resent rebel incorporation (White 2020), which also lowers  $p^{\max}$ . Yet both types of regimes often lack the coup-proofing institutions needed to mitigate the coup threat posed by any opposition members that remain in or are brought into the regime, that is, members of the old guard or newly integrated officers from the rebel army. This yields  $p^{\min} > \underline{p}$ . Perversely, greater ability to eliminate rivals would enhance regime survival.

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