

# The Dictator's Powersharing Dilemma: Countering Dual Outsider Threats

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# The Dictator's Powersharing Dilemma: Countering Dual Outsider Threats

## Abstract

Dictators face a powersharing dilemma: broadening elite incorporation mitigates prospects for outsider rebellions (by either elites excluded from power or the masses), but raises the risk of insider coups. This article rethinks the theoretical foundations of the powersharing dilemma and its consequences. My findings contrast with and provide conditionalities for a “conventional threat logic,” which argues: large outsider threats compel dictators to create broader-based regimes, despite raising coup risk. Instead, I show that the magnitude of the elite outsider threat ambiguously affects powersharing incentives. Dictators with either weak coup-proofing institutions or that face deeply entrenched elites take the opposite actions as predicted by the conventional logic. An additional outsider threat from the masses can either exacerbate or eliminate the powersharing dilemma with elites, depending on elite affinity toward mass rule. Examining the elite/mass interaction also generates new implications for how mass threats affect the likelihood of coups and regime overthrow.

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A highly consequential choice that dictators make is whether to share power and spoils with rival elite factions. Rulers face a *powersharing dilemma* because broadening elite incorporation in the central government mitigates the risk of an outsider attack (rebellion/civil war), but exacerbates the threat of an insider coup. If excluded from access to power and rents at the center, elite actors face incentives to organize a private military that can overthrow the government in an outsider rebellion (Goodwin 2001; Cederman, Gleditsch and Buhaug 2013). Excluded rivals may constitute former members of the regime such as dismissed military officers or former ministers, or leaders of opposition political parties or marginalized ethnic groups. To prevent civil war, rulers can share power and spoils. Powersharing arrangements entail distributing cabinet positions such as the Ministry of Defense (Arriola 2009; Meng 2019), or incorporation into the ruling party. But sharing power at the center does not eliminate the threat posed by rival elites. Instead, it upgrades these elites from outsiders to insiders. Insider elites can leverage their access within the state apparatus to stage coups d'état, which succeed with higher probability than outsider rebellions (Roessler 2016; Roessler and Ohls 2018; Francois, Rainer and Trebbi 2015).

Dictators face survival threats not only from other elites, but also from the masses—poorer members of society such as unionized workers, students and unemployed youth, and rural peasants. A mass outsider threat generates a qualitatively similar powersharing dilemma as when excluded elites pose an outsider rebellion threat, although existing research studies them separately. Authoritarian rulers can strengthen the military (e.g., incorporating additional elite factions into the officer corps) to enhance repressive capacity. However, rulers face a “guardianship dilemma” because any elites included in a military strong enough to defend the government against a mass outsider threat themselves pose an insider coup threat (Acemoglu, Vindigni and Ticchi 2010; Besley and Robinson 2010; Svobik 2012, chap. 5; Greitens 2016).<sup>1</sup>

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<sup>1</sup>In this article, the consequential distinction between “elites” and “masses” is that the dictator can share power with an elite faction and still maintain the incumbent authoritarian regime, but sharing power with the masses would implicitly require democratizing and delegating policy control (Acemoglu and Robinson 2006). To isolate the dictator’s decision over sharing power with

When do rulers share power with rival elite factions? How does this choice affect outcomes such as coup risk and regime survival? Many scholars propose a variant of the following *conventional threat logic* in which the coercive capacity of outsiders (either elites excluded from power or the masses) determines the powersharing decision. When facing low-capacity outsiders—for example, the rival elite faction is numerically small, or the masses lack political organization—the dictator should exclude rival elites from power in the central government. The ruler accumulates more rents from personalizing power, and, given the minimal outsider threat, including more elites would raise the risk of overthrow by enabling them to stage a coup. However, a large outsider threat makes the dictator more willing to risk insider coups. Thus, to counter a strong outsider threat, the dictator (1) switches from excluding rival elites to sharing power, which also (2) raises the likelihood of an insider coup attempt. Collectively, the direct effect of a stronger outsider threat and the indirect effect of a heightened insider threat (3) decrease the overall likelihood of regime survival.<sup>2</sup>

This article rethinks the theoretical foundations of the powersharing dilemma and its consequences. I analyze a formal model in which a dictator faces dual outsider threats from elites and masses. Three main findings contrast with and provide conditionalities for the conventional threat logic. First, I isolate the dictator’s interaction with a representative elite actor and show that the elite’s coercive capacity ambiguously affects the dictator’s incentives to share power. Factors such as size of the elite faction affect not only the elite’s ability to rebel if excluded, but its ability to succeed in a coup attempt if included in power. The conventional logic is incorrect in either of two circumstances. If *coup-proofing institutions* are weak, i.e., coup attempts succeed with high probability, then the dictator excludes large elite factions despite generating an ominous rebellion threat. Alternatively, if the elite faction is small but deeply *entrenched in power*, i.e., exclusion yields a high probability of triggering a fight, then the dictator shares power. Second, adding in elites, I assume the dictator consumes zero upon losing power, which eliminates any incentives to transition to mass rule.

<sup>2</sup>As discussed later, some reject this logic (McMahon and Slantchev 2015) or find a non-monotonic relationship between outsider threats and coup attempts.

the mass threat can either eliminate or exacerbate the dictator’s powersharing dilemma with elites. The inextricable link between the elite and mass threat causes the conventional logic to break down if *elite affinity toward mass rule*, i.e., how much the elite actor consumes under mass rule, is either too low or too high. Third, if elite affinity toward mass rule is low and *returns to elite coalitions* are high—i.e., the probability of mass takeover drops considerably when the dictator and elite band together—then larger mass threats facilitate rather than undermine authoritarian regime survival. Collectively, these findings help us to better understand the strategic logic underpinning authoritarian powersharing, coups, and regime survival. The next section motivates these key concepts and provides a non-technical overview of the main results. I then present the formal setup and analysis, followed by qualitative evidence.

## 1 OVERVIEW: KEY CONCEPTS AND FINDINGS

### 1.1 THE POWERSHARING TRADEOFF

The game features two strategic actors, a dictator and representative elite actor. The dictator moves first and makes two choices: whether to share power with the elite (include) or not (exclude), and a continuous choice over distributing “pure spoils” to the elite. The elite responds by accepting or fighting, and its probability of winning depends on both its endowed coercive capacity and inclusion/exclusion from power. Finally, Nature determines whether an exogenous masses actor takes over, and this probability depends on the dictator’s and elite’s prior actions.

The standard component of this interaction is to allow the dictator to distribute spoils to the opposition. For example, Arriola (2009, 1345-6) discusses how cabinet ministers in Africa allocate public resources to their home districts. Rulers can also distribute spoils through political institutions such as parties, legislatures, and elections; public employment; control over state-owned enterprises; and decentralized land control.

The present innovation is to distinguish sharing *power* with elites—which also concedes spoils—

from pure spoils transfers that concede no power, which correspond respectively with the dictator's two sequential choices. In the real world, which modes of co-optation also improve elites' ability to challenge the ruler? A broad-based military that incorporates elites beyond the dictator's family members and co-ethnics exemplifies sharing *power*, in addition to rents earned from controlling state-owned enterprises and other sources of spoils that top officers enjoy in many countries. Discussing cabinet positions in Africa, Roessler (2016) argues that incorporation at the center provides opportunities for violence specialists and other power brokers to construct a network of followers that can pressure the ruler. Creating an institutionalized party carries a similar tradeoff: rulers distribute spoils to other elites through party membership, which also improves their ability to overthrow the dictator (Magaloni 2008). By contrast, one mode of distributing spoils that *does not* affect elites' ability to overthrow the dictator is allowing peripheral regions wide leeway in governance, as in many African countries in which chiefs enjoy considerable discretion over neo-customary land tenure systems (Boone 2017). Similarly, welfare systems for citizens in oil-rich regimes serve the explicit purpose of distributing spoils in return for eschewing political organization or criticizing the government. These arrangements distribute spoils while *excluding* elites from political power at the center.

The following assumptions encompass the key tensions in the dictator's powersharing tradeoff. The drawback of sharing power at the center is to increase the elite's probability of winning a fight. I assume that coups (the available fighting technology for included elites) succeed with higher probability than outsider rebellions (the analog for excluded elites). This assumption incorporates Roessler's (2016, 37) core premise that "conceive[s] of coups and rebellions, or insurgencies, as analogs; both represent anti-regime techniques that dissidents use to force a redistribution of power." They differ in their organizational basis because "[c]oup conspirators leverage partial control of the state (and the resources and matériel that comes with access to the state) ... rebels or insurgents lack such access and have to build a private military organization to challenge the central government and its military." Consequently, "coups are often much more likely to displace rulers from power than rebellions."

One benefit of sharing power is to enable the dictator to distribute more spoils, which increases prospects for striking a peaceful bargain with the elite. Dictators face impediments to credibly committing to share spoils, and one means of improving commitment ability is to enable elites to defend their spoils. Thus, it is natural to conceive important positions in authoritarian regimes, such as the Minister of Defense or high-ranking positions in the party, as simultaneously conferring higher guaranteed spoils and enabling the insider coup technology.

A mass threat creates another benefit to sharing power. I assume that a unified front by the strategic players—i.e., if the dictator shares power and the elite accepts the spoils offer—discretely lowers the probability of mass takeover. This is a standard assumption in the guardianship dilemma literature if we conceive of sharing power specifically as creating a larger military. More broadly, disruptions at the center as well as narrowly constructed regimes with minimal societal support create openings for mass takeover (Goodwin 2001, 49), whereas the dictator and other elites can counteract these opportunities by banding together.<sup>3</sup>

## 1.2 ELITE THREAT: COUP-PROOFING AND ELITE ENTRENCHMENT

To assess the conventional threat logic, we need to take comparative statics on the coercive capacity of the elite and mass threats. I begin with a baseline case: zero probability of mass takeover.

Contrary to the conventional logic, the magnitude of the elite threat ambiguously affects how the dictator resolves its powersharing tradeoff. In the model, in addition to the powersharing choice, the elite's endowed coercive capacity affects its ability to overthrow the ruler. It is natural to conceptualize this as the size of the elite faction, for example, the size of the elite's ethnic group if ethnicity is a politically important cleavage. Elites with greater coercive capacity are more likely

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<sup>3</sup>Overall, there are two main departures from standard conflict bargaining models. First, the powersharing choice in essence enables the dictator to choose between two institutional settings in which to bargain, as opposed to taking this as given. Second, analyzing how the exogenous mass threat affects the dictator-elite interaction departs from the standard bilateral interaction.

to win a rebellion because of greater manpower to challenge the government, which Roessler (2016) and Roessler and Ohls (2018) discuss as “threat capabilities.” I depart by assuming that the elite’s coercive capacity *also* affects its ability to stage a successful coup. Larger factions contain more people that can mobilize in support of a coup, and can better defend against challengers in the (unmodeled) future. Consequently, the same underlying coercive capacity that improves the elite’s ability to challenge the dictator in an outsider rebellion *also* enhances the elite’s ability to challenge via a coup, which reduces the dictator’s rents and enhances prospects for elite conflict. To understand when the conventional logic holds or fails, we need to incorporate conditioning factors that determine, at both low or high levels of elite coercive capacity, whether the pros of powersharing outweigh the cons. This produces the first new finding.

The conventional logic for elite powersharing fails under either of two circumstances. First, the conventional expectation that the ruler will share power with large elite factions does not hold if *coup-proofing institutions* are weak. Various factors affect a regime’s coup-proofing ability: political control over promotions, the presence of counterbalancing institutions against the conventional military (e.g., presidential guard), and broader political institutions that affect opportunities for the military to intervene in politics (Finer 1962; Quinlivan 1999). With weak coup-proofing institutions, the probability of a coup attempt by an included elite is intolerably high, and the dictator excludes even if the group is large and poses a stark civil war threat. For example, in Angola, a decolonization war with split rebel factions prevented the ruling party from forging interethnic institutions that could have mitigated coup risk, which caused post-independence rulers to exclude rival ethnic factions that posed a strong rebellion threat.

Second, the conventional expectation that the dictator will exclude elites with low endowed coercive capacity (e.g., small ethnic groups) does not hold for elites that are deeply *entrenched in power* at the center. For example, if a dictator tries to exclude members of a group that dominates the officer corps, these military elites might trigger a countercoup (Sudduth 2017). This consideration was salient in many post-colonial countries where a particular ethnic minority group was



privileged in the colonial military (Harkness 2018). An existing foothold in power in the central government substitutes for small numerical size to generate a strong threat if the dictator excludes. In this circumstance, the dictator fears the consequences of exclusion more than those of inclusion even for numerically small groups, contrary to the conventional logic.

### 1.3 MASS THREAT AND ELITE AFFINITY

How does a mass threat affect this interaction? A strong mass threat can either eliminate or exacerbate the dictator's powersharing tradeoff with the elite, depending on *elite affinity toward mass rule*—which existing models of the guardianship dilemma do not consider.<sup>4</sup> By affinity, I mean how much the elite would consume if the masses take over. The main implications from the conventional threat logic hold only under *intermediate* affinity, yielding the second new finding.

To explain why, at one extreme, some elites anticipate dire consequences under mass rule (low affinity), such as business elites in Malaysia vis-à-vis communists in the 1940s through 1970s as well as whites in apartheid South Africa vis-à-vis the African majority. In these cases, elites feared widespread redistribution if the masses gained control. If elite affinity is low and the mass threat is strong, then there is no powersharing *dilemma* because there is no coup risk under powersharing. This result arises because stronger mass threats discourage an included elite—who cares greatly about preventing mass takeover—from attempting a coup. A strong-enough mass threat reduces the coup probability to zero. This contrasts with the conventional implication that stronger outsider threats should make coups more likely. Instead, only one aspect of the conventional logic is correct: a strong-enough mass threat causes the dictator to switch from exclusion to sharing power. Thus, in the low-affinity case, the overall effect of mass threats on the equilibrium probability of a coup attempt is inverted U-shaped: increasing at the point where the dictator switches to sharing power, and decreasing afterward.<sup>5</sup>

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<sup>4</sup>Beyond the conflict setting, parameterizing affinity relates to Zakharov's (2016) analysis of how elites' outside options affect a dictator's loyalty-competence tradeoff for subordinates.

<sup>5</sup>This result builds off McMahon and Slantchev (2015), who also reject the implicit assump-

At the other extreme, some elites can prosper under mass rule (high affinity). For example, top-ranking Egyptian generals facing pro-democracy protesters in 2011 expected considerable influence in a new regime, as did Rwandan Tutsis in the 1990s when co-ethnic Tutsis organized in Uganda posed the main external threat. In high-affinity cases, a strong mass threat makes the ruler's powersharing dilemma intractable—it cannot buy off a coup attempt because elites care more about picking the winning side rather than who wins. Contrary to the conventional logic, a strong mass threat *does not* induce the dictator to share power.

Combining these contrarian findings for low and high affinity shows that only *intermediate* elite affinity recovers conventional implications.

#### 1.4 REGIME SURVIVAL: ELITE AFFINITY AND RETURNS TO ELITE COALITIONS

The third main finding is that stronger mass threats *enhance* regime durability if elite affinity toward mass rule is low and *returns to elite coalitions* are high, contrary to the conventional implication that outsider threats imperil regime survival. This is striking when considering that, in the model, the only direct effect of a stronger mass threat is to increase the probability of takeover. The importance of low elite affinity follows from the logic discussed above: the dictator and elite band together in an internally peaceful powersharing regime when facing a strong mass threat. If returns to elite coalitions are high, then banding together blunts the direct effect of a strong mass threat and causes the overall probability of regime overthrow (by either elites or the masses) to de-tion in previous models of the guardianship dilemma that the mass threat disappears following elite takeover (although their model does not produce this inverted U-shaped effect). My model also differs by parameterizing elites' utility under mass rule (rather than implicitly assuming low affinity) and by incorporating a permanent elite threat, which underpin the logic in the following paragraphs.

cline.<sup>6</sup> Empirically, mass threats likely contributed to durable regimes in Malaysia and apartheid South Africa. Not only was elite affinity toward the masses low, but tax collection and military conscription yielded strong states and high returns to elite coalitions.

## 2 MODEL SETUP

Two strategic actors, a dictator  $D$  and distinct elite faction  $E$ , engage in a one-shot interaction with the following moves: (1)  $D$  sequentially decides power and spoils for  $E$ , (2)  $E$  accepts or fights, and (3) Nature determines mass overthrow.

**1. *Sharing power and spoils.***  $D$  has two policy instruments, chosen sequentially with a Nature move in between, that determine what percentage of the government spoils (normalized to 1) that  $E$  receives. First, for the binary powersharing choice, if  $D$  *includes*  $E$  in power, then  $E$  is guaranteed a total transfer of at least  $\underline{x}$ , an exogenous parameter that satisfies  $\underline{x} \in (0, \hat{x})$ .<sup>7</sup> Alternatively,  $D$  can *exclude*  $E$ , thereby denying this basement level of spoils.

Second,  $D$ 's choice of pure spoils determines how the remainder of the budget is distributed. This decision is continuous and subject to an exogenously determined upper bound over which  $D$  has incomplete information when making its powersharing choice. Specifically, after choosing inclusion/exclusion, Nature determines the maximum amount of spoils beyond  $\underline{x}$  that  $D$  can transfer,  $\bar{x} \sim U(0, 1 - \underline{x})$ .<sup>8</sup> Modeling an upper bound on possible transfers expresses in reduced form that

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<sup>6</sup>The importance of modeling a permanent elite threat is readily apparent here. If instead an excluded elite could not rebel against the dictator (as in existing models), then the probability of regime survival is obviously maximized if the only outsider threat—the masses—lacks any coercive capacity.

<sup>7</sup>Appendix Assumption A.1 defines  $\hat{x} \in (0, 1)$ . Footnote 12 discusses the purpose of this upper bound.

<sup>8</sup>The Nature move makes  $D$  uncertain when making its powersharing choice about whether it can buy off  $E$  with the pure spoils transfer (under either inclusion or exclusion).

rulers face limitations to the total spoils they can credibly commit to transfer, perhaps because of possibilities to renege on promises in the (unmodeled) future. After learning  $\bar{x}$ ,  $D$  proposes the additional spoils transfer to  $E$ , denoted as  $x_{in} \in [0, \bar{x}]$  if included and  $x_{ex} \in [0, \bar{x}]$  if excluded.<sup>9</sup> Thus, the first effect of sharing power is to raise the maximum feasible transfer from  $\bar{x}$  to  $\underline{x} + \bar{x}$ .

**2. Elite fighting decision.** After observing  $D$ 's choices over sharing power and spoils,  $E$  either accepts—hence consuming  $\underline{x} + x_{in}$  if included or  $x_{ex}$  if excluded—or fights. Two distinct factors affect  $E$ 's probability of winning a fight: (1) the inclusion/exclusion choice, and (2)  $E$ 's endowed coercive capacity  $\theta_E \in [0, 1]$ . If  $D$  excludes, then  $E$ 's available fighting technology is a rebellion, which succeeds with probability  $p_{ex}(\theta_E) \in (0, 1)$ . If instead  $D$  includes, then  $E$ 's available fighting technology is a coup, which succeeds with probability  $p_{in}(\theta_E) \in (0, 1)$ . Coups are more likely to succeed than rebellions:  $p_{in}(\theta_E) > p_{ex}(\theta_E)$  for all  $\theta_E \in [0, 1]$ . Thus, the second effect of sharing power is to shift the distribution of power toward  $E$ .

The probability that either a coup or civil war succeeds strictly increases in  $\theta_E$ . I assume that the probabilities satisfy the strict monotone likelihood ratio principle, and evaluate positive-signed and negative-signed likelihood ratios as separate cases.

**Assumption 1** (Strict monotone likelihood ratio principle).

$$\textbf{Case 1.} \quad \frac{d}{d\theta_E} \left[ \frac{p_{ex}(\theta_E)}{p_{in}(\theta_E)} \right] > 0 \qquad \textbf{Case 2.} \quad \frac{d}{d\theta_E} \left[ \frac{p_{ex}(\theta_E)}{p_{in}(\theta_E)} \right] < 0$$

As introduced above and discussed in more depth below, the probability that a coup succeeds for high-capacity elites,  $p_{in}(1)$ , corresponds with the strength of *coup-proofing institutions*, and the probability of rebellion success for low-capacity elites,  $p_{ex}(0)$ , corresponds with the depth of *elite entrenchment*.

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<sup>9</sup>Equivalently, suppose  $D$  makes its two choices simultaneously, followed by the Nature move; and if  $D$ 's proposed pure spoils transfer exceeds  $\bar{x}$ , then the *realized* spoils transfer equals  $\bar{x}$ .

**3. Mass takeover.** Finally, Nature determines whether the non-strategic masses ( $M$ ) overthrow the regime. This probability depends on whether  $D$  and  $E$  banded together. If  $D$  excluded and/or  $E$  fought, then the probability of no mass takeover is  $1 - \theta_M$ . If instead  $D$  shared power and  $E$  accepted, then the probability of no mass overthrow equals  $1 - (1 - \sigma) \cdot \theta_M$ .  $M$ 's coercive capacity is  $\theta_M \in [0, 1]$ , and  $\sigma \in [0, 1]$  expresses *returns to elite coalitions*: the extent to which the probability of mass takeover decreases when the dictator and elites band together.<sup>10</sup> Thus, the third effect of sharing power is to create the possibility of lowering the probability of mass takeover.

By construction, these survival probabilities satisfy the strict monotone likelihood ratio principle and create easily interpretable boundary conditions: if  $\theta_M = 0$ , then  $M$  takes over with probability 0; and if  $\theta_M = 1$  and  $D$  and  $E$  do not band together, then  $M$  takes over with probability 1.

**Consumption.** Suppose no mass takeover. If  $E$  accepts  $D$ 's offer, then  $E$  consumes  $\underline{x} + x_{in}$  if included and  $x_{ex}$  if excluded; and  $D$  consumes  $1 - (x_{in} + \underline{x})$  and  $1 - x_{ex}$ , respectively. If  $E$  fights, then the winner of the coup or civil war consumes  $1 - \phi$  and the loser consumes 0, and  $\phi \in (0, 1)$  expresses fighting costs.

If mass takeover occurs, then  $D$  consumes 0.  $E$ 's consumption under mass rule depends on whether it accepted  $D$ 's offer. If it did, then  $E$  consumes 0 because it implicitly formed an alliance with  $D$  to uphold the incumbent regime (which would be necessary to consume the spoils granted by  $D$ ). By contrast, by fighting  $D$ ,  $E$  implicitly allies with  $M$ . This enables  $E$  to consume  $\kappa \cdot (1 - \phi)$  under mass rule, where  $\kappa \in [0, 1]$  expresses *elite affinity toward mass rule*. Table 1 summarizes the notation.

[TABLE 1 ABOUT HERE]

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<sup>10</sup>Implicitly, this setup assumes that allying with  $E$  discretely lowers the probability of mass takeover. Alternatively, if the probability of no mass overthrow was  $1 - (1 - \theta_E \cdot \sigma) \cdot \theta_M$ , then it would explicitly increase in  $\theta_E$ , and at  $\theta_E = 1$  reduces to the simpler expression that I use. Appendix Assumption A.3 imposes a tighter lower bound on  $\sigma$ .

### 3 EQUILIBRIUM ANALYSIS

#### 3.1 SPOILS TRANSFER AND FIGHTING

I solve backward on the stage game to derive the subgame perfect Nash equilibria. If  $D$  shares power, then  $E$  accepts any spoils transfer  $x_{in}$  satisfying:

$$\underbrace{[1 - (1 - \sigma) \cdot \theta_M] \cdot (\underline{x} + x_{in})}_{\text{Accept}} \geq \underbrace{p_{in}(\theta_E) \cdot [1 - \theta_M \cdot (1 - \kappa)] \cdot (1 - \phi)}_{\text{Coup}}, \quad (1)$$

and  $E$  is indifferent between acceptance and a coup if  $x_{in} = x_{in}^*(\theta_E, \theta_M)$ , for:

$$x_{in}^*(\theta_E, \theta_M) \equiv \underbrace{(1 - \phi) \cdot p_{in}(\theta_E) - \underline{x}}_{x_{in}^*(\theta_M=0)} + (1 - \phi) \cdot p_{in}(\theta_E) \cdot \frac{\theta_M}{1 - (1 - \sigma) \cdot \theta_M} \cdot \left( \underbrace{\kappa}_{\uparrow \text{leverage}} \underbrace{-\sigma}_{\downarrow \text{leverage}} \right). \quad (2)$$

One component of  $E$ 's calculus is its bilateral interaction with  $D$ , in which  $E$  considers the amount of transfers it will receive relative to the probability of coup success and the costs of fighting, expressed by  $x_{in}^*(\theta_M = 0)$ . Additionally,  $\theta_M$  creates countervailing effects on  $E$ 's bargaining leverage. Although acceptance lowers the probability of mass takeover, summarized by the down arrow under  $\sigma$ , it also implies that  $E$  consumes 0 rather than  $\kappa$  if  $M$  overthrows the regime, expressed with the up arrow under  $\kappa$ . The uniform distribution for  $\bar{x}$  implies:

$$Pr(\text{coup} \mid \text{inclusion}, \theta_E, \theta_M) = \frac{x_{in}^*(\theta_E, \theta_M)}{1 - \underline{x}}, \quad (3)$$

and the probability that  $E$  accepts the deal is  $Pr(\text{deal} \mid \text{inclusion}, \theta_E, \theta_M) = 1 - Pr(\text{coup} \mid \text{inclusion}, \theta_E, \theta_M)$ .

If instead  $D$  excludes, then the acceptance constraint is:

$$\underbrace{(1 - \theta_M) \cdot x_{ex}}_{\text{Accept}} \geq \underbrace{p_{ex}(\theta_E) \cdot [1 - \theta_M \cdot (1 - \kappa)] \cdot (1 - \phi)}_{\text{Rebellion}}, \quad (4)$$

and  $E$  is indifferent between acceptance and rebelling if  $x_{ex} = x_{ex}^*(\theta_E, \theta_M)$ , for:

$$x_{ex}^*(\theta_E, \theta_M) \equiv \underbrace{(1 - \phi) \cdot p_{ex}(\theta_E)}_{x_{ex}^*(\theta_M=0)} + (1 - \phi) \cdot p_{ex}(\theta_E) \cdot \frac{\theta_M}{1 - \theta_M} \cdot \underbrace{\kappa}_{\uparrow \text{leverage}}. \quad (5)$$

There are three differences from Equation 2. First,  $E$  does not receive the basement powersharing transfer  $\underline{x}$ , and therefore only the probability of winning and fighting costs affect  $x_{ex}^*(\theta_M = 0)$ . Second,  $E$ 's probability of winning equals  $p_{ex}(\theta_E)$  rather than  $p_{in}(\theta_E)$ . Third,  $\theta_M$  exerts only one effect. As with inclusion, acceptance implies that  $E$  consumes 0 rather than  $\kappa$  if  $M$  takes over. However, if  $E$  is excluded, then accepting does not lower the probability of mass takeover, which equals  $\theta_M$  regardless of  $E$ 's response. The uniform distribution for  $\bar{x}$  implies:

$$Pr(\text{rebel} \mid \text{exclusion}, \theta_E, \theta_M) = \frac{x_{ex}^*(\theta_E, \theta_M)}{1 - \underline{x}}, \quad (6)$$

and the probability that  $E$  accepts the deal is  $Pr(\text{deal} \mid \text{exclusion}, \theta_E, \theta_M) = 1 - Pr(\text{rebel} \mid \text{exclusion}, \theta_E, \theta_M)$ . Appendix Section A.1 imposes sufficient conditions for interior solutions if  $\theta_M = 0$ , and Proposition A.2 characterizes the corner solutions for higher  $\theta_M$ .

If  $\theta_M$  is “low,” then  $D$  optimally proposes  $x_{in} = x_{in}^*(\theta_E, \theta_M)$  if  $E$  is included, and  $x_{ex} = x_{ex}^*(\theta_E, \theta_M)$  if excluded. As is standard in conflict bargaining models,  $D$  wants to buy off  $E$  because  $D$  makes the offers and fighting is costly, but does not want to offer more than needed to guarantee acceptance. However, if  $\theta_M$  and  $\kappa$  are “high,” then  $D$  prefers to trigger a fight rather than compensate  $E$  for high  $\kappa$ , as Appendix Proposition A.3 shows, in which case we set the probability of a deal to 0.

### 3.2 POWERSHARING

When choosing inclusion/exclusion,  $D$  is unsure of the maximum possible “pure spoils” transfer,  $\bar{x}$ , it can make.  $D$  compares its expected utility under inclusion to that under exclusion. Each term depends on the optimal offer, conditional on buying off  $E$ ; the probability of elite fighting; and the probability of surviving the mass threat.  $D$  shares power if and only if the powersharing incentive-compatibility constraint,  $\mathcal{P}(\theta_E, \theta_M) > 0$ , is met, for:

$$\mathcal{P}(\theta_E, \theta_M) \equiv Pr(\text{deal} \mid \text{inclusion}, \theta_E, \theta_M) \cdot \underbrace{[1 - \underline{x} - x_{in}^*(\theta_E, \theta_M)] \cdot [1 - (1 - \sigma) \cdot \theta_M]}_{\mathbb{E}[U_D(\text{inclusion} \mid \text{deal}, \theta_E, \theta_M)]}$$

$$\begin{aligned}
& + Pr(\text{coup} \mid \text{inclusion}, \theta_E, \theta_M) \cdot \underbrace{[1 - p_{in}(\theta_E)] \cdot (1 - \phi) \cdot (1 - \theta_M)}_{\mathbb{E}[U_D(\text{inclusion} \mid \text{coup}, \theta_E, \theta_M)]} \\
& - Pr(\text{deal} \mid \text{exclusion}, \theta_E, \theta_M) \cdot \underbrace{[1 - x_{ex}^*(\theta_E, \theta_M)] \cdot (1 - \theta_M)}_{\mathbb{E}[U_D(\text{exclusion} \mid \text{deal}, \theta_E, \theta_M)]} \\
& - Pr(\text{rebel} \mid \text{exclusion}, \theta_E, \theta_M) \cdot \underbrace{[1 - p_{ex}(\theta_E)] \cdot (1 - \phi) \cdot (1 - \theta_M)}_{\mathbb{E}[U_D(\text{exclusion} \mid \text{rebel}, \theta_E, \theta_M)]}. \tag{7}
\end{aligned}$$

If  $D$  includes, then with probability  $Pr(\text{deal} \mid \text{inclusion}, \theta_E, \theta_M)$ ,  $D$  can buy off  $E$  by offering  $x_{in}^*$ . With complementary probability, Nature draws  $\bar{x} < x_{in}^*$  and  $E$  attempts a coup in response to any feasible offer. In this case, the probability of defeating the coup attempt and the costliness of fighting determine  $D$ 's expected utility. Exclusion yields similar expressions. Each term is weighted by the probability of surviving mass overthrow. This equals  $1 - \theta_M$  in all cases except if  $D$  shares power and  $E$  accepts, when it is higher:  $1 - [(1 - \sigma) \cdot \theta_M]$ .

We can equivalently state the powersharing constraint as follows.  $D$  will share power if and only if the *actual* probability of a coup attempt under inclusion,  $Pr(\text{coup} \mid \text{inclusion}, \theta_E, \theta_M)$ , is less than the *maximum* probability of a coup under inclusion for which  $D$  will *choose* to share power:

$$\begin{aligned}
& Pr(\text{coup} \mid \theta_E, \theta_M)^{\max} \equiv \\
& \max \left\{ \frac{\mathbb{E}[U_D(\text{inclusion} \mid \text{deal}, \theta_E, \theta_M)] - \mathbb{E}[U_D(\text{exclusion} \mid \theta_E, \theta_M)]}{\mathbb{E}[U_D(\text{inclusion} \mid \text{deal}, \theta_E, \theta_M)] - \mathbb{E}[U_D(\text{inclusion} \mid \text{coup}, \theta_E, \theta_M)]}, 0 \right\}. \tag{8}
\end{aligned}$$

**Remark 1.**  $\mathcal{P}(\theta_E, \theta_M) > 0$  if and only if  $Pr(\text{coup} \mid \theta_E, \theta_M)^{\max} > Pr(\text{coup} \mid \text{inclusion}, \theta_E, \theta_M)$ .

### 3.3 EQUILIBRIUM

Proposition 1 characterizes the equilibrium strategy profile for “low”  $\theta_M$ , in which the expressions have interior solutions.<sup>11</sup> Collectively, Propositions A.2 through A.4 characterize the equilibrium

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<sup>11</sup>A continuum of equilibria exist because at the pure spoils stage,  $D$  is indifferent among all offers if  $E$  rejects any offer. However, all equilibria strategy profiles in which elite fighting occurs



strategy profile for all parameter values.

**Proposition 1** (Equilibrium).

- If  $\mathcal{P}(\theta_E, \theta_M) > 0$ , then  $D$  shares power with  $E$ . Otherwise,  $D$  excludes.
- $D$  offers  $x_{in} = \min \{x_{in}^*, 1 - \underline{x}\}$  if  $E$  is included and  $x_{ex} = \min \{x_{ex}^*, 1 - \underline{x}\}$  if  $E$  is excluded.
- If included, then  $E$  accepts any  $x_{in} \geq x_{in}^*$  and attempts a coup otherwise; and if excluded, then  $E$  accepts any  $x_{ex} \geq x_{ex}^*$  and rebels otherwise.

## 4 ELITE THREAT

This section considers a baseline case without a mass threat,  $\theta_M = 0$ . Hence, the elite (if excluded) poses the sole outsider threat. The new insights arise from assuming that the same underlying coercive capacity that improves the elite's ability to challenge the dictator in an outsider rebellion also enhances its coup ability.

### 4.1 THE POWERSHARING TRADEOFF: RENTS VERSUS CONFLICT

Before assessing the conventional threat logic, we need to uncover the mechanisms that underpin the dictator's powersharing decision. If  $\theta_M = 0$ , then  $D$ 's powersharing incentive-compatibility constraint  $\mathcal{P}(\theta_E, \theta_M) > 0$  (see Equation 7) reduces to:

$$\mathcal{P}(\theta_E, 0) = \phi \cdot \underbrace{\left[ \Pr(\text{rebel} \mid \text{exclusion}, \theta_E, 0) - \Pr(\text{coup} \mid \text{inclusion}, \theta_E, 0) \right]}_{\textcircled{1} \text{ Elite conflict mechanism (+/-)}}$$

$$- \underbrace{(1 - \phi) \cdot \left[ p_{in}(\theta_E) - p_{ex}(\theta_E) \right]}_{\textcircled{2} \text{ Rent-seeking mechanism (-)}}$$

along the equilibrium path are payoff equivalent.

$$= \underbrace{\frac{\phi}{1-x} \cdot \underline{x}}_{\text{1a}} - (1-\phi) \cdot [p_{in}(\theta_E) - p_{ex}(\theta_E)] \cdot \left( \underbrace{\frac{\phi}{1-x}}_{\text{1b}} + \underbrace{1}_{\text{2}} \right) > 0. \quad (9)$$

Equation 9 demonstrates that  $D$ 's powersharing dilemma can be restated as a *tradeoff between rents and the likelihood of elite conflict*. On the one hand, sharing power provides guaranteed rents of  $\underline{x}$  for  $E$ . This mechanism decreases  $\Pr(\text{coup} \mid \text{inclusion}, \theta_E, 0)$  relative to  $\Pr(\text{rebel} \mid \text{exclusion}, \theta_E, 0)$  by increasing the range of  $\bar{x}$  draws large enough that  $D$  can buy off  $E$ . This is the *conflict-prevention mechanism* (term 1a in Equation 9).<sup>12</sup> On the other hand, sharing power shifts the distribution of power by raising  $E$ 's probability of winning from  $p_{ex}(\theta_E)$  to  $p_{in}(\theta_E)$ . Enabling  $E$  to credibly demand more spoils yields two mechanisms that diminish  $D$ 's incentives to share power: a *conflict-enhancing mechanism* because  $E$  wins a fight with higher probability (term 1b in Equation 9) and a *rent-seeking mechanism* from diminishing  $D$ 's rents for a fixed probability of fighting (term 2). Combining terms 1a and 1b implies that sharing power can either raise or diminish the probability of elite conflict, depending on the magnitude of  $p_{in}(\theta_E) \cdot (1-\phi) - \underline{x}$  relative to  $p_{ex}(\theta_E) \cdot (1-\phi)$ . The strictly negative rent-seeking mechanism implies Lemma 1.

**Lemma 1** (Necessity of positive conflict mechanism for powersharing). *At  $\theta_M = 0$ , a necessary condition for  $D$  to share power is:*

$$\Pr(\text{rebel} \mid \text{exclusion}, \theta_E, 0) > \Pr(\text{coup} \mid \text{inclusion}, \theta_E, 0).$$

## 4.2 RECOVERING CONVENTIONAL IMPLICATIONS

The conventional threat logic predicts that hypothetically increasing  $E$ 's coercive capacity  $\theta_E$  should (1) cause  $D$  to switch from exclusion to inclusion, (2) raise the likelihood of a coup attempt, and (3) increase the overall likelihood of regime overthrow. Here I focus on the first two implications, and Appendix Section A.3 analyzes the third.

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<sup>12</sup> Appendix Assumption A.1 restricts the powersharing transfer such that  $D$  prefers transferring  $\underline{x}$  to fighting.

The tradeoff between rents and conflict implies that  $D$  shares power if and only if the net conflict mechanism is positive (i.e., conflict-prevention mechanism dominates conflict-enhancing mechanism) and large in magnitude relative to the rent-seeking mechanism. Equation 9 shows that, at any  $\theta_E$ , this requires small  $p_{in}(\theta_E) - p_{ex}(\theta_E)$ . Therefore, to yield the conventional implication that  $D$  shares power with high-capacity elites, we need small  $p_{in}(1) - p_{ex}(1)$ . To yield the conventional implication that  $D$  excludes low-capacity elites, we need large  $p_{in}(0) - p_{ex}(0)$ . I denote these respectively as the *strong coup-proofing institutions* and *non-entrenched elites* conditions. Specifically, the conventional threat logic requires:

$$\underbrace{p_{in}(1) - p_{ex}(1)}_{\text{Strong coup-proofing}} < \frac{\phi \cdot \underline{x}}{(1 - \phi) \cdot (\phi + 1 - \underline{x})} < \underbrace{p_{in}(0) - p_{ex}(0)}_{\text{Non-entrenched elites}}. \quad (10)$$

Finally, the conventional threat logic requires that  $\theta_E$  monotonically improves prospects for rebellion success relative to coup success, which corresponds to Case 1 in Assumption 1.

Figure 1 depicts different theoretical possibilities. The thick black line is the equilibrium probability of a coup attempt,  $\Pr(\text{coup}^*)$ , which is positive for parameter values in which  $D$  shares power and 0 otherwise. Table 2 provides the legend. In Panel A, the aforementioned assumptions for the conventional threat logic hold. At low  $\theta_E$ , there is no tradeoff between rents and conflict because inclusion is worse for each. Low  $p_{ex}(0)$  implies  $\Pr(\text{coup} \mid \text{inclusion}, \theta_E, 0) > \Pr(\text{rebel} \mid \text{exclusion}, \theta_E, 0)$ , shown with the dashed black line exceeding the solid gray line. The negative net conflict mechanism reinforces rent-seeking incentives to exclude.  $E$  is too weak to punish  $D$  for exclusion, and Lemma 1 implies that  $D$  excludes.

[FIGURE 1 ABOUT HERE]

[TABLE 2 ABOUT HERE]

The positive likelihood ratio combined with the boundary conditions from Equation 10 imply that higher  $\theta_E$  raises  $p_{ex}(\theta_E)$  considerably more than  $p_{in}(\theta_E)$ . This creates a threshold such that if  $\theta_E >$

$\theta'_E$ ,<sup>13</sup> then  $D$ 's tradeoff between rents and conflict has bite. The rent-seeking mechanism is always negative, but for  $\theta_E > \theta'_E$ , the net conflict mechanism is positive because  $\Pr(\text{rebel} \mid \text{exclusion}, \theta_E, 0) > \Pr(\text{coup} \mid \text{inclusion}, \theta_E, 0)$ . Despite this, for  $\theta_E$  only slightly larger than  $\theta'_E$ ,  $D$  excludes because it tolerates a higher probability of conflict to gain larger expected rents.<sup>14</sup>

Large  $\theta_E$  increases the magnitude of the elite conflict mechanism sufficiently relative to the rent-seeking mechanism that  $D$ 's willingness to tolerate coup risk, shown with the dotted gray line for  $\Pr(\text{coup} \mid \theta_E, 0)^{\max}$ , strictly increases and intersects the dashed black line for  $\Pr(\text{coup} \mid \text{inclusion}, \theta_E, 0)$ . At  $\theta_E = \theta_E^\dagger$ ,  $D$  switches to sharing power, and the equilibrium probability of a coup attempt,  $\Pr(\text{coup}^*)$ , jumps from 0 to positive. Consistent with the conventional implication for coup attempts, further increases in  $\theta_E$  strictly raise  $\Pr(\text{coup}^*)$ , which equals  $\Pr(\text{coup} \mid \text{inclusion}, \theta_E, 0)$  for  $\theta_E > \theta_E^\dagger$ . Independent of the specific assumptions for Panel A,  $\Pr(\text{coup} \mid \text{inclusion}, \theta_E, 0)$  strictly increases in  $\theta_E$  because higher elite coercive capacity increases the probability that a coup attempt succeeds.

### 4.3 VIOLATING THE CONVENTIONAL THREAT LOGIC

The first main finding for the model analysis establishes that if either part of Equation 10 fails, so do conventional implications for powersharing and coups. In Panel B, the strong coup-proofing condition fails because  $p_{in}(1)$  is higher than in Panel A. Although Case 1 of Assumption 1 holds, the conflict mechanism is negative except for high  $\theta_E$ , at which point the rent-seeking mechanism is large enough in magnitude to prevent powersharing. Consequently,  $D$  excludes for all  $\theta_E$ , and  $\Pr(\text{coup}^*) = 0$ . This case highlights the importance of evaluating how  $\theta_E$ , as opposed to  $p_{ex}(\theta_E)$ , affects equilibrium outcomes. Equation 9 shows that increasing  $p_{ex}(\theta_E)$  encourages  $D$  to share power by lowering its expected utility under exclusion. However, to assess the effects of elite coercive capacity, we cannot hypothetically increase  $p_{ex}(\theta_E)$  while holding  $p_{in}(\theta_E)$  fixed

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<sup>13</sup>The implicit characterization is  $\Pr(\text{rebel} \mid \text{exclusion}, \theta'_E, 0) = \Pr(\text{coup} \mid \text{inclusion}, \theta'_E, 0)$ .

<sup>14</sup>This is the same rationale for why  $D$  does not minimize the probability of elite overthrow, discussed in Appendix Section A.3.

because  $\theta_E$  affects both. In Panel B, high probability of rebellion success does not engender powersharing because the same increases in  $\theta_E$  that undergird rebellion success also considerably raise  $p_{in}(\theta_E)$ .

In Panel C, the non-entrenched elites condition fails because  $p_{ex}(0)$  is not much smaller than  $p_{in}(0)$ . The conflict mechanism is positive and large enough in magnitude at  $\theta_E = 0$  to induce  $D$  to share power.

In Panel D, Case 2 of Assumption 1 holds and the relationships oppose the conventional logic:  $D$  switches from inclusion to exclusion for large enough  $\theta_E$ , and  $\Pr(\text{coup}^*)$  drops at that point. Proposition 2 formalizes the different cases, which correspond respectively to the four panels in Figure 1.

**Proposition 2** (Elite threat, powersharing, and coup attempts). *Assume  $\theta_M = 0$  and, for parts a through c, Case 1 in Assumption 1 holds.*

**Part a. Conventional threat logic for powersharing and coups.** *If Equation 10 holds, then a unique  $\theta_E^\dagger \in (0, 1)$  exists such that:*

- *If  $\theta_E < \theta_E^\dagger$ , then  $D$  excludes and  $\Pr(\text{coup}^*) = 0$ .*
- *If  $\theta_E > \theta_E^\dagger$ ,  $D$  shares power and  $\Pr(\text{coup}^*) = \Pr(\text{coup} \mid \text{inclusion}, \theta_E, 0)$ , which strictly increases in  $\theta_E$ .*

**Part b.** *If only the strong coup-proofing condition in Equation 10 fails, then  $D$  excludes for all  $\theta_E \in [0, 1]$  and  $\Pr(\text{coup}^*) = 0$ .*

**Part c.** *If only the non-entrenched elites condition in Equation 10 fails, then  $D$  shares power for all  $\theta_E \in [0, 1]$  and  $\Pr(\text{coup}^*) = \Pr(\text{coup} \mid \text{inclusion}, \theta_E, 0)$ .*

**Part d.** *Assume Case 2 in Assumption 1 holds. Then a unique  $\theta_E^\dagger \in \mathbb{R}$  exists such that:*

- *If  $\theta_E < \theta_E^\dagger$ , then  $D$  shares power and  $\Pr(\text{coup}^*) = \Pr(\text{coup} \mid \text{inclusion}, \theta_E, 0)$ .*
- *If  $\theta_E > \theta_E^\dagger$ , then  $D$  excludes and  $\Pr(\text{coup}^*) = 0$ .*

## 5 MASS THREAT

How does a mass threat affect this interaction? Setting  $\theta_M > 0$  can either eliminate or exacerbate the dictator's rents-conflict tradeoff with the elite, depending on the elite's affinity toward mass

rule,  $\kappa$ . Existing models of the guardianship dilemma do not consider this possibility. These models constitute one version of the conventional threat logic by positing that larger outsider rebellion threats induce rulers to build a stronger military—which in turn raises the coup threat. Existing accounts also overlook that soldiers not hired for the military can still challenge the ruler. By contrast, modeling a permanent elite threat carries key implications for whether rulers face a guardianship dilemma and whether mass threats imperil or enhance regime survival.

## 5.1 THE POWERSHARING TRADEOFF: EFFECTS OF THE MASS THREAT

The mass threat alters  $D$ 's tradeoff between rents and elite conflict, which Equation 9 introduced for  $\theta_M = 0$ .<sup>15</sup> Directly, higher  $\theta_M$  raises  $D$ 's incentives to share power by widening the discrepancy between its probability of surviving the mass threat if it includes rather than excludes  $E$ . The probability of preventing mass takeover equals  $1 - \theta_M$  under exclusion but increases to  $1 - (1 - \sigma) \cdot \theta_M$  under inclusion if  $E$  accepts the offer. For this reason, unlike in the baseline case, the rent-seeking effect might *encourage* powersharing. Thus, Lemma 1 does not hold if  $\theta_M > 0$ , and  $D$  may share power even if  $\Pr(\text{rebel} \mid \text{exclusion}, \theta_E, \theta_M) > \Pr(\text{coup} \mid \text{inclusion}, \theta_E, \theta_M)$ ; see Panel B in Figure 2.

Higher  $\theta_M$  indirectly affects  $D$ 's powersharing choice by altering  $E$ 's calculus, as Equations 2 and 5 indicate, although the sign of the effects depends on elite affinity toward mass rule,  $\kappa$ . Low  $\kappa$  undercuts the bargaining leverage of an included elite because  $D$  knows that  $E$  fears mass takeover and that  $E$  can discretely lower the probability of mass overthrow by accepting. This encourages powersharing through both the rent-seeking mechanism (since an included elite accepts smaller rent transfers) and the elite conflict mechanism (by decreasing the probability that  $\bar{x}$  is low enough that  $D$  cannot buy off an included elite). In fact, if  $\kappa < \underline{\kappa}$  (see Appendix Equation A.11), then  $\Pr(\text{coup} \mid \text{inclusion}, \theta_E, \theta_M) = 0$  for large  $\theta_M$ . Thus, low  $\kappa$  and high  $\theta_M$  *eliminate* the coup risk from powersharing.

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<sup>15</sup>Appendix Section A.4 provides formal details for the following.

By contrast, if  $\kappa$  is high, then higher  $\theta_M$  *raises* an included elite’s bargaining leverage. The specific threshold is  $\kappa > \sigma$  because, then, the extent to which  $E$  does not fear mass rule outweighs the returns to elite coalitions,  $\sigma$ , meaning that  $E$  cares more about picking the winning side than about which side wins. Consequently, the aforementioned effects flip in sign, which discourages power-sharing. In fact, if  $\kappa > \bar{\kappa}$  (see Appendix Equation A.12), then  $Pr(\text{coup} \mid \text{inclusion}, \theta_E, \theta_M) = 1$  for large  $\theta_M$ . Thus, the powersharing dilemma is intractable, and  $D$  cannot buy off  $E$ .

## 5.2 RECOVERING CONVENTIONAL IMPLICATIONS

Recall the powersharing and coup implications from the conventional logic about outsider threats, which here is parameterized by  $\theta_M$ : (1a)  $D$  excludes  $E$  for low  $\theta_M$ , (1b)  $D$  includes  $E$  for high  $\theta_M$ , and (2)  $Pr(\text{coup}^*)$  increases in  $\theta_M$ . Implication 1a requires:

$$\mathcal{P}(\theta_E, 0) < 0. \quad (11)$$

This holds under either of two distinct sufficient conditions for  $D$  to exclude: the conventional logic for the elite threat holds and  $\theta_E$  is low, or the strong coup-proofing condition fails and  $D$  excludes for all  $\theta_E$ ; respectively, parts a and b of Proposition 2.

Jointly satisfying implications 1b and 2 requires *intermediate affinity*. Implication 1b requires *low-enough*  $\kappa$ . If  $\kappa > \bar{\kappa}$ , then  $D$  will not share power at high  $\theta_M$  because  $Pr(\text{coup} \mid \text{inclusion}, \theta_E, \theta_M) = 1$ . By contrast, implication 2 requires *high-enough*  $\kappa$ . The overall effect of  $\theta_M$  on  $E$ ’s bargaining leverage depends on  $\kappa$ , as discussed above:  $Pr(\text{coup} \mid \text{inclusion}, \theta_E, \theta_M)$  increases in  $\theta_M$  only if  $\kappa$  is high (see Equation 2).<sup>16</sup> Implications 1b and 2 are jointly satisfied if:<sup>17</sup>

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<sup>16</sup>This contrasts with the effect of elite coercive capacity on coups, discussed in the previous section: unconditionally, higher  $\theta_E$  increases  $Pr(\text{coup} \mid \text{inclusion}, \theta_E, 0)$  by empowering  $E$  to succeed at a coup attempt.

<sup>17</sup>Although “intermediate” as just motivated encompasses  $\kappa \in (\sigma, \bar{\kappa})$ , restricting the upper bound to an open neighborhood of  $\sigma$  is sufficient to establish that  $\mathcal{P}(\theta_E, \theta_M)$  is monotonic in

$$\kappa \in (\sigma, \sigma + \epsilon), \text{ for small } \epsilon > 0. \quad (12)$$

Figure 2 illustrates substantively important combinations of Equations 11 and 12 holding or not. It plots the same terms as in Figure 1 but as a function of  $\theta_M$ . In Panel A, both conditions hold, and the overall relationships resemble those in Figure 1A:  $D$  switches from exclusion to inclusion at a unique threshold  $\theta_M^\dagger$ , and  $\Pr(\text{coup}^*)$  discretely increases from 0 to positive. This is often referred to as the guardianship dilemma mechanism, which Corollary 1 formalizes, because  $D$  tolerates a higher probability of an elite coup attempt to deter mass takeover. And,  $\Pr(\text{coup}^*)$  strictly increases in  $\theta_M$  for all  $\theta_M > \theta_M^\dagger$ , consistent with conventional implications.

[FIGURE 2 ABOUT HERE]

### 5.3 VIOLATING THE CONVENTIONAL THREAT LOGIC

Figure 2 also highlights cases that reject the conventional threat logic, yielding the second main finding for the model analysis. In Panels B and C, Equation 12 fails because  $\kappa$  is too low. Low elite affinity toward mass rule undermines the conventional implication that strong mass threats raise coup propensity. In Panel B, the overall relationship between  $\theta_M$  and  $\Pr(\text{coup}^*)$  is inverted U-shaped. Some components are the same as in Panel A: Equation 11 holds, and  $\kappa$  is low enough that  $D$  switches from exclusion to inclusion at  $\theta_M = \theta_M^\dagger$ . Here,  $\Pr(\text{coup}^*)$  discretely increases, again recovering the guardianship dilemma logic. However, because  $\kappa < \sigma$  in Panel B,  $\Pr(\text{coup}^*)$  *decreases* in  $\theta_M$  over  $\theta_M > \theta_M^\dagger$ . This yields the non-monotonic relationship. Furthermore,  $\kappa < \underline{\kappa}$  implies that  $\Pr(\text{coup} \mid \text{inclusion}, \theta_E, \theta_M) = 0$  for large enough  $\theta_M$ , hence eliminating coup risk under powersharing.

Panel C is identical to Panel B except  $D$  shares power with  $E$  for all  $\theta_M$ , i.e.,  $E$ 's coercive threat is sufficient to induce powersharing. Here, there is no guardianship dilemma. The only effect of the increasing  $\theta_M$  is to make  $E$  less likely to stage a coup, and  $\Pr(\text{coup}^*)$  strictly decreases in  $\theta_M$  until  $\theta_M$ , which I use to prove Proposition 3.



hitting 0.

In Panel D, Equation 12 fails because  $\kappa$  is too large, and hence the mass threat exacerbates  $D$ 's rents-conflict tradeoff with  $E$ . Because  $\kappa > \bar{\kappa}$ , a strong mass threat disables  $D$  from buying off  $E$ , i.e.,  $Pr(\text{coup} \mid \text{inclusion}, \theta_E, \theta_M) = 1$  for high  $\theta_M$ . Contrary to conventional threat implications,  $D$  excludes if  $\theta_M$  is large. Proposition 3 formalizes the different cases, which correspond respectively to the four panels in Figure 2.<sup>18</sup>

**Proposition 3** (Mass threat, powersharing, and coup attempts).

*For parts a through c, assume affinity does not exceed the intermediate threshold,  $\kappa < \sigma + \epsilon$ , for small  $\epsilon > 0$ .*

*If Equation 11 holds, then a unique  $\theta_M^\dagger \in (0, 1)$  exists such that  $D$  shares power if and only if  $\theta_M > \theta_M^\dagger$ . If  $\theta_M < \theta_M^\dagger$ , then  $Pr(\text{coup}^*) = 0$ . If  $\theta_M > \theta_M^\dagger$ , then  $Pr(\text{coup}^*) = Pr(\text{coup} \mid \text{inclusion}, \theta_E, \theta_M)$ . There are two possibilities:*

**Part a. Conventional threat logic for powersharing and coups.** *If  $\kappa > \sigma$ , then  $Pr(\text{coup} \mid \text{inclusion}, \theta_E, \theta_M)$  strictly increases in  $\theta_M$ .*

**Part b.** *For any  $\kappa < \sigma$ ,  $Pr(\text{coup} \mid \text{inclusion}, \theta_E, \theta_M)$  weakly decreases in  $\theta_M$ . If  $\kappa < \underline{\kappa}$ , then a unique  $\underline{\theta}_M^{in} \in (\theta_M^\dagger, 1)$  exists such that if  $\theta_M > \underline{\theta}_M^{in}$ , then  $Pr(\text{coup} \mid \text{inclusion}, \theta_E, \theta_M) = 0$ . Appendix Proposition A.2 defines  $\underline{\theta}_M^{in}$ .*

**Part c.** *If Equation 11 fails, then  $D$  shares power for all  $\theta_M \in [0, 1]$  and  $Pr(\text{coup}^*) = Pr(\text{coup} \mid \text{inclusion}, \theta_E, \theta_M)$  for all  $\theta_M$ . The effect of  $\theta_M$  on  $Pr(\text{coup} \mid \text{inclusion}, \theta_E, \theta_M)$  depends on  $\kappa$  and  $\sigma$ , as just described.*

**Part d.** *Assume high affinity,  $\kappa > \bar{\kappa}$ . There exists  $\theta_M^\dagger < \hat{\theta}_M^{in}$  such that if  $\theta_M > \theta_M^\dagger$ , then  $D$  excludes and  $Pr(\text{coup}^*) = 0$ . Appendix Proposition A.3 defines  $\hat{\theta}_M^{in} \in (0, 1)$ .*

**Corollary 1** (Guardianship dilemma mechanism). *Assume  $\kappa < \sigma + \epsilon$ , for small  $\epsilon > 0$ .*

- *If Equation 11 holds, then the guardianship dilemma mechanism holds:  $Pr(\text{coup}^*)$  exhibits a discrete increase at  $\theta_M = \theta_M^\dagger$ .*
- *If Equation 11 fails, then the guardianship dilemma mechanism fails:  $Pr(\text{coup}^*)$  does not exhibit a discrete increase at any  $\theta_M \in [0, 1]$ .*

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<sup>18</sup>The discussion of Appendix Figure A.3 addresses parameter values omitted in Proposition 3.

These findings differ from existing theories because my model assumes (1) variance in elite affinity to mass rule and (2) the dictator faces a permanent threat from elites. The first assumption implies that increasing  $\theta_M$  affects not only  $D$ 's incentives to share power—as the conventional logic contends—but also  $E$ 's incentives to stage a coup, a largely novel consideration for this literature. Even the specific finding of a non-monotonic relationship between  $\theta_M$  and  $\Pr(\text{coup}^*)$ , shown in Figure 2B, rests on a distinct mechanism from some existing variants of the guardianship dilemma argument that produce a seemingly similar prediction. Acemoglu, Vindigni and Ticchi (2010) show that strong threats induce rulers to choose large militaries, and assume that governments can commit to continually pay large militaries but not small or intermediate-sized militaries. Svobik (2012, chap. 5) shows that the contracting problem between a government and its military dissipates if the military is large—which the government will choose when facing a strong outsider threat—because the military can control policy without actually intervening. He calls this a “military tutelage” regime. Both these models assume that more severe outsider threats increase the military's bargaining leverage relative to the government, and that the magnitude of the outsider threat does not affect the military's consumption. By contrast, here, a non-monotonic relationship arises if  $\kappa$  is low enough that  $\theta_M$  *decreases*  $E$ 's expected utility to attempting a coup, which, combined with the guardianship dilemma mechanism, generates the non-monotonicity. These considerations also highlight that even in Figure 2A, which supports the conventional logic, the mechanism is distinct because  $E$  internalizes its expected consumption under mass rule.

Additionally, I build on McMahon and Slantchev's (2015) critique of the guardianship dilemma logic. They also consider how  $\theta_M$  affects  $E$ 's incentives for a coup, but the two assumptions just highlighted account for my different findings. First, they implicitly assume  $\kappa = 0$ , hence  $\Pr(\text{coup} \mid \text{inclusion}, \theta_E, \theta_M)$  necessarily decreases in  $\theta_M$  in their model. However, I show that high  $\kappa$  generates the opposite relationship, given  $E$ 's incentives to join the winning side. Second, if  $\kappa$  is low, then a permanent elite threat—which their model does not contain—is necessary to eliminate the guardianship dilemma mechanism. In existing models of coups, the ruler will never share

power absent a mass threat, implying that an analog of Equation 11 always holds.<sup>19</sup> I show that under this condition, the guardianship dilemma mechanism holds. At the powersharing-switching point,  $\theta_M = \theta_M^\dagger$ , there is a discrete jump upward in  $\Pr(\text{coup}^*)$  (Corollary 1; Figure 2B), contrary to McMahon and Slantchev’s (2015) rejection of a guardianship dilemma. However, my model allows elites to challenge even if excluded from power, which may induce  $D$  to share power at  $\theta_M = 0$  (hence Equation 11 fails). In this case,  $\Pr(\text{coup}^*)$  monotonically decreases in  $\theta_M$  because  $D$  shares power for all  $\theta_M$  (Figure 2C), and there is no guardianship dilemma.

## 5.4 REGIME-ENHANCING MASS THREATS

The third main finding from the model analysis is that stronger mass threats enhance regime durability if  $\kappa$  is low and  $\sigma$  is high, contrary to the conventional implication that outsider threats imperil regime survival. The importance of *low elite affinity* follows from the logic just discussed, and the present result additionally highlights the importance of *high returns to elite coalitions*, i.e., high  $\sigma$ . Equation 13 states the equilibrium probability of regime overthrow,  $\rho^*(\theta_M)$ , if  $\kappa < \underline{\kappa}$ . For each range of  $\theta_M$  values, the first term is the probability of elite overthrow and the second is the probability of mass overthrow (conditional on no elite overthrow). Figure 3 depicts the probability of regime overthrow (rather than of a coup attempt, as in previous figures). Panel A depicts the equilibrium probability of overthrow by  $E$  (coup or rebellion), Panel B by  $M$ , and Panel C by either.

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<sup>19</sup>In McMahon and Slantchev (2015), this would entail the ruler not delegating national defense to a military specialist. They explicitly only analyze outsider threats large enough that the ruler delegates to a military agent—creating positive coup risk for all parameter values that they analyze—but my argument applies to their model under the full range of  $\theta_M$ .

$$\rho^*(\theta_M) = \begin{cases} Pr(\text{rebel} \mid \text{excl.}, \theta_E, \theta_M) \cdot p_{ex} \\ \quad + \left[ Pr(\text{rebel} \mid \text{excl.}, \theta_E, \theta_M) \cdot (1 - p_{ex}) + Pr(\text{deal} \mid \text{excl.}, \theta_E, \theta_M) \right] \cdot \theta_M & \text{if } \theta_M < \theta_M^\dagger \\ Pr(\text{coup} \mid \text{incl.}, \theta_E, \theta_M) \cdot p_{in} \\ \quad + \left[ Pr(\text{coup} \mid \text{incl.}, \theta_E, \theta_M) \cdot (1 - p_{in}) + Pr(\text{deal} \mid \text{incl.}, \theta_E, \theta_M) \cdot (1 - \sigma) \right] \cdot \theta_M & \text{if } \theta_M \in (\theta_M^\dagger, \underline{\theta}_M^{in}) \\ 0 + (1 - \sigma) \cdot \theta_M & \text{if } \theta_M > \underline{\theta}_M^{in} \end{cases} \quad (13)$$

[FIGURE 3 ABOUT HERE]

For the parameter values in the figure, the regime is more likely to survive at  $\theta_M = \underline{\theta}_M^{in}$  than at  $\theta_M = 0$ . To see why, for  $\theta_M < \theta_M^\dagger$ , we get the conventional relationship:  $\rho(\theta_M)$  increases in  $\theta_M$ . Throughout this range,  $D$  excludes  $E$  and the probability of mass overthrow equals  $\theta_M$ . The increasing relationship shown in Panel C reflects this direct effect. However, at  $\theta_M = \theta_M^\dagger$ ,  $D$  switches to inclusion. This generates a discrete drop in the probability of mass takeover (Panel B), which causes the overall probability of overthrow to discretely drop (Panel C). For  $\theta_M \in (\theta_M^\dagger, \underline{\theta}_M^{in})$ , the probability of elite overthrow decreases in  $\theta_M$  (Panel A) for the same reasons as discussed for Panels B/C of Figure 2. Because returns to elite coalitions,  $\sigma$ , are high, the negative indirect effect of  $\theta_M$ —which arises from lowering  $E$ 's probability of staging a coup—blunts the positive direct effect of  $\theta_M$  on the probability of mass overthrow (Panel B). Because  $\kappa < \underline{\kappa}$ ,  $\text{Pr}(\text{coup}^*)$  eventually hits 0, eliminating coup risk under powersharing. Panel C shows that  $\theta_M = \underline{\theta}_M^{in}$  minimizes the overall probability of overthrow.<sup>20</sup>

**Proposition 4** (Regime-enhancing mass threats). *Suppose affinity is low,  $\kappa < \underline{\kappa}$ . If  $\theta_E > 0$ , then a unique  $\sigma' < 1$  exists such that if  $\sigma > \sigma'$ , then  $\rho^*(\underline{\theta}_M^{in}) < \rho^*(0)$ .*

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<sup>20</sup>A permanent elite threat is necessary for this result. If instead  $\theta_E = 0$  and  $p_{ex}(0) = 0$ , then  $\rho^*(0) = 0$ ; and therefore  $\theta_M = 0$  would necessarily minimize overthrow risk.

## 6 IMPLICATIONS FOR EMPIRICAL CASES

The following examples suggest how to operationalize key conditioning factors in the model—coup-proofing, elite entrenchment, elite affinity, and returns to elite coalitions—in real-world cases. This discussion also motivates that these theoretical conditioning factors help to explain, empirically, why outsider threats sometimes yield outcomes consistent with the conventional threat logic and sometimes not.

### 6.1 LARGE ELITE FACTIONS AND COUP-PROOFING INSTITUTIONS

The conventional logic requires the dictator to share power with a high-capacity elite. This is more likely if *coup-proofing institutions* are strong, i.e., low  $p_{in}(1)$  (see Equation 10). For example, in cases such as the Soviet Union and Communist China, a strong party and army were created jointly during a mass revolutionary struggle during which the vanguard group transformed societal structures and eliminated rival organizations, followed by subsequent institutionalization of elite competition (Svolik 2012, 129; Levitsky and Way 2013, 10-11). Strong parties also aid with surveillance duties typically performed by internal security organizations, which coup-proof the regime by collecting intelligence about coup plots before they occur. Similarly, overlapping security agencies can check each other to counterbalance against coup attempts (Quinlivan 1999).<sup>21</sup>

By contrast, if coup-proofing institutions are weak, i.e., high  $p_{in}(1)$ , then  $D$  will not tolerate the considerable coup risk posed by a high-capacity elite (Figure 1B). In Angola, multiple rebel groups participated in a lengthy liberation war to end Portuguese rule. In January 1975, Portugal finally set a date for independence while negotiating with a transitional government that incorporated the three main rebel groups—MPLA ( $D$ ), and UNITA and FNLA ( $E$ )—each primarily associated

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<sup>21</sup>The strong coup-proofing condition stated in Equation 10 is also more likely to hold if there is a high threat of a rebellion under exclusion, i.e., high  $p_{ex}(1)$ . Existing research connects this condition to ethnic groups located *close to the capital* (Roessler and Ohls 2018). In such cases, rebels face lower hurdles to organizing an insurgency that can effectively strike at the capital.

with a different ethnic group. UNITA and FNLA posed credible rebellion threats, i.e., high  $\theta_E$  and  $p_{ex}(1)$ , given prior fighting and intact military wings. However, rather than compelling MPLA to share power, Angola’s fractured process of gaining independence meant that MPLA could not integrate other rebel groups into the regime without exacerbating coup risk, yielding high  $p_{in}(1)$ . This contrasted with African countries that experienced electoral competition before independence which—in some cases—engendered durable interethnic parties. Armed ethnic factions caused Angola’s transitional government to collapse in August 1975, just before independence. “Inevitably, the delicate coalition came apart as the leaders of the three movements failed to resolve fundamental policy disagreements or control their competition for personal power” (Warner 1991, 38-9).

Unfortunately, Angola is not unique as attempts at military integration following civil war often fail (Glassmyer and Sambanis 2008), likely because of high  $p_{in}(1)$ . For example, in Chad in 1979, integrating the rebel army FAN “into the national army . . . was not accomplished. When the prime minister demanded that he should be protected by the FAN rather than the national army, the FAN forces were already in the [capital city]; thus, amid the political and constitutional wrangling, there were de jure two armies” (Nolutshungu 1996, 105-6). Strong outside threats would also create strong inside threats if included, and rulers will exclude if they cannot solidify internal security.

## 6.2 SMALL ELITE FACTIONS AND ENTRENCHMENT

The conventional logic also requires the dictator to exclude a low-capacity elite, which is more likely if their ability to win if excluded,  $p_{ex}(0)$ , is low (see Equation 10). Retaining our conceptualization of low  $\theta_E$  as numerically small ethnic groups, why would  $p_{ex}(0)$  ever be high? In reality, rulers do not inherit a blank slate. For example, if a group dominates the officer corps of the military prior to  $D$  gaining power, then attempting to purge these elites may trigger a countercoup by elites “before losing their abilities to conduct a coup” (Sudduth 2017, 1769) in which they leverage “whatever tactics and resources they have to fight against their declining status” (Harkness 2018,

8). Alternatively, recently fired military officers may be able to organize a particularly effective rebellion.<sup>22</sup> Thus, prior *entrenchment in power* substitutes for small numerical size to generate a strong threat if the dictator excludes, which raises  $p_{ex}(0)$  and encourages powersharing (Figure 1C).<sup>23</sup>

Upon gaining independence from European powers, rulers in many ex-colonies inherited “split domination” regimes in which different ethnic groups controlled civilian political and military institutions (Horowitz 1985).<sup>24</sup> In Nigeria, the numerical dominance of northern Muslims ( $D$ ) enabled their party, the Northern People’s Congress (NPC), to win a plurality of legislative seats at independence in 1960. However, the officer corps considerably overrepresented eastern Igbos ( $E$ ) because they achieved higher average education levels. Igbos’ entrenched position posed obstacles to marginalizing them, and the eastern-dominated party NCNC was a junior partner in the governing coalition with NPC. Although the northern-led government implemented biased military recruitment procedures designed to increase the percentage of northern officers, the Igbo-tilted imbalance remained by 1965. Northerners ended the powersharing relationship only after an Igbo-led coup attempt in 1966, which manifested the threat posed by the entrenched elites. Subsequent events highlighted their rebellion risk: after Igbos were purged from the army, the military effectively split in half as a civil war erupted in the east in 1967.

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<sup>22</sup>Cederman, Gleditsch and Buhaug (2013) show empirically that “downgraded” ethnic groups (lost access to power in the central government within the previous five years) are relatively likely to fight civil wars. They posit the importance of psychologically inflicted grievances, but a plausible alternative interpretation is that downgraded groups maintain some at the center, which makes launching an outsider rebellion more feasible.

<sup>23</sup>With this motivation, the fighting technology under exclusion could be a “coup.” However, the equilibrium probability of a coup attempt in the relevant theoretical statement, Proposition 2c, is unchanged because, in equilibrium for those parameter values,  $D$  includes  $E$  for all  $\theta_E$ .

<sup>24</sup>For the following, see pages 451, 455-6, 465, and 504-5.

### 6.3 MASS THREATS AND REGIME SURVIVAL

Another conventional implication is that stronger mass threats should reduce prospects for regime survival. However, this holds only if elites' *affinity for mass rule*,  $\kappa$ , is high, or if *returns to elite coalitions*,  $\sigma$ , are low (Proposition 4). Rwanda exemplifies high  $\kappa$ . Following Hutu overthrow of the Tutsi monarchy in 1959, many Tutsis fled the country. Hutus dominated the Rwandan government ( $D$ ) into the 1990s, and Tutsis that remained in Rwanda comprised the opposition ( $E$ ). However, Tutsis living in Rwanda faced incentives to ally with their transnational ethnic kin, which by 1990 had organized as the Rwandan Patriotic Front (RPF) in Uganda ( $M$ ). Following the Rwandan genocide in 1994, the RPF invaded with support from Rwandan Tutsis and has governed the country since 1995. Egypt and Tunisia during the Arab Spring in 2011 followed a similar logic. Their armies ( $E$ ) conceivably could have dispersed mass protesters ( $M$ ). However, these units were relatively professionalized and ethnically similar to the protesting masses. Although they would lose specific perks of the incumbent regime ( $D$ ), the strong organizational position of these militaries and their control over important economic sectors led them to anticipate relatively favorable outcomes under a civilian regime. More generally, Egypt and Tunisia highlight how mass protests or ongoing civil wars can create propitious conditions for coup attempts (Casper and Tyson 2014; Bell and Sudduth 2017), although only if  $\kappa$  is high. Otherwise, as discussed in the next cases, mass opposition should cause elites to band together against the threat—eliminating coup risk under powersharing.<sup>25</sup>

Malaysia exemplifies low  $\kappa$  and high  $\sigma$ , in which case mass threats should *enhance* regime survival (Figure 3).<sup>26</sup> Japan's occupation of colonial Malaya during World War II enabled the Chinese-dominated Malayan Communist Party ( $M$ ) to form. It sparked the Malayan Emergency between 1948 and 1960, which caused over 10,000 deaths, and  $M$  engaged in communal violence after

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<sup>25</sup>Also consider contrasting Arab Spring cases of Bahrain, Libya, and Syria: personalized and ethnically distinct militaries perceived bad fates following regime change (low  $\kappa$ ), and violently defended the incumbent regime.

<sup>26</sup>The following draws from Slater (2010).



independence. Slater (2010, 92) argues, “Shared perceptions of endemic threats from below provide the most compelling explanation both for the internal strength of Malaysia’s ruling parties, and for the robustness of the coalition adjoining them,” which differs from guardianship dilemma models in which elites do not fear mass takeover when making their coup decision. Specifically, the major Malayan political party UMNO ( $D$ ) allied with a business-led conservative Chinese party MCA ( $E$ ), and this powersharing coalition governed until 2018. Despite shared ethnicity between  $E$  and  $M$ ,  $\kappa$  was low. Communists targeted not only Malays, but also Chinese elites it labeled as conspirators. Communists’ actions placed the entire Chinese community in suspicion, causing business leaders to organize the MCA. Prior British colonial efforts bolstered the security forces and created effective taxation institutions, which enabled a unified elite coalition to mitigate the communist threat (high  $\sigma$ ). Appendix B discusses additional durable regimes that faced strong mass threats, such as apartheid South Africa; as well as cases with low  $\sigma$ , such as Russia in 1917.

## 7 CONCLUSION

This article provided a new theoretical analysis of how dictators share power in response to outsider threats. In contrast to a “conventional threat logic,” I explain why dictators do not necessarily share power with elites that pose a considerable rebellion threat. Nor will responding to mass threats by including other elites necessarily raise coup risk or imperil regime survival. To understand the effects of outsiders’ coercive capacity, we need to incorporate conditioning factors such as the strength of coup-proofing institutions, the depth of elite entrenchment, elite affinity toward mass rule, and returns to elite coalitions. Table 3 summarizes the three main results and ties them back to the formal propositions and illustrative figures.

[TABLE 3 ABOUT HERE]

This article brings together insights from disparate literatures, including ethnic conflict and authoritarian institutions, to improve our understanding of the strategic logic underpinning authoritarian

powersharing, coups, and regime survival. However, incorporating elements from various existing theories required introducing certain simplifications that future research could relax. Following Roessler (2016), I treat coups and civil wars as analogous technologies for capturing the state that differ only in their probability of winning. Future work could consider how other aspects of civil wars, including their greater length and higher overall costs, might affect this tradeoff, or how rulers can change strategies during an ongoing civil war. Civil wars can also differ in their aims, and scholars could assess differences in powersharing strategies when elites' main threat is to create a separate state rather than to capture the center. There are additional considerations for the coup technology as well. This model evaluates interactions with a unified elite, but in reality, there are multiple elite factions distinguished between elites in the inner circle and opposition elites. For example, White (2020) shows that insider military factions are more likely to stage coups following civil war settlements that incorporate members of the rebel military, generating an additional deterrent against incorporating opposition factions. These are fruitful considerations to study within the broader context of the dictator's powersharing dilemma.

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**Table 1: Summary of Notation**

Stage	Variables/description
1. Sharing power and spoils	<ul style="list-style-type: none"> <li>• <math>\underline{x}</math>: Basement level of spoils for <math>E</math> if <math>D</math> shares power; <math>D</math> cannot transfer this portion of the budget if it excludes</li> <li>• <math>x</math>: <math>D</math>'s pure spoils offer, denoted <math>x_{in}</math> if <math>E</math> is <u>in</u>cluded and <math>x_{ex}</math> if <u>ex</u>cluded</li> <li>• <math>\bar{x}</math>: Maximum pure spoils that <math>D</math> can offer to <math>E</math> (Nature-drawn after <math>D</math> chooses inclusion/exclusion); maximum possible spoils are <math>\bar{x}</math> for excluded <math>E</math> and <math>\underline{x} + \bar{x}</math> for included <math>E</math></li> </ul>
2. Elite fighting decision	<ul style="list-style-type: none"> <li>• <math>\theta_E</math>: <math>E</math>'s coercive capacity; increases its probability of winning a rebellion or a coup</li> <li>• <math>p_{in}(\theta_E)</math>: <math>E</math>'s probability of winning a fight (i.e., coup) if <u>in</u>cluded; I denote <math>p_{in}(1)</math> as the strength of <i>coup-proofing institutions</i></li> <li>• <math>p_{ex}(\theta_E)</math>: <math>E</math>'s probability of winning a fight (i.e., rebellion) if <u>ex</u>cluded; I denote <math>p_{ex}(0)</math> as the depth of <i>elite entrenchment</i></li> <li>• <math>\phi</math>: Surplus destroyed by fighting</li> </ul>
3. Mass takeover	<ul style="list-style-type: none"> <li>• <math>\theta_M</math>: <math>M</math>'s coercive capacity; this is the probability of mass overthrow if <math>D</math> and <math>E</math> do not band together (<math>D</math> excludes and/or <math>E</math> fights)</li> <li>• <math>\sigma</math>: Higher values indicate greater <i>returns to elite coalitions</i>; the probability of mass overthrow equals <math>(1 - \sigma) \cdot \theta_M</math> if <math>D</math> and <math>E</math> band together</li> <li>• <math>\kappa</math>: <i>elite affinity toward mass rule</i></li> </ul>

**Table 2: Legend for Figures 1 and 2**

<b>Solid black</b>	Equilibrium probability of a coup attempt, denoted as $\Pr(\text{coup}^*)$ ; equivalent to Equation 3 for parameter values in which $D$ shares power (see Equation 7 and Remark 1), and 0 otherwise.
Dashed black	Counterfactual probability of a coup attempt under inclusion, for parameter values in which $D$ excludes (also Equation 3).
Solid gray	Probability of a rebellion under exclusion (see Equation 6)
Dotted gray	$D$ 's coup tolerance: the highest probability of a coup attempt under inclusion for which $D$ will share power (see Equation 8 and Remark 1)

**Table 3: Outsider Threats and Powersharing: New Implications**

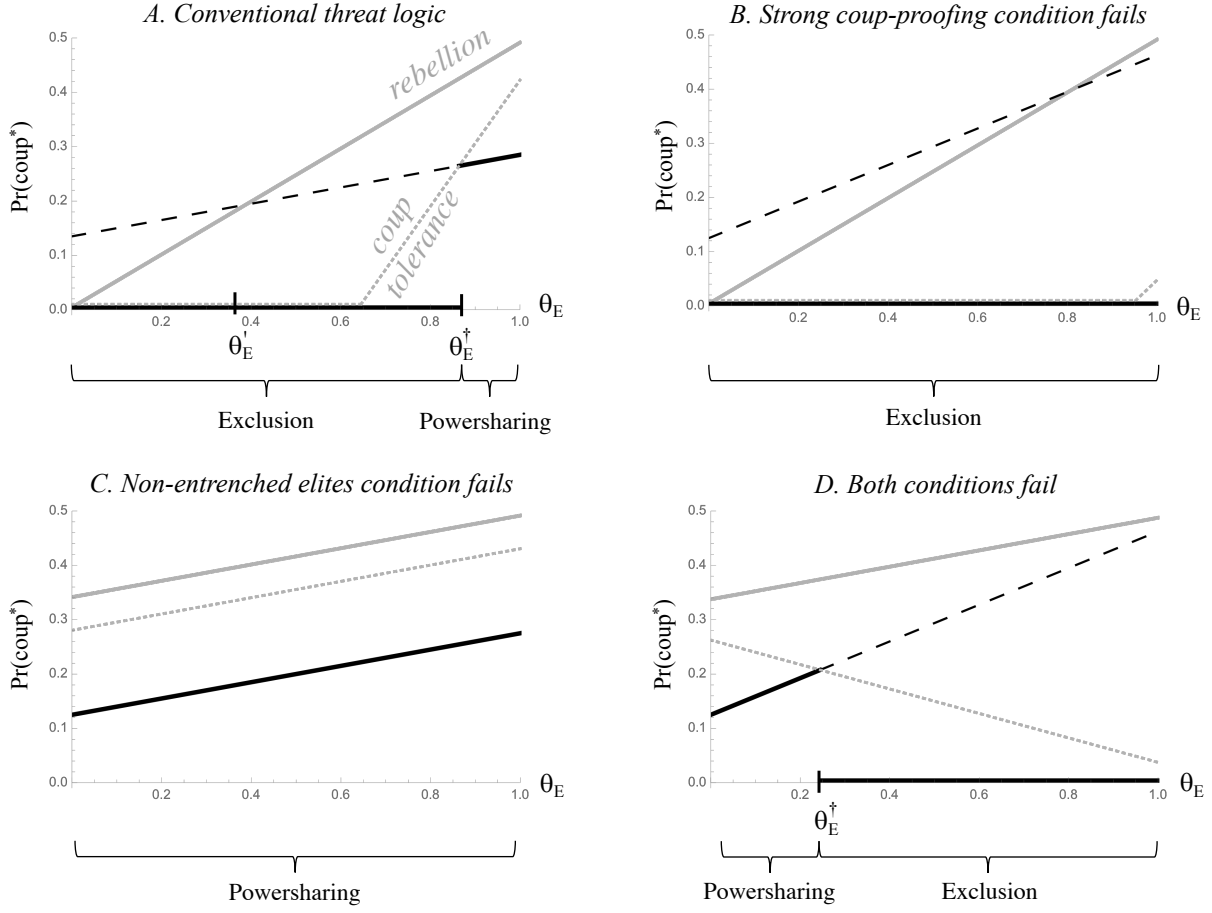
	<b>Powersharing</b>	<b>Coups</b>	<b>Regime survival</b>
<i>Conventional threat logic</i>	Dictator excludes if the outsider threat is small and shares power if the outsider threat is large	A larger outsider threat raises the equilibrium probability of a coup attempt	A larger outsider threat raises the equilibrium probability of regime overthrow
<i>When this fails</i>	<b>1a.</b> Weak coup-proofing (Prop. 2b; Fig. 1B) <b>1b.</b> Entrenched elites (Prop. 2c; Fig. 1C) <b>2b.</b> High elite affinity with masses (Prop. 3d; Fig. 2D)	<b>2a.</b> Low elite affinity with masses (Prop. 3b; Fig. 2B/C)*	<b>3.</b> Low elite affinity with masses and high returns to elite coalitions (Prop. 4; Fig. 3)**

\*With weak coup-proofing institutions, this aspect of the conventional logic fails even without a mass threat because  $D$  excludes for all  $\theta_E$ .

\*\*Appendix Proposition A.1 provides a counterexample to the regime-survival implication of the conventional logic absent a mass threat.

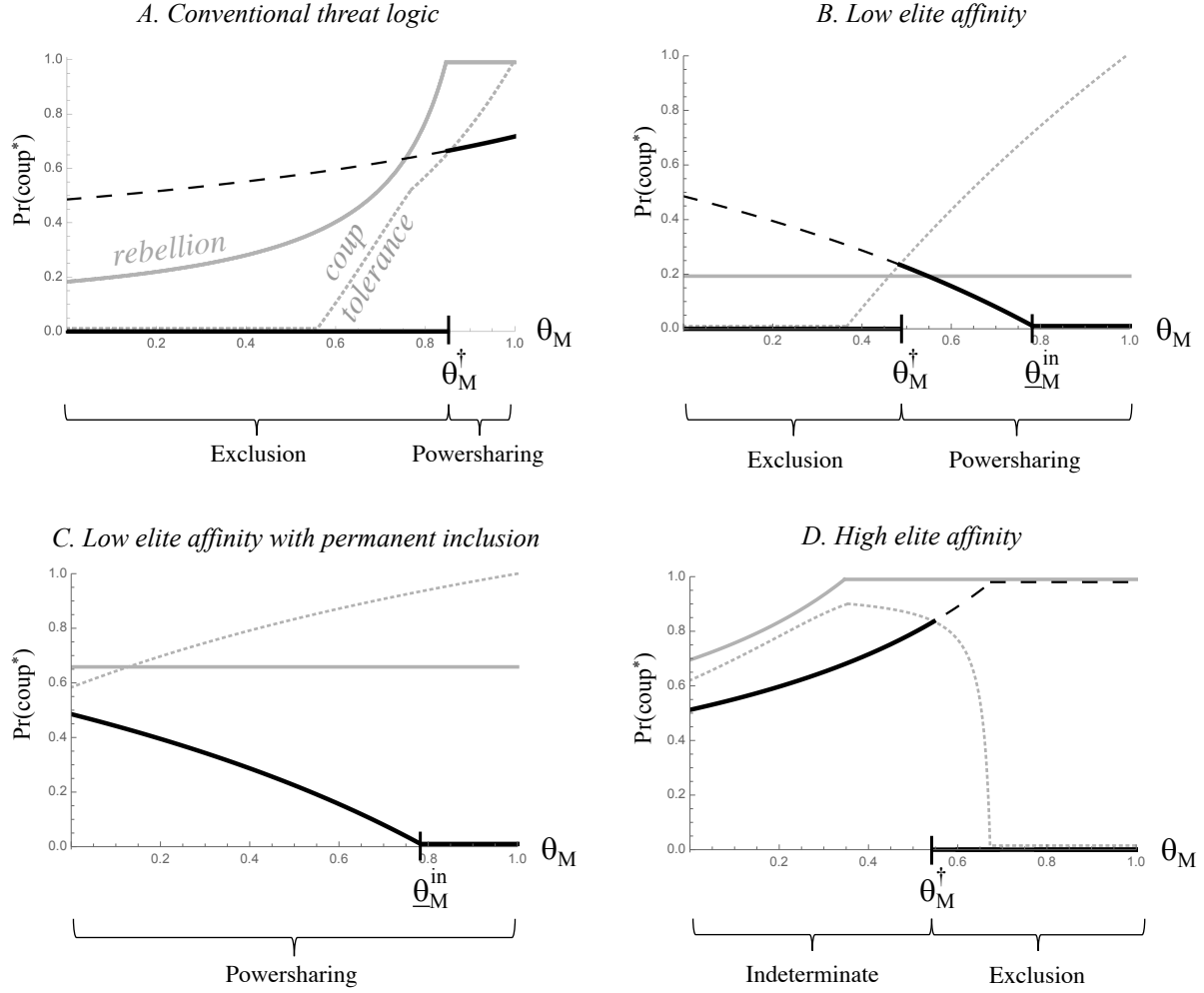


**Figure 1: Elite Threat: Powersharing and Coup Attempts**



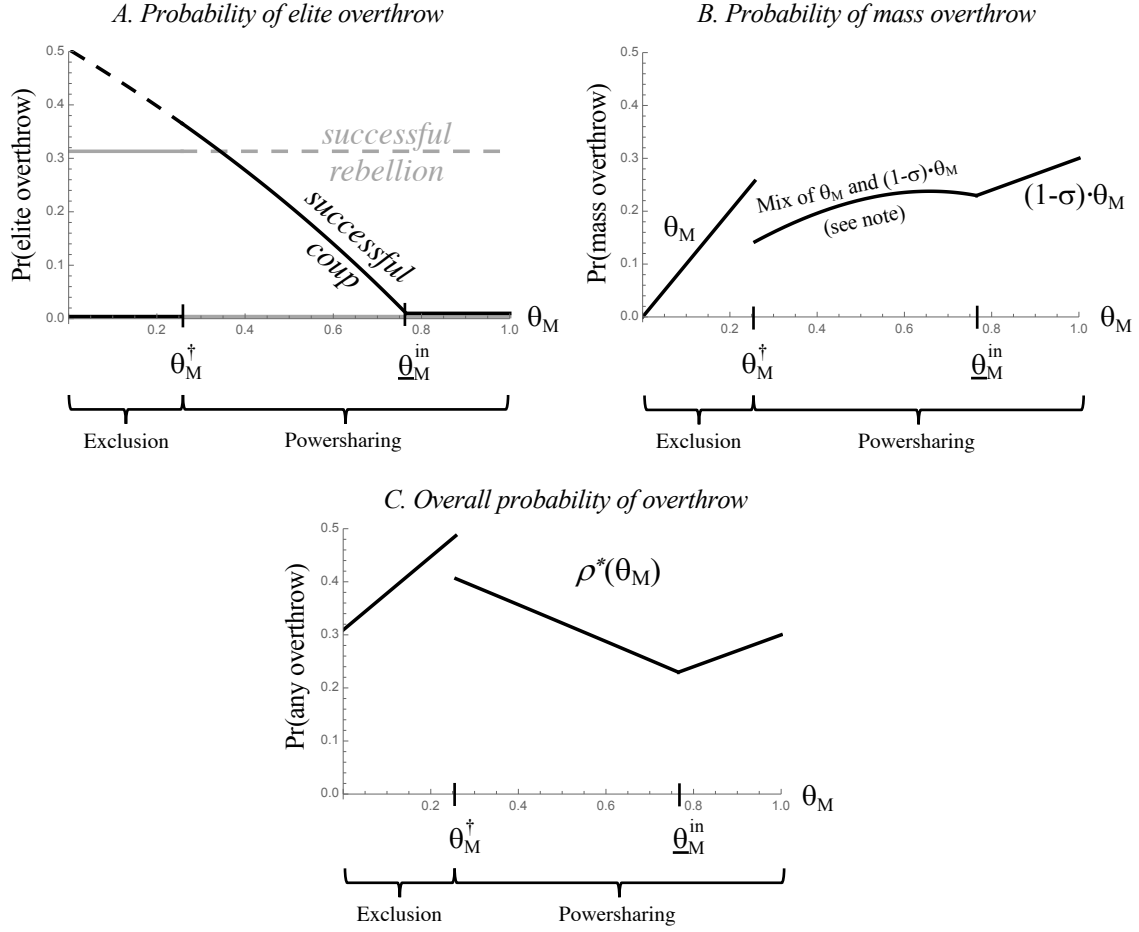
*Notes:* Table 2 provides the legend. Figure 1 uses functional forms  $p_{in}(\theta_E) = (1 - \theta_E) \cdot p_{in}(0) + \theta_E \cdot p_{in}(1)$  and  $p_{ex}(\theta_E) = (1 - \theta_E) \cdot p_{ex}(0) + \theta_E \cdot p_{ex}(1)$ . Panel A sets  $\theta_M = 0$ ,  $p_{ex}(0) = 0$ ,  $p_{ex}(1) = 0.65$ ,  $p_{in}(0) = 0.5$ ,  $p_{in}(1) = 0.7$ ,  $\underline{x} = 0.2$ , and  $\phi = 0.4$ . B raises  $p_{in}(1)$  to 0.95, C raises  $p_{ex}(0)$  to 0.45, and D imposes both changes. Consequently, Panels A through C satisfy Case 1 in Assumption 1, and D satisfies Case 2.

**Figure 2: Mass Threat: Powersharing and Coup Attempts**



*Notes:* Figure 2 uses the same functional forms for the contest functions as Figure 1. Panel A sets  $\theta_E = 1$ ,  $p_{in}(1) = 0.95$ ,  $p_{ex}(1) = 0.25$ ,  $\sigma = 0.6$ ,  $\underline{x} = 0.18$ ,  $\phi = 0.4$ , and  $\kappa = 0.8$ . B lowers  $\kappa$  to 0, C lowers  $\kappa$  to 0 and raises  $p_{ex}(1)$  to 0.9, and D raises  $p_{in}(1)$  to 1,  $p_{ex}(1)$  to 0.95, and lowers  $\sigma$  to 0.3. Table 2 provides the legend.

**Figure 3: Mass Threat and Overthrow Risk**



*Notes:* The functional form assumptions and parameter values are the same as in Figure 2B except  $p_{ex}(1) = 0.65$  and  $\sigma = 0.7$ . In A, the black curve equals  $Pr(\text{coup} \mid \text{inclusion}, \theta_E, \theta_M) \cdot p_{in}(\theta_E)$  and the gray curve equals  $Pr(\text{rebel} \mid \text{exclusion}, \theta_E, \theta_M) \cdot p_{ex}(\theta_E)$ . In B, the curve for  $\theta_M \in (\theta_M^\dagger, \theta_M^{in})$  equals  $[Pr(\text{coup} \mid \text{inclusion}, \theta_E, \theta_M) + Pr(\text{deal} \mid \text{inclusion}, \theta_E, \theta_M) \cdot (1 - \sigma)] \cdot \theta_M$ . This differs from Equation 13 because it is the *unconditional* probability of mass overthrow. For C, Equation 13 defines  $\rho^*(\theta_M)$ .

Online Appendix for  
“The Dictator’s Powersharing Dilemma:  
Countering Dual Outsider Threats”

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## A SUPPLEMENTARY INFORMATION FOR FORMAL RESULTS

### A.1 CORNER SOLUTIONS FOR ELITE THREAT

At  $\theta_M = 0$ , if  $\underline{x}$  is too large, then Equations 2 and 5 will hit a corner solution,  $x_{in}^* < 0$  or  $x_{ex}^* > 1 - \underline{x}$ , because the basement powersharing transfer is so large that  $E$  either cannot credibly threaten a coup under inclusion or  $D$  cannot possibly transfer enough spoils under exclusion to buy off  $E$ . I impose Assumption A.1 throughout to rule out these substantively uninteresting cases. However, this assumption does not rule out corner solutions if  $\theta_M > 0$ , and I characterize these solutions in Propositions A.2 through A.4.

**Assumption A.1** (Bounds on powersharing transfer).

$$\underline{x} < \hat{x} \equiv \min \left\{ (1 - \phi) \cdot p_{in}(0), 1 - (1 - \phi) \cdot p_{ex}(1) \right\}$$

Throughout, I set:

- $x_{in}^* = 0$  and  $Pr(\text{coup} \mid \text{inclusion}, \theta_E, \theta_M) = 0$  if the RHS of Equation 2 is less than 0.
- $x_{in}^* = 1 - \underline{x}$  and  $Pr(\text{coup} \mid \text{inclusion}, \theta_E, \theta_M) = 1$  if the RHS of Equation 2 exceeds  $1 - \underline{x}$ .
- $x_{ex}^* = 1 - \underline{x}$  and  $Pr(\text{rebel} \mid \text{exclusion}, \theta_E, \theta_M) = 1$  if the RHS of Equation 5 exceeds  $1 - \underline{x}$ .
- NB: The RHS of Equation 5 is never less than 0.

### A.2 PROOF OF PROPOSITION 2

Proposition 1 follows from Propositions A.2 through A.4, which characterize the equilibrium strategy profile for the general  $\theta_M > 0$  case. Lemma 1 follows directly from Equation 9.

**Proof of Proposition 2.** It is straightforward to show that Case 1 of Assumption 1 implies that  $\mathcal{P}(\theta_E, 0)$  strictly increases in  $\theta_E$ , which I will refer to as fact \*.

**Part a.** We can implicitly define:

$$p_{in}(\theta_E^\dagger) - p_{ex}(\theta_E^\dagger) = \frac{\phi \cdot \underline{x}}{(1 - \phi) \cdot (\phi + 1 - \underline{x})} \quad (\text{A.1})$$

The boundaries  $\theta_E^\dagger \in (0, 1)$  follow from Equation 10, and the unique threshold claim follows from fact \*. Finally, need to show:

$$\frac{d}{d\theta_E} Pr(\text{coup} \mid \text{inclusion}, \theta_E, 0) = \frac{1 - \phi}{1 - \underline{x}} \cdot \frac{dp_{in}(\theta_E)}{d\theta_E} > 0$$

**Part b.** Follows from  $p_{in}(1) - p_{ex}(1) > \frac{\phi \cdot \underline{x}}{(1 - \phi) \cdot (\phi + 1 - \underline{x})}$  and fact \*.

**Part c.** Follows from  $p_{in}(0) - p_{ex}(0) < \frac{\phi \cdot \underline{x}}{(1 - \phi) \cdot (\phi + 1 - \underline{x})}$  and fact \*.

**Part d.** It is straightforward to show that Case 2 of Assumption 1 implies that  $\mathcal{P}(\theta_E, 0)$  strictly decreases in  $\theta_E$ . The definition of  $\theta_E^\dagger$  is identical to that in Equation A.1, except the strictly decreasing function  $\mathcal{P}(\theta_E, 0)$  implies the opposite actions for  $D$  on either side of the threshold. Without imposed boundary conditions,  $\theta_E^\dagger$  is not restricted to lie between 0 and 1. ■

### A.3 ELITE THREATS AND REGIME SURVIVAL

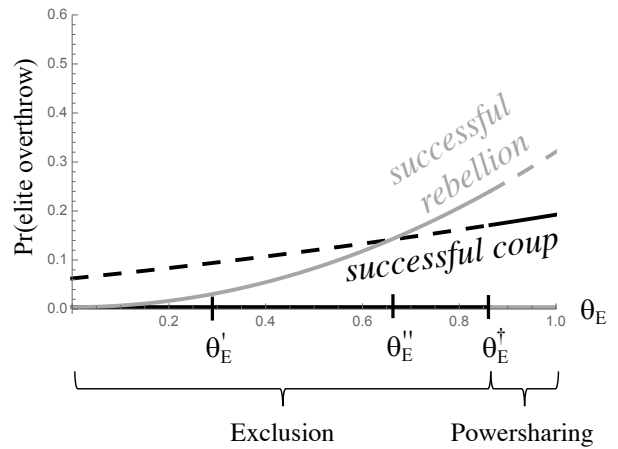
The third main implication from the conventional threat logic is that the equilibrium probability of regime overthrow should strictly increase in  $\theta_E$ . By contrast, in my model,  $D$  trades off between rents and conflict, and the probability of regime survival does not directly enter the powersharing constraint (Equation 9). Here, I provide a counterexample to the conventional logic.

Figure A.1 uses the same parameter values as in Figure 1A, for which the necessary conditions for the conventional threat logic for powersharing hold. For intermediate values  $\theta_E \in (\theta_E'', \theta_E^\dagger)$ , the rent-seeking effect is large enough in magnitude that  $D$  excludes despite the probability of a successful rebellion under exclusion,  $\Pr(\text{rebel} \mid \text{exclusion}, \theta_E, 0) \cdot p_{ex}(\theta_E)$ , exceeding the probability of a successful coup under inclusion,  $\Pr(\text{coup} \mid \text{inclusion}, \theta_E, 0) \cdot p_{in}(\theta_E)$ . See also footnote 14. Consequently, increasing  $\theta_E$  from slightly less than  $\theta_E^\dagger$  to slightly greater than the powersharing-switching threshold *decreases* the equilibrium probability of overthrow.

This counterintuitive result arises because higher  $\theta_E$  decreases the weight that  $D$  puts on accruing rents. Formally, Equation 9 shows that  $p_{in}(\theta_E) - p_{ex}(\theta_E)$  determines the magnitude of the rent-seeking effect, and imposing Part a of Assumption 1 implies that this term strictly decreases in  $\theta_E$ . At  $\theta_E = \theta_E^\dagger$ ,  $D$  switches from exclusion to inclusion, which discretely lowers the equilibrium probability of overthrow because  $\theta_E^\dagger$  exceeds the threshold  $\theta_E''$  at which the probability of a successful rebellion under exclusion exceeds the probability of a successful coup attempt under inclusion. Proposition A.1 formalizes this intuition.

This result contrasts with the conventional threat implication that stronger outsider threats necessarily diminish survival prospects. It also contrasts with the broader premise in the authoritarian politics literature that “all dictators are presumed to be motivated by the same goal—survive in office while maximizing rents” (Magaloni 2008, 717) and “[s]urvival is the primary objective of political leaders” (Bueno de Mesquita and Smith 2010, 936). Roessler (2016, 60-61) expands this

**Figure A.1: Elite Threats and Overthrow Risk**



Notes: Figure A.1 uses the same parameter values and functional form assumptions for the contest functions as Figure 1A. The black curve equals  $\Pr(\text{coup} \mid \text{inclusion}, \theta_E, 0) \cdot p_{in}(\theta_E)$  and the gray curve equals  $\Pr(\text{rebel} \mid \text{exclusion}, \theta_E, 0) \cdot p_{ex}(\theta_E)$ .

discussion by assuming that rulers also “bid to keep economic rents and political power concentrated in their hands” but, similarly, assumes that rulers pursue this goal conditional on building a winning coalition large enough to “maintain societal peace.” Although  $D$  can consume rents only if it survives, the shift in the balance of power caused by inclusion—which diminishes  $D$ ’s rents—creates a disincentive for sharing power.  $D$ ’s desire for rents can cause it not only to exclude a *low-capacity* elite—as the conventional threat logic anticipates—but also to exclude at intermediate  $\theta_E$ . Thus, in equilibrium,  $D$  risks a higher probability of fighting for  $\theta_E \in (\theta'_E, \theta^\dagger_E)$  and a higher probability of overthrow for  $\theta_E \in (\theta''_E, \theta^\dagger_E)$ .

This finding is especially striking considering my assumption that  $D$  consumes 0 if it loses power, regardless of *how* it loses power. By contrast, in other models, rulers do not necessarily maximize their probability of survival because they prefer a (positively valued) exit option over clinging to power at all costs. For example, a ruler might expect a better post-exit fate if the next regime is democratic rather than authoritarian, which creates incentives to step down and hand power to democrats, hence securing a better post-exit fate (e.g., Debs 2016).

**Proposition A.1** (Dictator does not maximize probability of survival). *Suppose both conditions in Equation 10 hold and a modified version of Case 1 of Assumption 1:*

$$\frac{d}{d\theta_E} \left[ \frac{p_{ex}(\theta_E)}{p_{in}(\theta_E)} \right] > \frac{2x^*_{in}(\theta_E) + \underline{x}}{2x^*_{ex}(\theta_E)} \quad (\text{A.2})$$

**Part a.** A unique  $\theta''_E > \theta'_E$  exists such that if  $\theta_E > \theta''_E$ , then  $Pr(\text{rebel} \mid \text{exclusion}, \theta_E, 0) \cdot p_{ex} > Pr(\text{coup} \mid \text{inclusion}, \theta_E, 0) \cdot p_{in}$ .

**Part b.** At  $\theta_E = \theta^\dagger_E$ , the rent-seeking effect equals  $\frac{\phi \cdot \underline{x}}{1 + \phi - \underline{x}}$ .

**Part c.** If  $\frac{\phi \cdot \underline{x}}{1 + \phi - \underline{x}} > R$ , for  $R > 0$  defined in the proof, then  $\theta''_E < \theta^\dagger_E$  and the equilibrium probability of regime overthrow exhibits a discrete drop at  $\theta_E = \theta^\dagger_E$ .

**Proof of Proposition A.1, part a.** The  $\theta''_E$  threshold is implicitly defined as:

$$Pr(\text{coup} \mid \text{inclusion}, \theta''_E, 0) \cdot p_{in}(\theta''_E) = Pr(\text{rebel} \mid \text{exclusion}, \theta''_E, 0) \cdot p_{ex}(\theta''_E) \quad (\text{A.3})$$

To show  $\theta''_E > \theta'_E$ , recall that  $\theta'_E$  is implicitly defined as  $Pr(\text{coup} \mid \text{inclusion}, \theta'_E, 0) = Pr(\text{rebel} \mid \text{exclusion}, \theta'_E, 0)$ , which rearranges to:

$$(1 - \phi) \cdot [p_{in}(\theta'_E) - p_{ex}(\theta'_E)] = \underline{x} \quad (\text{A.4})$$

Because  $p_{in}(\theta_E) > p_{ex}(\theta_E)$  for all  $\theta_E$ , Equation A.3 implies  $Pr(\text{coup} \mid \text{inclusion}, \theta''_E, 0) < Pr(\text{rebel} \mid \text{exclusion}, \theta''_E, 0)$ , which rearranges to:

$$(1 - \phi) \cdot [p_{in}(\theta''_E) - p_{ex}(\theta''_E)] < \underline{x} \quad (\text{A.5})$$



Combining Equations A.4 and A.5 implies that  $p_{in}(\theta''_E) - p_{ex}(\theta''_E) < p_{in}(\theta'_E) - p_{ex}(\theta'_E)$ . The claim follows from Case 1 of Assumption 1.

To complete the proof, it suffices to show for all  $\theta_E > \theta'_E$ :

$$\begin{aligned} \frac{d}{d\theta_E} \left[ Pr(\text{rebel} \mid \text{exclusion}, \theta_E, 0) \cdot p_{ex}(\theta_E) - Pr(\text{coup} \mid \text{inclusion}, \theta_E, 0) \cdot p_{in}(\theta_E) \right] = \\ \frac{d}{d\theta_E} \left[ \frac{p_{ex}(\theta_E)}{p_{in}(\theta_E)} \right] - \frac{2x_{in}^*(\theta_E) + \underline{x}}{2x_{ex}^*(\theta_E)} > 0, \end{aligned}$$

where the sign follows from Equation A.2.

**Part b.** It is useful to rewrite the implicit definition of  $\theta_E^\dagger$  to explicitly equate the rent-seeking and elite conflict effects:

$$\underbrace{\frac{\phi}{1 - \underline{x}} \cdot \left[ - [p_{in}(\theta_E^\dagger) - p_{ex}(\theta_E^\dagger)] \cdot (1 - \phi) + \underline{x} \right]}_{\text{Conflict}} = \underbrace{(1 - \phi) \cdot [p_{in}(\theta_E^\dagger) - p_{ex}(\theta_E^\dagger)]}_{\text{Rent-seeking}} \quad (\text{A.6})$$

We can rearrange this equation to express the rent-seeking effect as:

$$(1 - \phi) \cdot [p_{in}(\theta_E^\dagger) - p_{ex}(\theta_E^\dagger)] = \frac{\phi \cdot \underline{x}}{1 + \phi - \underline{x}} \quad (\text{A.7})$$

**Part c.** It suffices to show the following term is positive at  $\theta_E = \theta_E^\dagger$ :

$$\Pr(\text{rebel} \mid \text{exclusion}, \theta_E, 0) \cdot p_{ex}(\theta_E) - \Pr(\text{coup} \mid \text{inclusion}, \theta_E, 0) \cdot p_{in}(\theta_E)$$

Rearranging and multiplying out positive terms shows that this has the same sign as:

$$\frac{\phi}{1 - \underline{x}} \cdot \left[ - [p_{in}(\theta_E^\dagger) - p_{ex}(\theta_E^\dagger)] \cdot (1 - \phi) + \underline{x} \right] - \frac{\phi}{1 - \underline{x}} \cdot [p_{in}(\theta_E^\dagger) \cdot (1 - \phi) - \underline{x}] \cdot \frac{p_{in}(\theta_E^\dagger) - p_{ex}(\theta_E^\dagger)}{p_{ex}(\theta_E^\dagger)} \quad (\text{A.8})$$

The first term is simply the conflict effect, which by Equation A.6 equals the rent-seeking effect at  $\theta_E = \theta_E^\dagger$ , which in turn equals the term from Equation A.7. Therefore, we can rewrite Equation A.8 to show that the necessary inequality is:

$$\frac{\phi \cdot \underline{x}}{1 + \phi - \underline{x}} > R \equiv \frac{\phi}{1 - \underline{x}} \cdot [p_{in}(\theta_E^\dagger) \cdot (1 - \phi) - \underline{x}] \cdot \frac{p_{in}(\theta_E^\dagger) - p_{ex}(\theta_E^\dagger)}{p_{ex}(\theta_E^\dagger)} > 0 \quad (\text{A.9})$$

■

## A.4 HOW MASS THREAT CHANGES POWERSHARING INCENTIVES

For the general  $\theta_M \geq 0$  case,  $D$ 's powersharing incentive-compatibility constraint is:

$$\begin{aligned}
 \mathcal{P}(\theta_E, \theta_M) &= (1 - \theta_M) \cdot \underbrace{\mathcal{P}(\theta_E, 0)}_{\text{Equation 9}} + \underbrace{\sigma \cdot \theta_M \cdot Pr(\text{deal} \mid \text{inclusion}, \theta_E, \theta_M) \cdot [1 - (1 - \phi) \cdot p_{in}]}_{\textcircled{1} \text{ Direct rent-seeking effect of } \theta_M} \\
 &+ \underbrace{\theta_M \cdot (1 - \phi) \cdot \left[ Pr(\text{deal} \mid \text{inclusion}, \theta_E, \theta_M) \cdot p_{in} \cdot (\kappa - \sigma) - Pr(\text{deal} \mid \text{exclusion}, \theta_E, \theta_M) \cdot p_{ex} \cdot \kappa \right]}_{\textcircled{2} \text{ Indirect rent-seeking effect of } \theta_M} \\
 &+ \underbrace{(1 - \theta_M) \cdot \phi \cdot \left[ \Delta Pr(\text{rebel} \mid \text{exclusion}) - \Delta Pr(\text{coup} \mid \text{inclusion}) \right]}_{\textcircled{3} \text{ Indirect elite conflict effect of } \theta_M} > 0. \tag{A.10}
 \end{aligned}$$

This expression rearranges Equation 7 assuming interior solutions for  $x_{in}^*$  and  $x_{ex}^*$ . Proposition A.4 considers corner solutions. The new notation in term 3 of Equation A.10 is:

$$\begin{aligned}
 \Delta Pr(\text{coup} \mid \text{inclusion}) &\equiv Pr(\text{coup} \mid \text{inclusion}, \theta_E, \theta_M) - Pr(\text{coup} \mid \text{inclusion}, \theta_E, 0) \\
 &= (1 - \phi) \cdot p_{in}(\theta_E) \cdot \frac{\theta_M}{1 - (1 - \sigma) \cdot \theta_M} \cdot (\kappa - \sigma) \cdot \frac{1}{1 - \underline{x}} \\
 \Delta Pr(\text{rebel} \mid \text{exclusion}) &\equiv Pr(\text{rebel} \mid \text{exclusion}, \theta_E, \theta_M) - Pr(\text{rebel} \mid \text{exclusion}, \theta_E, 0) \\
 &= (1 - \phi) \cdot p_{ex}(\theta_E) \cdot \frac{\theta_M}{1 - \theta_M} \cdot \kappa \cdot \frac{1}{1 - \underline{x}}
 \end{aligned}$$

The following complements the discussion in Section 5.1 by providing more precise technical details on the three effects of  $\theta_M$  highlighted in Equation A.10.

**1. Direct rent-seeking effect of  $\theta_M$ .** If  $\theta_M = 0$ , then the rent-seeking mechanism is negative (term 2 in Equation 9). However, if  $\theta_M > 0$ , there is a chance that  $D$  loses its rents because of mass takeover. Consequently, there is a countervailing component of the rent-seeking mechanism because sharing power decreases the probability of mass takeover from  $\theta_M$  to:

$$[Pr(\text{deal} \mid \text{inclusion}, \theta_E, \theta_M) \cdot (1 - \sigma) + Pr(\text{coup} \mid \text{inclusion}, \theta_E, \theta_M)] \cdot \theta_M.$$

This effect encourages powersharing by raising the probability that  $D$  consumes a positive amount rather than 0. Combining the two components of the rent-seeking mechanism implies that the net effect can be positive or negative. If positive, the rent-seeking effect can be sufficient to induce powersharing. Figure 2B provides an example: at  $\theta_M = \theta_M^\dagger$ ,  $D$  shares power despite  $Pr(\text{coup} \mid \text{inclusion}, \theta_E, \theta_M) > Pr(\text{rebel} \mid \text{exclusion}, \theta_E, \theta_M)$ . This also implies that Lemma 1 does not hold if  $\theta_M > 0$ .

**2. Indirect rent-seeking effect of  $\theta_M$ .** Sharing power indirectly affects  $D$ 's rents by influencing  $E$ 's bargaining leverage. The overall effect is ambiguous because higher  $\theta_M$  can either lower or raise  $E$ 's bargaining leverage under inclusion. Equation 2 highlights that the threshold for a net positive effect on powersharing is  $\kappa < \sigma$ .

On the one hand, by accepting a deal, an included  $E$  lowers the probability of mass takeover from  $\theta_M$  to  $(1 - \sigma) \cdot \theta_M$ . On the other hand, deposing  $D$  in a coup enables  $E$  to consume  $\kappa \cdot (1 - \phi)$  rather than 0 if  $M$  takes over. Which effect dominates? If  $\kappa < \sigma$ , then the net effect of  $\theta_M$  reduces  $E$ 's bargaining leverage under inclusion. In fact, if  $\kappa < \underline{\kappa}$ , then  $x_{in}^* = 0$  for large  $\theta_M$ , hence eliminating  $D$ 's rents-conflict tradeoff with  $E$ . The bottom curve in Figure A.2 depicts this case, and the threshold is:

$$\underline{\kappa} \equiv \frac{\sigma \cdot \underline{x}}{(1 - \phi) \cdot p_{in}}, \quad (\text{A.11})$$

which is strictly less than  $\sigma$ . However, if  $\kappa > \sigma$ , then large  $\theta_M$  exacerbates  $D$ 's rents-conflict tradeoff with  $E$  by enhancing  $E$ 's bargaining leverage under inclusion. In fact, if  $\kappa > \bar{\kappa}$ , then  $x_{in}^* = 1 - \underline{x}$  for large  $\theta_M$ . The top curve in Figure A.2 depicts this case, and the threshold is:

$$\bar{\kappa} \equiv \frac{\sigma}{(1 - \phi) \cdot p_{in}}, \quad (\text{A.12})$$

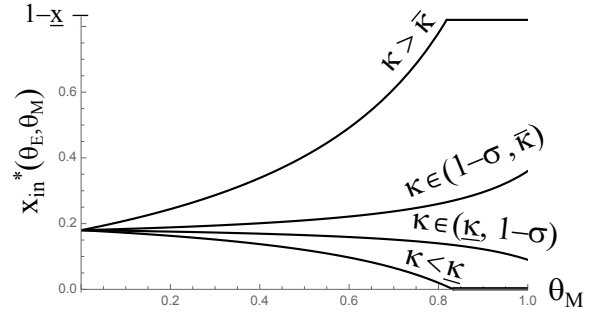
which strictly exceeds  $\sigma$ .

By contrast, under exclusion, higher  $\theta_M$  unambiguously increases  $E$ 's bargaining leverage. There is the same  $\kappa$  effect as under inclusion that raises  $E$ 's expected utility to fighting, but no countervailing effect: the probability of mass takeover equals  $\theta_M$  regardless of  $E$ 's action (see Equation 5). This component of the indirect effect raises  $D$ 's incentives to share power, given the greater difficulties of buying off an excluded elite.

Overall, if  $\kappa < \sigma$ , then the indirect rent-seeking effect encourages powersharing by increasing  $D$ 's payoff under inclusion and decreasing it under exclusion. By contrast, if  $\kappa > \sigma$ , then the net effect is ambiguous because higher  $\theta_M$  strengthens  $E$ 's bargaining leverage under both inclusion and exclusion. This provides the intuition for the inability to sign the effect of  $\theta_M$  on  $\mathcal{P}(\theta_E, \theta_M)$  if  $\kappa > \sigma$ , as discussed more below.

**3. Indirect elite conflict effect of  $\theta_M$ .** The same effects as just described of  $\theta_M$  on  $E$ 's bargaining leverage also influence the probability of elite fighting. Consequently, the third term in Equation A.10 is positive if  $\kappa < \sigma$  and ambiguous otherwise.

**Figure A.2: Mass Threat and Spoils Transfer Under Inclusion**



Notes: Figure A.2 uses the same contest functional forms as the figures in the article. It sets  $\phi = 0.4$ ,  $\underline{x} = 0.18$ ,  $\theta_E = 1$ ,  $p_{in}(1) = 0.6$ ,  $p_{ex}(1) = 0.4$ , and  $\sigma = 0.2$ . In ascending order, the values of  $\kappa$  are 0, 0.15, 0.3, and 0.95.

## A.5 EQUILIBRIUM WITH CORNER SOLUTIONS

Proposition 1 characterizes the equilibrium strategy profile with interior solutions for the pure spoils offers. Although Assumption A.1 guarantees interior solutions if  $\theta_M = 0$ , there are corner solutions for high-enough  $\theta_M > 0$ . Collectively, Propositions A.2 through A.4 characterize the equilibrium strategy profile for all parameter values. Proposition A.2 presents corner solutions that arise from  $E$ 's optimal responses.

**Proposition A.2** (Elite's willingness to accept).

*Part a. Suppose  $E$  is included.*

1. If  $\kappa < \underline{\kappa} \equiv \frac{\sigma \cdot \underline{x}}{(1-\phi) \cdot p_{in}}$ , then a unique  $\underline{\theta}_M^{in} \in (0, 1)$  exists such that if  $\theta_M < \underline{\theta}_M^{in}$ , then  $\underline{\theta}_M^{in} \in (0, 1)$  and  $\frac{dx_{in}^*}{d\theta_M} < 0$ ; and otherwise  $x_{in}^* = 0$ .
2. If  $\kappa \in (\underline{\kappa}, \sigma)$ , then  $\frac{dx_{in}^*}{d\theta_M} < 0$  and  $x_{in}^* \in (0, 1 - \underline{x})$  for all  $\theta_M \in [0, 1]$ .
3. If  $\kappa \in (\sigma, \bar{\kappa})$ , for  $\bar{\kappa} \equiv \frac{\sigma}{(1-\phi) \cdot p_{in}}$ , then  $\frac{dx_{in}^*}{d\theta_M} > 0$  and  $x_{in}^* \in (0, 1 - \underline{x})$  for all  $\theta_M \in [0, 1]$ .
4. If  $\kappa > \bar{\kappa}$ , then a unique  $\bar{\theta}_M^{in} \in (0, 1)$  exists such that if  $\theta_M < \bar{\theta}_M^{in}$ , then  $x_{in}^* \in (0, 1 - \underline{x})$  and  $\frac{dx_{in}^*}{d\theta_M} > 0$ , and otherwise  $x_{in}^* = 1 - \underline{x}$ .

*Part b. Suppose  $E$  is excluded.*

1. If  $\kappa = 0$ , then  $x_{ex}^* \in (0, 1 - \underline{x})$  and is constant in  $\theta_M$ .
2. If  $\kappa > 0$ , then a unique  $\bar{\theta}_M^{ex} \in (0, 1)$  exists such that  $\theta_M < \bar{\theta}_M^{ex}$ , then  $x_{ex}^* \in (0, 1 - \underline{x})$  and  $\frac{dx_{ex}^*}{d\theta_M} > 0$ ; and otherwise  $x_{ex}^* = 1 - \underline{x}$ .

**Proof of Proposition A.2, part a.** First show that  $x_{in}^*$  is strictly monotonic in  $\theta_M$ : strictly increasing if  $\kappa > \sigma$ , and strictly decreasing otherwise. The derivative shows this clearly:

$$\begin{aligned} \frac{d}{d\theta_M} \left[ p_{in} \cdot \frac{1 - \theta_M \cdot (1 - \kappa)}{1 - (1 - \sigma) \cdot \theta_M} \cdot (1 - \phi) - \underline{x} \right] &= \\ \frac{p_{in} \cdot (1 - \phi)}{[1 - (1 - \sigma) \cdot \theta_M]^2} \cdot \left[ [1 - \theta_M \cdot (1 - \kappa)] \cdot (1 - \sigma) - [1 - (1 - \sigma) \cdot \theta_M] \cdot (1 - \kappa) \right] &= \\ = \frac{p_{in} \cdot (1 - \phi)}{[1 - (1 - \sigma) \cdot \theta_M]^2} \cdot (\kappa - \sigma). \end{aligned}$$

Now prove the ordering  $\underline{\kappa} < \sigma < \bar{\kappa}$ :

$$\frac{\underline{x} \cdot \sigma}{(1 - \phi) \cdot p_{in}} < \sigma < \frac{\sigma}{(1 - \phi) \cdot p_{in}} \implies \underline{x} < (1 - \phi) \cdot p_{in} < 1,$$

which follows from Assumption A.1,  $\phi \in (0, 1)$ , and  $p_{in} \in (0, 1)$  for all  $\theta_E$ .

Given strict monotonicity and Assumption A.1, which implies  $x_{in}^* \in (0, 1 - \underline{x})$  at  $\theta_M = 0$ , it suffices to show the following. Because  $x_{in}^*(\theta_M = 1) = p_{in} \cdot \frac{\kappa}{\sigma} \cdot (1 - \phi) - \underline{x}$ , we have that  $x_{in}^*(\theta_M = 1) < 0$  if and only if  $\kappa < \underline{\kappa}$ . Additionally,  $x_{in}^*(\theta_M = 1) > 1 - \underline{x}$  if and only if  $\kappa > \bar{\kappa}$ . The implicit characterization of the two  $\theta_M$  thresholds are:

$$p_{in} \cdot \frac{1 - \underline{\theta}_M^{in} \cdot (1 - \kappa)}{1 - (1 - \sigma) \cdot \underline{\theta}_M^{in}} \cdot (1 - \phi) - \underline{x} = 0$$

$$p_{in} \cdot \frac{1 - \bar{\theta}_M^{in} \cdot (1 - \kappa)}{1 - (1 - \sigma) \cdot \bar{\theta}_M^{in}} \cdot (1 - \phi) - \underline{x} = 1 - \underline{x},$$

which yields the respective explicit characterizations:

$$\underline{\theta}_M^{in} = \frac{\underline{x} - (1 - \phi) \cdot p_{in}}{(1 - \sigma) \cdot \underline{x} - (1 - \phi) \cdot p_{in} \cdot (1 - \kappa)} \in (0, 1)$$

$$\bar{\theta}_M^{in} = \frac{1 - (1 - \phi) \cdot p_{in}}{1 - \sigma - p_{in} \cdot (1 - \kappa) \cdot (1 - \phi)} \in (0, 1)$$

**Proof of part b.** If  $\kappa = 0$ , then  $x_{ex}^* = p_{ex} \cdot (1 - \phi)$ , hence not a function of  $\kappa$  and, by Assumption A.1, is contained between 0 and  $1 - \underline{x}$ . If  $\kappa > 0$ ,  $x_{ex}^*$  strictly increases in  $\theta_M$ :

$$\frac{d}{d\theta_M} \left[ p_{ex} \cdot \frac{1 - \theta_M \cdot (1 - \kappa)}{1 - \theta_M} \cdot (1 - \phi) \right] = \frac{p_{ex} \cdot (1 - \phi)}{(1 - \theta_M)^2} \cdot \theta_M > 0$$

Finally,  $\lim_{\theta_M \rightarrow 1} x_{ex}^* = \infty$ . The implicit characterization of the  $\theta_M$  threshold is:

$$p_{ex} \cdot \frac{1 - \bar{\theta}_M^{ex} \cdot (1 - \kappa)}{1 - \bar{\theta}_M^{ex}} \cdot (1 - \phi) = 1 - \underline{x},$$

which solves explicitly to:

$$\bar{\theta}_M^{ex} = \frac{1 - \underline{x} - p_{ex} \cdot (1 - \phi)}{1 - \underline{x} - p_{ex} \cdot (1 - \phi) \cdot (1 - \kappa)} \in (0, 1)$$

■

There is another possible source of corner solutions. For large enough  $\theta_M$ ,  $D$  may prefer to face a fight rather than to buy off  $E$ , even if an interior offer exists that  $E$  would accept (and assuming  $\bar{x}$  is large enough to enable  $D$  to make the interior optimal pure spoils transfer). This may seem puzzling when considering that the present setup contains several core tenets of standard bargaining models of war:  $D$  makes the bargaining offers and fighting is costly, and therefore  $D$  pockets the bargaining surplus saved by avoiding a fight. The parameter  $\kappa$  creates the wedge:  $D$ 's optimal bargaining offer compensates  $E$  for  $\kappa$ , but  $\kappa$  does not affect  $D$ 's expected utility if a fight occurs. Proposition A.3 shows that, under either inclusion or exclusion, high-enough  $\kappa$  creates this distinct source of bargaining breakdown in which  $D$  does not want to compensate  $E$  for  $\kappa$ .

**Proposition A.3** (Dictator's willingness to make peace-inducing offer).

**Part a.** Suppose  $E$  is included.

- If  $\kappa < \bar{\kappa}$ , then  $\mathbb{E}[U_D(\text{offer } x_{in}^* | E \text{ accepts } x_{in} \geq x_{in}^*)] > \mathbb{E}[U_D(\text{offer } 0)]$  for all  $\theta_M \in [0, 1]$ .
- If  $\kappa > \bar{\kappa}$ , then a unique  $\hat{\theta}_M^{in} \in (0, 1)$  exists such that  $\mathbb{E}[U_D(\text{offer } x_{in}^* | E \text{ accepts } x_{in} \geq x_{in}^*)] > \mathbb{E}[U_D(\text{offer } 0)]$  if and only if  $\theta_M < \hat{\theta}_M^{in}$ .

**Part b.** Suppose  $E$  is excluded.

- If  $\kappa = 0$ , then  $\mathbb{E}[U_D(\text{offer } x_{ex}^* | E \text{ accepts } x_{ex} \geq x_{ex}^*)] > \mathbb{E}[U_D(\text{offer } 0)]$  for all  $\theta_M \in [0, 1]$ .
- If  $\kappa > 0$ , then a unique  $\hat{\theta}_M^{ex} \in (0, 1)$  exists such that  $\mathbb{E}[U_D(\text{offer } x_{ex}^* | E \text{ accepts } x_{ex} \geq x_{ex}^*)] > \mathbb{E}[U_D(\text{offer } 0)]$  if and only if  $\theta_M < \hat{\theta}_M^{ex}$ .

**Proof of part a.** If  $\kappa < \underline{\kappa}$  and  $\theta_M > \underline{\theta}_M^{in}$ , then  $E$  accepts any offer. If  $\theta_M < \underline{\theta}_M^{in}$ , then:

$$\mathbb{E}[U_D(\text{offer } x_{in}^* | E \text{ accepts } x_{in} \geq x_{in}^*)] = \left[ 1 - p_{in} \cdot \frac{1 - \theta_M \cdot (1 - \kappa)}{1 - (1 - \sigma) \cdot \theta_M} \cdot (1 - \phi) \right] \cdot [1 - (1 - \sigma) \cdot \theta_M]$$

$$\mathbb{E}[U_D(\text{offer } 0)] = (1 - p_{in}) \cdot (1 - \theta_M) \cdot (1 - \phi)$$

Rearranging shows that the first expression is greater than the second expression iff:

$$\kappa < \frac{\phi \cdot \left( \frac{1}{\theta_M} - 1 \right) + \sigma}{p_{in} \cdot (1 - \phi)}$$

The RHS of this inequality strictly decreases in  $\theta_M$ , so it hits its lower bound at  $\theta_M = 1$ . Substituting this in establishes  $\mathbb{E}[U_D(\text{offer } x_{in}^* | E \text{ accepts } x_{in} \geq x_{in}^*)] > \mathbb{E}[U_D(\text{offer } 0)] \iff \kappa < \bar{\kappa}$ . If  $\kappa > \bar{\kappa}$ , then  $\mathbb{E}[U_D(\text{offer } x_{in}^* | E \text{ accepts } x_{in} \geq x_{in}^*)] > \mathbb{E}[U_D(\text{offer } 0)]$  iff:

$$\theta_M < \hat{\theta}_M^{in} \equiv \frac{\phi}{p_{in} \cdot \kappa \cdot (1 - \phi) + \phi - \sigma} \in (0, 1)$$

To establish that the denominator of this term is strictly positive, because the denominator strictly increases in  $\kappa$ , it hits its lower bound at  $\kappa = \bar{\kappa}$ . Substituting this term into the denominator and simplifying yields  $\phi > 0$ . Finally, setting this term strictly less than 1 and rearranging yields  $\kappa > \bar{\kappa}$ , which we are currently assuming.

**Proof of part b.**

$$\mathbb{E}[U_D(\text{offer } x_{ex}^* | E \text{ accepts } x_{ex} \geq x_{ex}^*)] = \left[ 1 - p_{ex} \cdot \frac{1 - \theta_M \cdot (1 - \kappa)}{1 - \theta_M} \cdot (1 - \phi) \right] \cdot (1 - \theta_M)$$

$$\mathbb{E}[U_D(\text{offer } 0)] = (1 - p_{ex}) \cdot (1 - \theta_M) \cdot (1 - \phi)$$

Rearranging shows the first expression is greater than the second expression iff:

$$\theta_M < \hat{\theta}_M^{ex} \equiv \frac{\phi}{p_{ex} \cdot \kappa \cdot (1 - \phi) + \phi} \in (0, 1)$$

Further algebraic rearranging shows that  $\hat{\theta}_M^{ex} < 1$  iff  $\kappa > 0$ , and clearly  $\hat{\theta}_M^{ex} > 0$ . ■

Lemma A.1 compares the thresholds from the previous two lemmas (the proof involves straightforward algebra). If  $E$  is included, recall that  $\kappa > \bar{\kappa}$  is necessary for  $\hat{\theta}_M^{in} < 1$ . In this case, the highest value of  $\theta_M$  for which  $D$  prefers buying off  $E$  over facing a fight is less than the value of  $\theta_M$  at which the required pure spoils transfer equals  $1 - \underline{x}$ , i.e.,  $\hat{\theta}_M^{in} < \bar{\theta}_M^{in}$ . This is intuitive:  $D$  of course prefers fighting over offering everything to  $E$  since it is a one-shot game, and fighting preserves at least the chance of positive consumption. Therefore, because of continuity,  $D$  also prefers fighting over offering “almost” everything to  $E$ . Since we are currently assuming  $\kappa > \bar{\kappa}$ , hence higher values of  $\theta_M$  cause  $E$  to demand more, only for low-enough  $\theta_M$  can  $D$  buy off  $E$  without offering “almost” everything.

This consideration is different if  $E$  is excluded because  $D$  can offer only up to  $1 - \underline{x}$ . The higher is  $\underline{x}$ , the lower is  $D$ ’s highest possible offer under exclusion, which makes it more willing to make this offer rather than to trigger a rebellion. If  $\underline{x} > (1 - \phi) \cdot (1 - p_{ex})$ , then  $\hat{\theta}_M^{ex} > \bar{\theta}_M^{ex}$ . Thus, when  $\underline{x}$  exceeds this threshold, we can effectively ignore  $\hat{\theta}_M^{ex}$ ; under exclusion,  $D$  will always buy off  $E$  if possible. To reduce the number of corner solutions to check without losing any implications of substantive importance, I impose Assumption A.2 (NB:  $\phi > 0$  is necessary and sufficient for this to be able to hold jointly with Assumption A.1).

**Assumption A.2.**  $\underline{x} > (1 - \phi) \cdot (1 - p_{ex})$

**Lemma A.1** (Comparing thresholds for corner solutions).

**Part a.** If  $\kappa > \bar{\kappa}$ , then the minimum  $\theta_M$  at which  $D$  prefers to face a coup attempt rather than to buy off an included  $E$  is lower than the minimum  $\theta_M$  at which  $Pr(\text{coup} \mid \text{inclusion}) = 1$ :  $\hat{\theta}_M^{in} < \bar{\theta}_M^{in}$ . If  $\kappa < \bar{\kappa}$ , then  $\hat{\theta}_M^{in} > \bar{\theta}_M^{in}$ .

**Part b.** The minimum  $\theta_M$  at which  $D$  prefers to face a rebellion rather than to buy off an excluded  $E$  exceeds the minimum  $\theta_M$  at which  $Pr(\text{rebel} \mid \text{exclusion}) = 1$ :  $\hat{\theta}_M^{ex} > \bar{\theta}_M^{ex}$ .

Lemma A.2 shows that if  $\kappa > \bar{\kappa}$  and  $\theta_M > \hat{\theta}_M^{in}$ , then  $D$  excludes  $E$ . The rationale is straightforward: coups succeed with higher probability than rebellions. If  $D$  faces a coup attempt under inclusion with probability 1, in which case there are also no benefits to inclusion from lowering the probability of mass takeover, then this payoff must be lower than the lower bound payoff to exclusion, which entails facing a rebellion by  $E$  with probability 1.

**Lemma A.2** (High elite affinity and exclusion). *If  $\kappa > \bar{\kappa}$  and  $\theta_M > \hat{\theta}_M^{in}$ , then  $D$  excludes  $E$ .*

**Proof.** If  $\kappa > \bar{\kappa}$  and  $\theta_M > \hat{\theta}_M^{in}$ , then part a of Proposition A.3 combined with part a of Lemma A.1 shows that  $D$ 's expected utility to inclusion equals  $(1 - p_{in}) \cdot (1 - \phi) \cdot (1 - \theta_M)$ . It suffices to show that this term is strictly less than  $(1 - \theta_M) \cdot [Pr(\text{deal} | \text{exclusion}) \cdot (1 - x_{ex}^*) + Pr(\text{rebel} | \text{exclusion}) \cdot (1 - p_{ex}) \cdot (1 - \phi)]$ . Part b of Lemma A.1 implies that the lower bound of this term is  $(1 - \theta_M) \cdot (1 - p_{ex}) \cdot (1 - \phi)$ . Therefore, it suffices to show that  $(1 - \theta_M) \cdot (1 - p_{ex}) \cdot (1 - \phi) > (1 - p_{in}) \cdot (1 - \phi) \cdot (1 - \theta_M)$ , which follows from  $p_{in} > p_{ex}$ . ■

Equation A.10 presents  $D$ 's powersharing constraint,  $\mathcal{P}(\theta_E, \theta_M) > 0$ , if  $x_{in}^* \in (0, 1 - \underline{x})$  and  $x_{ex}^* \in (0, 1 - \underline{x})$ . The following definitions provide equivalent statements under various corner solutions. The first index in the subscript for  $\mathcal{P}(\cdot)$  indicates whether  $x_{in}^*$  is interior or hits the corner solution of 0, and the second index in the subscript indicates whether  $x_{ex}^*$  is interior or hits the corner solution of  $1 - \underline{x}$ . We do not need to indicate parameters for which  $x_{in}^*$  hits the corner solution of  $1 - \underline{x}$  because then  $D$  will necessarily exclude, as Lemma A.2 establishes. Thus, by this notation,  $\mathcal{P}(\theta_E, \theta_M)$  from Equation A.10 would be  $\mathcal{P}_{int,int}(\theta_E, \theta_M)$ , although in this case I omit the subscripts. Finally, I refer to the aggregate piecewise powersharing function as  $\mathcal{P}(\theta_E, \theta_M)$ .

**Definition A.1** (Powersharing expressions with corner solutions).

$$\begin{aligned} \mathcal{P}_{cor,int}(\theta_E, \theta_M) &= [1 - (1 - \sigma) \cdot \theta_M] \cdot (1 - \underline{x}) \\ &\quad - (1 - \theta_M) \cdot [Pr(\text{deal} | \text{exclusion}) \cdot (1 - x_{ex}^*) - Pr(\text{rebel} | \text{exclusion}) \cdot (1 - p_{ex}) \cdot (1 - \phi)] \\ \mathcal{P}_{int,cor}(\theta_E, \theta_M) &= [1 - (1 - \sigma) \cdot \theta_M] \cdot Pr(\text{deal} | \text{inclusion}) \cdot (1 - \underline{x} - x_{in}^*) \\ &\quad + (1 - \theta_M) \cdot (1 - \phi) \cdot [Pr(\text{coup} | \text{inclusion}) \cdot (1 - p_{in}) - (1 - p_{ex})] \\ \mathcal{P}_{cor,cor}(\theta_E, \theta_M) &= [1 - (1 - \sigma) \cdot \theta_M] \cdot (1 - \underline{x}) - (1 - \theta_M) \cdot (1 - p_{ex}) \cdot (1 - \phi) \end{aligned}$$

**Proposition A.4** (Optimal powersharing).  *$\mathcal{P}(\theta_E, \theta_M)$  is a continuous function differentiable almost everywhere, defined piecewise as follows:*

**Part a.** Suppose  $\kappa = 0$ .

- If  $\theta_M < \underline{\theta}_M^{in}$ , then  $D$  shares power iff  $\mathcal{P}(\theta_E, \theta_M) > 0$ .
- If  $\theta_M > \underline{\theta}_M^{in}$ , then  $D$  shares power iff  $\mathcal{P}_{cor,int}(\theta_E, \theta_M) > 0$ .

**Part b.1.** Suppose  $\kappa \in (0, \underline{\kappa})$  and  $\underline{\theta}_M^{in} < \bar{\theta}_M^{ex}$ .



- If  $\theta_M < \underline{\theta}_M^{in}$ , then  $D$  shares power iff  $\mathcal{P}(\theta_E, \theta_M) > 0$ .
- If  $\theta_M \in (\underline{\theta}_M^{in}, \bar{\theta}_M^{ex})$ , then  $D$  shares power iff  $\mathcal{P}_{cor,int}(\theta_E, \theta_M) > 0$ .
- If  $\theta_M > \bar{\theta}_M^{ex}$ , then  $D$  shares power iff  $\mathcal{P}_{cor,cor}(\theta_E, \theta_M) > 0$ .

**Part b.2.** Suppose  $\kappa \in (0, \underline{\kappa})$  and  $\underline{\theta}_M^{in} > \bar{\theta}_M^{ex}$ .

- If  $\theta_M < \bar{\theta}_M^{ex}$ , then  $D$  shares power iff  $\mathcal{P}(\theta_E, \theta_M) > 0$ .
- If  $\theta_M \in (\bar{\theta}_M^{ex}, \underline{\theta}_M^{in})$ , then  $D$  shares power iff  $\mathcal{P}_{int,cor}(\theta_E, \theta_M) > 0$ .
- If  $\theta_M > \underline{\theta}_M^{in}$ , then  $D$  shares power iff  $\mathcal{P}_{cor,cor}(\theta_E, \theta_M) > 0$ .

**Part c.** Suppose  $\kappa \in (\underline{\kappa}, \bar{\kappa})$ .

- If  $\theta_M < \bar{\theta}_M^{ex}$ , then  $D$  shares power iff  $\mathcal{P}(\theta_E, \theta_M) > 0$ .
- If  $\theta_M > \bar{\theta}_M^{ex}$ , then  $D$  shares power iff  $\mathcal{P}_{int,cor}(\theta_E, \theta_M) > 0$ .

**Part d.1.** Suppose  $\kappa > \bar{\kappa}$  and  $\hat{\theta}_M^{in} < \bar{\theta}_M^{ex}$ .

- If  $\theta_M < \hat{\theta}_M^{in}$ , then  $D$  shares power iff  $\mathcal{P}(\theta_E, \theta_M) > 0$ .
- If  $\theta_M > \hat{\theta}_M^{in}$ , then  $D$  excludes.

**Part d.2.** Suppose  $\kappa > \bar{\kappa}$  and  $\hat{\theta}_M^{in} > \bar{\theta}_M^{ex}$ .

- If  $\theta_M < \bar{\theta}_M^{ex}$ , then  $D$  shares power iff  $\mathcal{P}(\theta_E, \theta_M) > 0$ .
- If  $\theta_M \in (\bar{\theta}_M^{ex}, \hat{\theta}_M^{in})$ , then  $D$  shares power iff  $\mathcal{P}_{int,cor}(\theta_E, \theta_M) > 0$ .
- If  $\theta_M > \hat{\theta}_M^{in}$ , then  $D$  excludes.

**Proof.** The only non-trivial part of the continuity claim is as follows.  $\mathcal{P}(\theta_E, \theta_M)$  is continuous in  $\theta_M$  because  $\lim_{\theta_M \rightarrow \underline{\theta}_M^{in}} x_{in}^*(\theta_M) = 0$  and  $\lim_{\theta_M \rightarrow \bar{\theta}_M^{ex}} x_{ex}^*(\theta_M) = 1 - \underline{x}$ . These are the only two points at which the function is not differentiable. ■

## A.6 PROOF OF PROPOSITION 3

The key to proving Proposition 3 is to establish conditions under which  $\mathcal{P}(\theta_E, \theta_M)$  cannot change signs once positive. That is, if  $\mathcal{P}(\theta_E, \theta'_M) > 0$  for some  $\theta'_M$ , then  $\mathcal{P}(\theta_E, \theta''_M) > 0$  for any  $\theta''_M > \theta'_M$ . I establish this by demonstrating strict monotonicity over certain parameter ranges. Following Remark 1, it is isomorphic to analyze  $Pr(\text{coup} \mid \theta_E, \theta_M)^{\max} - Pr(\text{coup} \mid \text{inclusion}, \theta_E, \theta_M)$ . Lemma A.3 analyzes  $\kappa < \bar{\kappa}$ , and Lemma A.4 is a technical lemma used to prove the proposition. First, I impose an assumption about large-enough  $\sigma$ . It is intuitive that the results require large-enough  $\sigma$ , since at  $\sigma = 0$ , there is no security boost against  $M$  from the dictator and elite banding together.

**Assumption A.3** (High-enough returns to elite coalitions).

$$\sigma > 1 - \frac{(1 - p_{in}) \cdot (1 - \phi)}{1 - \underline{x}} \in (0, 1)$$

To establish the bounds, setting the threshold strictly greater than 0 and rearranging yields  $\underline{x} < \phi + (1 - \phi) \cdot p_{in}$ , which Assumption A.1 implies is true. The term is strictly less than 1 because every constituent term in the fraction is positive.

**Lemma A.3** (Mass threat and dictator's coup tolerance). *If  $\kappa < \bar{\kappa}$ , then the following statements hold for the interior characterization of  $Pr(\text{coup} \mid \theta_E, \theta_M)^{\max}$  in Eq. 8.*

**Part a.** *If  $\kappa > \underline{\kappa}$  or  $\theta_M < \underline{\theta}_M^{in}$ , then  $\frac{d}{d\theta_M} Pr(\text{coup} \mid \theta_E, \theta_M)^{\max} > 0$ .*

**Part b.** *Suppose  $\kappa < \underline{\kappa}$  and  $\theta_M > \underline{\theta}_M^{in}$ . If  $Pr(\text{coup} \mid \theta_E, \theta_M)^{\max} < 0$ , then  $\frac{d}{d\theta_M} Pr(\text{coup} \mid \theta_E, \theta_M)^{\max} > 0$ .*

**Part c.**  $Pr(\text{coup} \mid \theta_E, 1)^{\max} = 1$ .

**Proof.** Given the interior characterization of  $Pr(\text{coup} \mid \theta_E, \theta_M)^{\max}$  from Equation 8,  $\frac{d}{d\theta_M} Pr(\text{coup} \mid \theta_E, \theta_M)^{\max}$  has the same sign as:

$$\begin{aligned} & \underbrace{\left\{ \mathbb{E}[U_D(\text{inclusion} \mid \text{deal}, \theta_M)] - \mathbb{E}[U_D(\text{inclusion} \mid \text{coup}, \theta_M)] \right\}}_{\textcircled{1}} \\ & \left\{ \frac{d}{d\theta_M} \mathbb{E}[U_D(\text{inclusion} \mid \text{deal}, \theta_M)] - (1 - \theta_M) \cdot \underbrace{\frac{d}{d\theta_M} \mathbb{E}[U_D(\text{excl. w/o } M \text{ takeover} \mid \theta_M)]}_{\textcircled{2}} \right. \\ & \quad \left. + \underbrace{\mathbb{E}[U_D(\text{excl. w/o } M \text{ takeover} \mid \theta_M)]}_{\textcircled{3a}} \right\} \\ & \quad - \underbrace{\left\{ \mathbb{E}[U_D(\text{inclusion} \mid \text{deal}, \theta_M)] - \underbrace{\mathbb{E}[U_D(\text{exclusion} \mid \theta_M)]_{\textcircled{3b}}} \right\}}_{\textcircled{4}} \\ & \left\{ \frac{d}{d\theta_M} \mathbb{E}[U_D(\text{inclusion} \mid \text{deal}, \theta_M)] - \frac{d}{d\theta_M} \mathbb{E}[U_D(\text{inclusion} \mid \text{coup}, \theta_M)] \right\}, \quad (\text{A.13}) \end{aligned}$$

for:

$$\begin{aligned}\mathbb{E}[U_D(\text{excl. w/o } M \text{ takeover} | \theta_M)] &= Pr(\text{deal} | \text{exclusion}, \theta_E, \theta_M) \cdot [1 - x_{ex}^*(\theta_E, \theta_M)] \\ &\quad + Pr(\text{rebel} | \text{exclusion}, \theta_E, \theta_M) \cdot [1 - p_{ex}(\theta_E)] \cdot (1 - \phi)\end{aligned}$$

I use the following facts in the proof:

1. This term is strictly positive if  $\kappa < \bar{\kappa}$  or  $\theta_M < \hat{\theta}_M^{in}$ , and strictly negative otherwise. This follows from part a of Proposition A.3.
2. This term is strictly negative for  $\theta_M < \bar{\theta}_M^{ex}$ , and 0 otherwise. Part b of Proposition A.2 characterizes the threshold, and straightforward differentiation yields the sign for  $\theta_M < \bar{\theta}_M^{ex}$ .
3. The 3a term is weakly greater than  $[1 - p_{ex}(\theta_E)] \cdot (1 - \phi)$ . The 3b term is weakly greater than  $\mathbb{E}[U_D(\text{exclusion} | \text{rebel}, \theta_M)]$ .
4.  $Pr(\text{coup} | \theta_E, \theta_M)^{\max} > 0$  if this term is positive, and strictly negative otherwise. See the numerator of Equation 8.

**Part a.** Suppose  $\kappa > \underline{\kappa}$  or  $\theta_M < \underline{\theta}_M^{in}$ . Given facts 1 through 3, if Equation A.13 is strictly positive under the following assumptions, then it is strictly positive in general:  $\frac{d}{d\theta_M} \mathbb{E}[U_D(\text{exclusion} | \theta_M)] = 0$ ,  $\mathbb{E}[U_D(\text{excl. w/o } M \text{ takeover} | \theta_M)] = [1 - p_{ex}(\theta_E)] \cdot (1 - \phi)$ , and  $\mathbb{E}[U_D(\text{exclusion} | \theta_M)] = \mathbb{E}[U_D(\text{exclusion} | \text{rebel}, \theta_M)]$ . Substituting these terms as well as the interior solutions under inclusion into Equation A.13 shows that it is strictly positive if  $\kappa < \bar{\kappa}$ , which we are currently assuming. NB: we do not need to consider the corner solution  $Pr(\text{coup} | \text{inclusion}) = 1$ . From Prop. A.2,  $\kappa < \bar{\kappa}$  implies  $Pr(\text{coup} | \text{inclusion}) < 1$ .

**Part b.** If  $\kappa < \underline{\kappa}$  and  $\theta_M > \underline{\theta}_M^{in}$ , then Proposition A.2 shows that  $x_{in}^* = 0$ . Substituting some explicit terms into Equation 8 and rearranging yields:

$$\begin{aligned}Pr(\text{coup} | \theta_E, \theta_M)^{\max} &= \\ &\frac{(1 - \theta_M) \cdot [1 - \underline{x} - \mathbb{E}[U_D(\text{exclusion} | \theta_M)]] + \sigma \cdot \theta_M \cdot (1 - \underline{x})}{[1 - (1 - \sigma) \cdot \theta_M] \cdot (1 - \underline{x}) - (1 - \theta_M) \cdot (1 - p_{in}) \cdot (1 - \phi)},\end{aligned}\tag{A.14}$$

Because we are currently assuming  $\kappa < \bar{\kappa}$ , fact 1 establishes that the denominator is strictly positive. Thus, to have  $Pr(\text{coup} | \theta_E, \theta_M)^{\max} < 0$ , the numerator must be strictly negative (see fact 4). Given this, by the quotient rule, it is sufficient to show that the numerator and denominator each strictly increase in  $\theta_M$ . First the numerator:

$$\frac{d}{d\theta_M} \left[ (1 - \theta_M) \cdot [1 - \underline{x} - \mathbb{E}[U_D(\text{exclusion})]] + \sigma \cdot \theta_M \cdot (1 - \underline{x}) \right] =$$

$$-\underbrace{\left[1 - \underline{x} - \mathbb{E}[U_D(\text{exclusion} \mid \theta_M)]\right]}_{\text{(a)}} - \underbrace{(1 - \theta_M) \cdot \frac{d}{d\theta_M} \mathbb{E}[U_D(\text{exclusion} \mid \theta_M)]}_{\text{(b)}} + \underbrace{\sigma \cdot (1 - \underline{x})}_{\text{(c)}}$$

1. For the numerator of Equation A.14 to be negative, the term in brackets must be negative, which makes this term positive.
2. It is straightforward to show that  $\frac{d}{d\theta_M} \mathbb{E}[U_D(\text{exclusion} \mid \theta_M)] < 0$  (see Equation 5), which makes this term positive.
3. This term is positive (Assumption A.1 bounds  $\underline{x}$  below 1).

Then the denominator:

$$\frac{d}{d\theta_M} \left[ \left[ 1 - (1 - \sigma) \cdot \theta_M \right] \cdot (1 - \underline{x}) - (1 - \theta_M) \cdot (1 - p_{in}) \cdot (1 - \phi) \right] =$$

$$(1 - p_{in}) \cdot (1 - \phi) - (1 - \sigma) \cdot (1 - \underline{x}),$$

which is strictly positive because  $\sigma > 1 - \frac{(1-p_{in}) \cdot (1-\phi)}{1-\underline{x}}$  (see Assumption A.3).

**Part c.** Assuming  $\kappa < \bar{\kappa}$  implies  $x_{in}^* < 1 - \underline{x}$ . It is straightforward to substitute the explicit terms into Equation 8 to show, in turn, that this implies  $Pr(\text{coup} \mid \theta_E, 1)^{\max} = 1$ . ■

**Lemma A.4.** Suppose  $A(\cdot)$  is a  $C^1$  function satisfying  $\frac{dA(z)}{dz} > 0$  for any  $z \in \mathbb{R}$  such that  $A(z) < 0$ . Then  $A(z'') > 0$  for any  $z'$  and  $z''$  such that  $A(z') > 0$  and  $z' < z''$ .

**Proof.** We can establish this by contradiction. Suppose not, and  $A(z'') < 0$ . By the intermediate value theorem, for any  $\delta \in (A(z''), 0)$ , there exists a  $z_\delta \in (z', z'')$  such that  $A(z_\delta) = \delta$ . But  $\frac{dA(z)}{dz} > 0$  for any  $z < 0$  implies that  $z_\delta > z''$ , yielding a contradiction. ■

**Proof of Proposition 3, parts a and b.** Applying the intermediate value theorem establishes that at least one  $\theta_M^\dagger \in (0, 1)$  exists satisfying  $\mathcal{P}(\theta_E, \theta_M^\dagger) = 0$ :

- **Lower bound**  $\theta_M^\dagger > 0$ : Eq. 11 is equivalent to  $\mathcal{P}(\theta_E, 0) < 0$ , which implies  $\theta_M^\dagger > 0$ .
- **Upper bound**  $\theta_M^\dagger < 1$ :  $\mathcal{P}(\theta_E, 1) = Pr(\text{coup} \mid \theta_E, 1)^{\max} - Pr(\text{coup} \mid \text{inclusion}, \theta_E, 1) > 0$  follows from:
  - Part c of Lemma A.3 states that if  $\kappa < \bar{\kappa}$ , then  $Pr(\text{coup} \mid \theta_E, 1)^{\max} = 1$ .
  - Proposition A.2 states that if  $\kappa < \bar{\kappa}$ , then  $Pr(\text{coup} \mid \text{inclusion}, \theta_E, \theta_M) < 1$  for all  $\theta_M \in [0, 1]$ .

- Proposition A.4 establishes continuity.

The following establishes uniqueness.

- If  $\kappa > \underline{\kappa}$ , then combining part a of Lemma A.3 with parts a.1 and a.2 of Proposition A.2 implies that if  $\kappa < \sigma + \epsilon$  with small  $\epsilon > 0$ , then:

$$\frac{d}{d\theta_M} \mathcal{P}(\theta_E, \theta_M) = \underbrace{\frac{d}{d\theta_M} Pr(\text{coup} \mid \theta_E, \theta_M)^{\max}}_{>0} - \underbrace{\frac{d}{d\theta_M} Pr(\text{coup} \mid \text{inclusion}, \theta_E, \theta_M)}_{\text{Either } <0 \text{ or "small"} >0} > 0 \quad (\text{A.15})$$

- If  $\kappa < \underline{\kappa}$ , then there are two cases to consider:

1.  $\mathcal{P}(\theta_E, \underline{\theta}_M^{in}) = Pr(\text{coup} \mid \theta_E, \underline{\theta}_M^{in})^{\max} > 0$ . If  $\theta_M < \underline{\theta}_M^{in}$ , then the assumptions that yield Equation A.15 hold, which implies that there is at most one  $\theta_M^\dagger \in (0, \underline{\theta}_M^{in})$  such that  $\mathcal{P}(\theta_E, \theta_M^\dagger) = 0$ . If  $\theta_M > \underline{\theta}_M^{in}$ , then part b of Lemma A.3 shows that the assumptions for the supposition in Lemma A.4 apply. This implies that  $\mathcal{P}(\theta_E, \theta_M) > 0$  for all  $\theta_M > \underline{\theta}_M^{in}$ , and therefore there is no  $\theta_M^\dagger \in (\underline{\theta}_M^{in}, 1)$  such that  $\mathcal{P}(\theta_E, \theta_M^\dagger) = 0$ .
2.  $\mathcal{P}(\theta_E, \underline{\theta}_M^{in}) = Pr(\text{coup} \mid \theta_E, \underline{\theta}_M^{in})^{\max} < 0$ . If  $\theta_M < \underline{\theta}_M^{in}$ , then the assumptions that yield Equation A.15 hold, which implies that there is no  $\theta_M^\dagger \in (0, \underline{\theta}_M^{in})$  such that  $\mathcal{P}(\theta_E, \theta_M^\dagger) = 0$ . If  $\theta_M > \underline{\theta}_M^{in}$ , then part b of Lemma A.3 shows that the assumptions for the supposition in Lemma A.4 apply. This implies that there is at most one  $\theta_M^\dagger \in (\underline{\theta}_M^{in}, 1)$  such that  $\mathcal{P}(\theta_E, \theta_M^\dagger) = 0$ .

The statements about  $Pr(\text{coup}^*)$  as well as Corollary 1 follow directly from Prop. A.2.

**Part c.** Identical as parts a and b except  $\theta_M^\dagger > 0$  is no longer true.

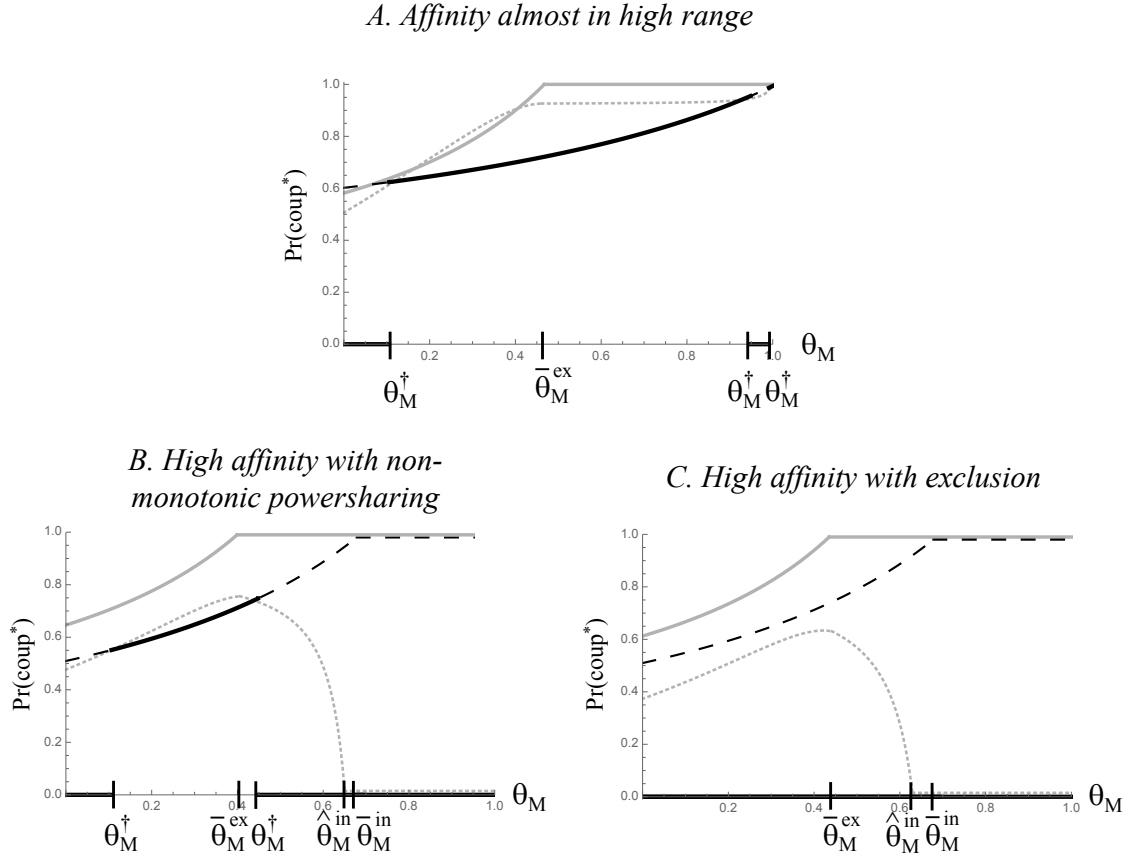
**Part d.** By Lemma A.2,  $\mathcal{P}(\theta_E, \theta_M) < 0$  for all  $\theta_M > \hat{\theta}_M^{in}$ . Combining this with the continuity result from Proposition A.4 implies the existence of at least one  $\theta_M^\dagger < \hat{\theta}_M^{in}$ , with  $\theta_M^\dagger$  defined as above:  $\mathcal{P}(\theta_E, \theta_M^\dagger) = 0$ . ■

Although Proposition 3 demonstrates how  $\kappa$  alters equilibrium prospects for powersharing and coup attempts, it does not characterize these outcomes for all possible values of  $\kappa$  and  $\theta_M$ . The proof for the proposition relies primarily on the monotonicity results for  $\mathcal{P}(\theta_E, \theta_M)$  established in the preceding lemmas. These proofs rely on the facts that  $x_{in}^*$  weakly decreases in  $\theta_M$  if  $\kappa < \sigma$ , and the increasing relationship between  $\theta_M$  and  $x_{in}^*$  is arbitrarily small in magnitude if  $\kappa > \sigma$  but is contained within a neighborhood of this threshold. However, for larger  $\kappa$ , in general it is not possible to analytically sign the difference between how  $\theta_M$  affects  $Pr(\text{coup} \mid \theta_E, \theta_M)^{\max}$  and  $Pr(\text{coup} \mid \text{inclusion})$ , which disables establishing unique thresholds.

Figure A.3 depicts several specific parameter values that highlight other theoretically possible relationships between  $\theta_M$  and  $\mathcal{P}(\theta_E, \theta_M)$  for values of  $\kappa$  and  $\theta_M$  not covered in Proposition 3. In Panel

A,  $\kappa \in (\sigma, \bar{\kappa})$  but is very close to  $\bar{\kappa}$ . Thus,  $x_{in}^*$  never hits  $1 - \underline{x}$ , but gets close. Consequently,  $\theta_M^\dagger$  is not unique. As in Figure 2A, Equation 11 holds and  $D$  switches from exclusion to powersharing at  $\theta_M = 0.11$ . However, at  $\theta_M = 0.95$ ,  $D$  switches back to exclusion—and then back to powersharing at  $\theta_M = 0.99$ . The switch at  $\theta_M = 0.95$  occurs specifically because the monotonicity result that underpins the claims for intermediate  $\kappa$  in Proposition 3 does not hold:  $\theta_M$  raises both  $Pr(\text{coup} \mid \theta_E, \theta_M)^{\max}$  and  $Pr(\text{coup} \mid \text{inclusion})$  and is larger in magnitude for the latter.

**Figure A.3: Effects of Mass Threat: Additional Cases**



*Notes:* Figure A.3 uses the same functional forms for the contest functions as the figures in the article. In Panel A,  $\phi = 0.4$ ,  $p_{ex}(0) = 0$ ,  $p_{ex}(1) = 0.95$ ,  $p_{in}(0) = 0.95$ ,  $p_{in}(1) = 1$ ,  $\theta_E = 1$ ,  $\sigma = 0.5$ ,  $\underline{x} = 0.02$ , and  $\kappa = 0.82$ . In Panel B,  $\phi = 0.4$ ,  $p_{ex}(0) = 0$ ,  $p_{ex}(1) = 0.95$ ,  $p_{in}(0) = 0.95$ ,  $p_{in}(1) = 1$ ,  $\theta_E = 0.93$ ,  $\sigma = 0.3$ ,  $\underline{x} = 0.18$ , and  $\kappa = 0.8$ . Panel C is identical to Panel B except  $p_{ex}(1) = 0.9$ .

Proposition 3 ensures that if  $\kappa > \bar{\kappa}$ , then  $D$  will exclude for high enough  $\theta_M$ . However, there are several possibilities for smaller  $\theta_M$ . Figure 2D highlights one, and Panels B and C of Figure A.3 highlight two others. Equation 11 holds in each of the latter two. In Panel B,  $D$  switches from exclusion to powersharing at  $\theta_M = 0.11$  before switching back to exclusion at  $\theta_M = \hat{\theta}_M^{in} = 0.44$ . In Panel C,  $Pr(\text{coup} \mid \theta_E, \theta_M)^{\max}$  begins decreasing in  $\theta_M$  before this function intersects  $Pr(\text{coup} \mid \text{inclusion})$ , and therefore  $D$  does not share power for any  $\theta_M \in [0, 1]$ . Panels B and C also highlight one parameter range in which  $\mathcal{P}(\theta_E, \theta_M)$  is strictly monotonic in  $\theta_M$  despite  $\kappa > \bar{\kappa}$ .

**Lemma A.5** (Mass threat and dictator's coup tolerance with high elite affinity). *If  $\kappa > \bar{\kappa}$  and  $\theta_M \in (\bar{\theta}_M^{ex}, \hat{\theta}_M^{in})$ , then  $\frac{d}{d\theta_M} \mathcal{P}(\theta_E, \theta_M) < 0$ .*

**Proof.** It suffices to show (a)  $\frac{d}{d\theta_M} Pr(\text{coup} \mid \text{inclusion}, \theta_E, \theta_M) > 0$  and (b)  $\frac{d}{d\theta_M} Pr(\text{coup} \mid \theta_E, \theta_M)^{\max} < 0$ . Claim a follows directly from  $\kappa > \bar{\kappa}$  and Proposition A.2. For claim b, we can use the proof strategy for Lemma A.3. Because  $\theta_M < \hat{\theta}_M^{in}$ , term 1 in Equation A.13 is strictly positive. Because  $\theta_M > \bar{\theta}_M^{ex}$ , term 2 in Equation A.13 equals 0, and terms 3a and 3b hit the lower bounds stated in fact 3 for that lemma. Thus, the same proof as for part a of Lemma A.3 establishes the claim; because we are now assuming  $\kappa > \bar{\kappa}$ , the sign flips. ■

## A.7 PROOF OF PROPOSITION 4

**Proof of Proposition 4.** Define  $\Delta\rho(\sigma) \equiv \rho^*(\theta_M = 0) - \rho^*(\theta_M = \underline{\theta}_M^{in}, \sigma)$ . The following two facts suffice for the claim:

$$1. \Delta\rho(1) > 0 \quad \text{and} \quad 2. \frac{d\Delta\rho(\sigma)}{d\sigma} > 0$$

To prove the first fact, the lower bound for  $\rho^*(\theta_M = 0)$  is:

$$\min \left\{ Pr(\text{rebel} \mid \text{exclusion}, \theta_E, 0) \cdot p_{ex}, \quad Pr(\text{coup} \mid \text{inclusion}, \theta_E, 0) \cdot p_{in} \right\},$$

which Assumption A.1 guarantees is strictly positive for  $\theta_E > 0$ . NB:  $\rho^*(\theta_M = 0)$  is not a function of  $\sigma$ . Additionally:

$$\rho^*(\theta_M = \underline{\theta}_M^{in}, \sigma) = \frac{\underline{x} - (1 - \phi) \cdot p_{in}}{(1 - \sigma) \cdot \underline{x} - (1 - \phi) \cdot p_{in} \cdot (1 - \kappa)} \cdot (1 - \sigma),$$

which equals 0 at  $\sigma = 1$ .

To prove the second fact, again noting that  $\rho^*(\theta_M = 0)$  is not a function of  $\sigma$ , it suffices to demonstrate:

$$-\frac{d\rho^*(\theta_M = \underline{\theta}_M^{in}, \sigma)}{d\sigma} = \frac{(1 - \kappa) \cdot (1 - \phi) \cdot p_{in} \cdot [(1 - \phi) \cdot p_{in} - \underline{x}]}{[(1 - \kappa) \cdot (1 - \phi) \cdot p_{in} - (1 - \sigma) \cdot \underline{x}]^2} > 0.$$

The strict positivity of the numerator follows from Assumption A.1. ■

## B SUPPLEMENTARY EMPIRICAL INFORMATION

Section 6.3 discusses mass threats and regime survival. Either high  $\kappa$  (see cases discussed in article) or low  $\sigma$  imply that stronger mass threats increase the probability of regime overthrow, consistent with the conventional logic. Russia in 1917 exemplifies low returns to elite coalitions (low  $\sigma$ ). “The Provisional Government [ $D$ ] completely lacked the authority or power to halt the attacks on privileged groups and the evolution toward anarchy. Right after the February Revolution, much of the former Imperial administration, including the police [ $E$ ], dissolved . . . liberal representative organs lacked real authority with the masses of peasant and proletarian Russians who had previously been excluded from them and subjected directly to autocratic controls” (Skocpol 1979, 209-210). Later that year, Bolshevik ( $M$ ) takeover occurred and a civil war began.

By contrast, low  $\kappa$  and high  $\sigma$  generate the opposite implication: strong mass threats should enhance regime survival. The article discusses Malaysia, but this case is not unique. Existing research on coalitions in authoritarian regimes analyzes others including Singapore, South Korea, Taiwan, and South Africa (Waldner 1999; Bellin 2000; Lieberman 2003; Doner, Ritchie and Slater 2005; Slater 2010). The East and Southeast Asian cases resemble Malaysia: World War II interrupted colonial governance, and the threats persisted afterwards. Like Malaysia, Singapore faced the threat of an insurgency from below; and Taiwan and South Korea each faced menacing international neighbors, communist China and North Korea, respectively. In the latter two cases,  $M$  is not the masses but rather an “external” actor. In all cases,  $\kappa$  was low because elites (e.g., top generals, business leaders) feared a bad fate if  $M$  took over, and elites faced incentives to invest in military power to mitigate the security threats (Doner, Ritchie and Slater 2005), which raised  $\sigma$ . Slater (2010) describes Malaysia and Singapore as regimes undergirded by “protection pacts,” which exhibit broad elite coalitions that support heightened state power when facing a mass threat that elites agree is particularly severe and threatening. Slater argues that such regimes feature strong states, robust ruling parties, cohesive militaries, and durable authoritarian regimes. Bellin (2000) proposes a similar mechanism in her study of 20th century democratization cases. One key factor that causes capitalists to support an incumbent dictator is fear of a threat from below. “Where poverty is widespread and the poor are potentially well mobilized (whether by communists in postwar Korea or by Islamists in contemporary Egypt), the mass inclusion and empowerment associated with democratization threatens to undermine the basic interests of many capitalists” (181).

South Africa provides another example. The white settler minority perceived a stark mass threat from the African majority (~80 percent of the population;  $M$ ), which was exacerbated after World War II as most of the rest of Africa moved toward African rule. But South African whites were also factionalized between English speakers and Dutch-speaking Afrikaaners, a legacy of prior Dutch and British colonialism. Although the major political parties changed over time, they generally reflected a split between English and Afrikaaners, meaning that one group was largely powerless when the other won a parliamentary majority and formed the government. From 1948—when the Afrikaaner-dominated National Party ( $D$ ) took power and imposed apartheid policies—through the next few decades, there was a concerted Afrikaaner bias in the control of top political positions, military and police positions, and businesses (Thompson 2001, 187-9).

Yet despite persistent divisions between Afrikaaners and English speakers ( $E$ ), white elites made a concerted effort to minimize their differences while facing a common African “enemy” (low  $\kappa$ ).



In the foundational South Africa Act of 1909 (one year before South Africa gained de facto independence as a self-governing dominion in the British Empire), white South Africans consciously defined their national political community in terms of race—differentiating whites from Africans and coloreds—rather than emphasizing the regional differences that split English speakers and Afrikaaners (Lieberman 2003). “Racial domination emerged as a common vehicle for appeasing both British-dominated capital and the largely Afrikaner white working class. It served to unify whites across their country and divided class interests. Racial domination was thus reinforced not so much to serve one set of economic interests as to serve the interests of all whites” (Marx 1998). European settlers’ livelihood rested upon economic exploitation of Africans: confiscating the best agricultural land to create a cheap and mobile labor supply among Africans (Lutzelschwab 2013, 155-61), which was one contributor to exceptionally high economic growth rates that nearly exclusively benefited the white population (Oliver and Atmore 2005, 290-1). Cooperation among whites also engendered the social consensus needed for an effective tax state (Lieberman 2003) and to conscript the entire white population for a strong military (Truesdell 2009), which was necessary to overcome their numerical deficiency. These factors also contributed to high  $\sigma$ . Thus, although this a borderline case of *powersharing* per se between Afrikaners and English, it is clear that the white community banded together to shut out the African majority from power, which delayed majority rule for roughly three decades after most of the rest of Africa.

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