The Dictator's Powersharing Dilemma: Countering Dual Outsider Threats

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Abstract

Dictators face a coup/civil war tradeoff: although sharing power mitigates the risk of outsider insurgencies, elites included in power can threaten rulers via coups d'état. A "conventional threat logic" posits that strong outsider threats compel dictators to create broader-based regimes, despite raising coup risk. This article rethinks this relationship by formally analyzing how two types of outsider threats—those from excluded elites and from the masses—affect a dictator's powersharing choice. A strong elite does not necessarily compel a dictator to share power because an elite threat that is large on the outside would also be large on the inside; the conventional logic holds only if coup-proofing institutions are strong and elites are not entrenched in power. Introducing an additional mass threat can either eliminate or exacerbate the dictator's coup/civil war tradeoff with the elite, depending on the elite's affinity toward mass rule; the conventional logic requires intermediate affinity.

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Dictators fear overthrow by outsider insurgencies. Often, dictators offer top positions within the military or cabinet to buy off threatening elites from initiating or continuing a civil war. However, sharing power may exacerbate rather than solve rulers' fear of overthrow because elites incorporated at the center can launch a coup d'état—the most common manner in which authoritarian regimes have collapsed since 1945 (35% of authoritarian collapses; Geddes, Wright and Frantz 2018, 179). Consequently, rulers face a coup/civil war tradeoff (Roessler 2016; Roessler and Ohls 2018).[1] In other circumstances, incorporating threatening outsiders would transform the regime, for example, when authoritarian regimes face mass threats and can "share power" only by democratizing and granting policy control to the masses (Acemoglu and Robinson 2006). Instead, authoritarian rulers can repress the threat of a mass outsider insurgency by expanding the military, but this simply recreates the coup/civil war dilemma because sharing power with additional elites creates a coup threat. Rulers face this "guardianship dilemma" because a military strong enough to defend the government from an outsider rebellion is also strong enough to overthrow it via a coup (Acemoglu, Vindigni and Ticchi 2010; Besley and Robinson 2010; Svolik 2012, chap. 5; Greitens 2016).

Given this dilemma—rooted in the tradeoff between outsider insurgencies and coups—when do rulers share power with elites? Many scholars propose the following *conventional threat logic* by which strong outsider threats (from either excluded elites or the masses) compel the dictator to share power, which also affects the likelihood of coup attempts and regime survival. If crafting a personalist regime would not generate an ominous overthrow threat from outsiders, then the dictator will exclude key elites from power in the central government. In this case, coups by insiders—which can occur undetected and succeed within several hours—pose the more imminent threat. However, in other circumstances, a narrowly based regime would breed a strong threat

[1]See also Francois, Rainer and Trebbi (2015). Conceiving members of different ethnic groups as distinct elite factions, empirically, ethnic groups whose members are excluded from power at the center more frequently initiate civil wars (Cederman, Gleditsch and Buhaug 2013), whereas groups with cabinet positions more frequently participate in coup attempts (Roessler 2016).

from outsiders, either from elites that the dictator chose to exclude from power or from the masses emboldened by weakness at the center. This encourages the dictator to broaden elite incorporation, although sharing power raises coup risk. Consequently, the conventional threat logic implies that hypothetically strengthening an outsider threat should (1) cause the dictator to switch from excluding elites to sharing power, (2) raise the likelihood of a coup attempt, and (3) increase the overall likelihood of regime overthrow.[2]

This article addresses these crucial considerations at the intersection of authoritarianism and conflict studies by formally modeling a dictator that faces dual outsider threats from elites and masses. I lay bare the assumptions needed for existing intuitions about powersharing to hold and show that existing arguments are special cases of a more general model in which stronger outsider threats (1) do not necessarily induce the dictator to share power; (2) even when they do, coup attempts do not necessarily become more likely; and (3) may stabilize the regime. A strong elite does not necessarily compel a dictator to share power because an elite threat that is large on the outside would also be large on the inside; the conventional logic holds only if coup-proofing institutions are strong and elites are not entrenched in power. The mass threat can either eliminate or exacerbate the dictator's coup/civil war tradeoff with the elite, depending on the elite's affinity toward mass rule; the conventional logic requires intermediate affinity. Table 1 summarizes the new implications.

In the game, the dictator moves first and decides power (include/exclude) and spoils for the elite. The elite responds by accepting or fighting. Finally, Nature determines whether an exogenous masses actor takes over. Although *including* the elite in power—e.g., sharing top military positions and high-ranking cabinet positions—enables the dictator to credibly commit to more spoils, sharing power also upgrades the elite's fighting technology from an outsider rebellion to an insider coup d'état. Elite inclusion also lowers the probability of mass takeover. By contrast, although distributing spoils while *excluding* the elite from power—e.g., decentralized land tenure

[2]As discussed later, some reject this logic (McMahon and Slantchev 2015) or find a non-monotonic relationship between outsider threats and the equilibrium probability of a coup attempt.

agreements—decreases the elite's probability of winning a fight, it also decreases the dictator's ability to credibly distribute spoils as well as exacerbates the mass threat.

Does a strong elite threat compel the dictator to share power? Contrary to the conventional logic, the strength of the elite threat does not offer clear consequences for how the dictator resolves its coup/civil war tradeoff. The same underlying coercive capacity (naturally conceptualized as the size of the elite faction) that improves the elite's ability to challenge the dictator in an outsider rebellion—and therefore *could* compel the dictator to share power—also enhances the elite's ability to challenge the dictator in a coup. In other words, we cannot hypothetically increase the elite's rebellion threat while holding fixed its coup threat—the manipulation that, implicitly, existing theories consider. This previews two circumstances in which the conventional threat logic fails, which I derive for a baseline case with zero probability of mass takeover. First, a regime with weak coup-proofing institutions fears the consequences of inclusion more than those of exclusion even if the elite exhibits strong coercive capacity (item 1a in Table 1). For example, in Angola, a decolonization war prevented elites from forging interethnic institutions that could have mitigated coup risk, causing post-independence rulers to exclude despite a strong rebellion threat. Second, elites entrenched in power cause the dictator to fear the consequences of exclusion more than those of inclusion even if the elite exhibits low coercive capacity (item 1b in Table 1). For example, in many post-colonial countries, a minority ethnic group privileged in the colonial military could credibly threaten a countercoup in response to a purge (see also Sudduth 2017). The conventional implication for powersharing requires strong coup-proofing institutions and non-entrenched elites. These conditions also yield another conventional implication: the equilibrium probability of a coup attempt increases in elite coercive capacity (item 2a in Table 1).[3]

[3]Even if the two necessary conditions for the conventional threat logic hold, the dictator does not choose inclusion/exclusion to minimize the probability of regime overthrow because it trades off between rents and conflict. Consequently, raising elite coercive capacity can *decrease* the probability of regime overthrow by diminishing the weight that the dictator places on accruing rents (item 3a in Table 1).

How does a mass threat affect this interaction? The mass threat can either eliminate or exacerbate the dictator's coup/civil war tradeoff with the elite, depending on the elite's affinity toward mass rule—which existing models of the guardianship dilemma do not consider. The main implications from the conventional threat logic hold only under *intermediate* affinity. At one extreme, some elites fear dire consequences under mass rule (low affinity), such as business elites in Malaysia vis-á-vis communists in the 1940s through 1970s as well as South African whites under apartheid vis-á-vis the African majority. Low affinity violates the conventional implication for coups: the overall relationship between the masses' coercive capacity and the equilibrium probability of a coup attempt is inverse U-shaped rather than increasing. The dictator necessarily switches to sharing power for a strong-enough mass threat, supporting the conventional implication for powersharing. At the switching point, the equilibrium probability of a coup attempt discretely increases, which recovers the standard guardianship dilemma mechanism. However, because the elite fears mass rule, it needs to band together with the dictator to lower the probability of mass takeover. This implies that further increases in the masses' coercive capacity *decrease* the elite's propensity for a coup (item 2b in Table 1). Therefore, by eliminating the dictator's coup/civil war tradeoff with the elite, low elite affinity toward mass rule also undermines the conventional implication that strong mass threats raise coup propensity.[4]

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 influence in a new regime, as did Rwandan Tutsis in the 1990s when co-ethnic Tutsis organized in Uganda posed the

[4] This result builds off McMahon and Slantchev (2015), who also reject the implicit assumption in prior guardianship dilemma models that the mass threat disappears following elite takeover. However, whereas they do not parameterize elites' utility under mass rule (assuming it is zero) and do not consider a permanent elite threat, introducing these aspects provides new insights into the conditions under which rulers face a guardianship dilemma. Parameterizing affinity also relates to Zakharov's (2016) focus (outside the conflict setting) on how elites' outside options affect a dictator's loyalty-competence tradeoff for subordinates.

main external threat. In such cases, when facing a strong mass threat, the elite's high affinity for mass rule disables the dictator from buying off a coup attempt by an included elite. This violates the conventional logic by undermining the dictator's incentives to share power (item 1c in Table 1).[5] Combining the contrarian findings for low and high affinity implies that only intermediate elite affinity recovers conventional implications.

Existing theories of the guardianship dilemma also overlook that soldiers not hired for the military can still challenge the ruler. By contrast, I model a permanent elite threat and explain how stronger mass threats can *enhance* regime durability by solving the dictator's coup/civil war tradeoff with the elite. Directly, a stronger mass threat raises the probability of regime overthrow. But indirect effects that cause the dictator and elites to band together can decrease the overall probability that the dictator is overthrown (i.e., by either elites or masses) relative to a counterfactual scenario without a mass threat. This regime-preserving effect occurs under low elite affinity toward mass rule and high state capacity, specifically, an alliance between the dictator and elite greatly reduces the probability of mass takeover (item 3b in Table 1). By contrast, if an excluded elite cannot rebel against the dictator (as in existing theories), then the probability of regime survival is obviously maximized if the only outsider threat—the masses—lacks any coercive capacity. Empirically, mass threats likely contributed to durable regimes in Malaysia and apartheid South Africa.

Table 1: Outsider Threats and Powersharing: New Implications

	1. Powersharing	**2. Coups**	**3. Regime survival**
Conventional threat logic	Dictator excludes if the outsider threat is weak and shares power if the outsider threat is strong	A stronger outsider threat raises the equilibrium probability of a coup attempt	A stronger outsider threat raises the equilibrium probability of regime overthrow
When this fails	**a.** Weak coup-proofing **b.** Entrenched elites **c.** High elite affinity with masses	**a.** Weak coup-proofing **b.** Low elite affinity with masses	**a.** Large rent-seeking effect **b.** Low elite affinity with masses and strong state capacity

[5]The dictator consumes zero if overthrown, regardless of how.

1 MODEL

1.1 SETUP

Two strategic actors, a dictator D and distinct elite faction E, engage in a one-shot interaction: (1) D decides power and spoils for E, (2) E accepts or fights, and (3) Nature determines mass overthrow of the regime. After formally describing the game, I substantively motivate the core assumptions.

1. Sharing power and spoils. D moves first and offers to E a share of total spoils, normalized to 1. Building off the central idea in conflict bargaining models that actors face impediments to credibly committing to distribute spoils, I assume D faces a limit on how much it can distribute to E. However, unlike in existing models, D makes a strategic choice that affects its ability to share spoils. Specifically, D has two policy instruments at its disposal, chosen sequentially (with a Nature move in between). The first provides transfers to E and also affects E's ability to overthrow D—sharing power and spoils, or more simply, powersharing—and the second is a pure spoils transfer.

First, for the binary powersharing choice, if D *includes* E in power, then it provides a minimum guaranteed transfer of $\underline{x}$, a parameter that satisfies $\underline{x} \in \left(0, \hat{\underline{x}}\right)$.[6] D benefits from increasing the basement amount it can commit to transfer as well as from weakly decreasing the probability of mass takeover (see stage 3), but sharing power also carries a drawback by shifting the distribution of power in favor of E (see stage 2). Alternatively, D can *exclude* E by granting neither this basement level of spoils nor access to power at the center.

D's second choice over distributing the remainder $1 - \underline{x}$ of the budget as pure spoils is continuous, but subject to an exogenously determined upper bound over which D has incomplete information when making its powersharing choice. Specifically, after the powersharing choice, Nature determines the maximum amount of remaining spoils that D can transfer, $\overline{x} \sim U(0, 1 - \underline{x})$.[7] This

[6] Appendix Assumption A.1 defines $\hat{\underline{x}} \in (0, 1)$.

[7] The Nature move makes D uncertain when making its powersharing choice about, under either

upper bound on possible transfers expresses in reduced form that 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. An alternative interpretation is that D receives a nontransferrable personal benefit to ruling that disables distributing all the spoils to E, but the exact size of this ruling premium is unknown when making the powersharing choice. After D learns $\overline{x}$, it proposes the additional spoils transfer to E, denoted as $x_{in} \in \left[0, \overline{x}\right]$ if included and $x_{ex} \in \left[0, \overline{x}\right]$ if excluded.[8] This pure spoils transfer does not affect the distribution of power. Overall, the maximum amount that D can possibly transfer is higher if it includes, $\underline{x} + \overline{x}$, than if it excludes, $\overline{x}$.

2. Elite fighting decision. After observing D's choices over sharing power and spoils, E either accepts—hence consuming $\underline{x} + x_{in}$ under inclusion or x_{ex} under exclusion—or fights. Two distinct factors affect E's probability of winning a fight: inclusion/exclusion, and E's coercive capacity $\theta_E \in [0, 1]$, for example, the size of E's ethnic group. If D excludes, then E's available fighting technology is a rebellion, which succeeds with probability $p_{ex}(\theta_E) = (1 - \theta_E) \cdot \underline{p}_{ex} + \theta_E \cdot \overline{p}_{ex}$. If D shares power, then E's available fighting technology is a coup, which succeeds with probability $p_{in}(\theta_E) = (1 - \theta_E) \cdot \underline{p}_{in} + \theta_E \cdot \overline{p}_{in}$. Coups are more likely to succeed than rebellions: $\underline{p}_{ex} < \underline{p}_{in}$ and $\overline{p}_{ex} < \overline{p}_{in}$, which expresses that sharing power shifts the distribution of power toward E. Additionally, assuming $0 \leq \underline{p}_{ex} < \overline{p}_{ex} < 1$ and $0 < \underline{p}_{in} < \overline{p}_{in} \leq 1$ implies that the probability of either type of fight succeeding strictly increases in θ_E. Sections 1.2 and 5 discuss how substantive factors such as coup-proofing institutions and elite entrenchment affect these boundary terms.[9]

3. Mass takeover. Finally, Nature determines whether a non-strategic, masses actor M overthrows

inclusion or exclusion, whether it can buy off E with the pure spoils transfer.

[8]Equivalently, D could make its two choices simultaneously with Nature moving afterward; here, if D's proposed transfer exceeds $\overline{x}$, then the *realized* spoils transfer would equal $\overline{x}$.

[9]Alternatively, I could model a function $p(\underline{x}, \theta_E)$ that strictly increases in both arguments and has an ambiguous sign for the cross-partial. However, the boundary values would still determine whether the conventional threat logic holds, motivating the linear functional forms with boundary parameters.

the regime. This probability depends on whether D and E band together. If D excludes and/or E fights, then the probability of mass takeover is θ_M; whereas if D shares power and E accepts, then this probability equals $\overline{q}_{in} \cdot \theta_M$. M's coercive capacity is $\theta_M \in [0,1]$, and $\overline{q}_{in} \in [0,1]$ expresses the regime's vulnerability to mass takeover when the dictator and elites band together, i.e., state capacity.[10] The assumed boundary conditions for the mass threat stack the deck toward the conventional threat logic: 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 E's affinity toward rule by M. Table 2 summarizes the notation.

1.2 KEY ASSUMPTIONS: ELITE

Three key assumptions generate the main tradeoffs if the dictator faces only an elite threat. Ethnicity, family, clan, religion, class (e.g., landlords and capitalists), or numerous other cleavages may differentiate the dictator and elite. First, dictators can distribute spoils to elites beyond their

[10] Implicitly, this setup assumes E is strong enough to discretely lower the probability of mass takeover by banding together with D. Alternatively, setting this overthrow probability to $\left[1 - \theta_E \cdot (1 - \overline{q}_{in})\right] \cdot \theta_M$ would explicitly decrease in θ_E and at $\theta_E = 1$ would reduce to the simpler expression that I use.

Table 2: Summary of Notation

Stage	Variables/description
1. Powersharing and spoils	• $\underline{x}$: Minimum amount of spoils for E if D shares power • x: D's pure spoils offer, denoted x_{in} if E is included and x_{ex} if excluded • $\overline{x}$: Maximum pure spoils that D can offer to E (Nature-drawn after D chooses inclusion/exclusion); implies maximum possible spoils $\overline{x}$ for excluded E and $\underline{x}+\overline{x}$ for included E
2. Accepting or fighting	• θ_E: E's coercive capacity; increases its probability of winning a rebellion or a coup • p_{in}: E's probability of winning a coup if included; equals $\theta_E \cdot \underline{p}_{in} + (1-\theta_E)\cdot \overline{p}_{in}$ • $\underline{p}_{in}$: minimum probability that a coup succeeds; expresses that sharing power facilitates coups even if E has low coercive capacity • $\overline{p}_{in}$: maximum probability that a coup succeeds; higher values indicate weaker coup-proofing institutions • p_{ex}: E's probability of winning a rebellion if excluded; equals $\theta_E \cdot \underline{p}_{ex} + (1-\theta_E)\cdot \overline{p}_{ex}$ • $\underline{p}_{ex}$: minimum probability that a rebellion succeeds; higher values indicate greater elite entrenchment at the center (entrenched elites have greater opportunity for a countercoup) • $\overline{p}_{ex}$: maximum probability that a rebellion succeeds; higher values correspond with factors such as how far E resides from the capital city • ϕ: Surplus destroyed by fighting
3. Mass overthrow	• θ_M: M's coercive capacity; this is the probability of Nature-determined mass overthrow if D and E do not band together (D excludes and/or E fights) • $\overline{q}_{in}$: Lower values indicate greater state capacity; the probability of mass overthrow equals $\theta_M \cdot \overline{q}_{in}$ if D and E band together • κ: E's affinity toward rule by M

inner circle in numerous ways, some of which also enhance opportunities to overthrow the ruler. Specifically, I differentiate sharing *power* with the opposition—which also concedes spoils—from distributing rents without sharing power, which correspond respectively to D's two consecutive moves. Methods of distributing spoils include political institutions such as parties, legislatures, and elections; public employment; goods and cash; control over state-owned enterprises; cabinet positions; and decentralized land control. How these instruments distribute spoils to elites is straightforward. For example, Arriola (2009, 1345-6) discusses how cabinet ministers in Africa can allocate public resources to their home district and extract favors in return for contracts and jobs. But which modes of co-optation also improve elites' ability to challenge the regime? On the one hand, a broad-based military that incorporates elites beyond the dictator's family members and co-ethnics exemplifies sharing *power*, in addition rents earned from controlling state-owned enterprises and other sources of spoils that top officers enjoy in many countries. Creating an institutionalized party carries a similar tradeoff: rulers distribute spoils to other elites through party membership, which also improves their ability to coordinate to overthrow the dictator (Magaloni

2008). 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. On the other hand, 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 neocustomary land tenure systems (Boone 2017). This exemplifies sharing spoils while *excluding* elites from power at the center. Similarly, cash transfers and related benefits for citizens in oil-rich regimes serve the explicit purpose of distributing spoils in return for not organizing politically or criticizing the government.

Second, sharing *power* at the center (and not merely spoils) enhances the ability of included elites to challenge the dictator specifically by enabling coups d'état, which corresponds with assuming $p_{in}(\theta_E) > p_{ex}(\theta_E)$ for all θ_E. I adopt 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 can be distinguished, however, by their organizational basis." Granting positions of power at the center, especially military positions, "lowers the mobilizational costs that dissidents must overcome to overthrow the ruler . . . This organizational distinction helps to account for why coups are often much more likely to displace rulers from power than rebellions." Specifically, "[c]oup conspirators leverage partial control of the state (and the resources and matériel that comes with access to the state) in their bid to capture political power . . . In contrast, rebels or insurgents lack such access and have to build a private military organization to challenge the central government and its military."

These two considerations also motivate why sharing power rather than only spoils increases the highest possible amount that D can transfer to E—in the model, raising the maximum feasible transfer from $\overline{x}$ under exclusion to $\underline{x} + \overline{x}$ under inclusion. Dictators face impediments to credibly committing to promises, and one means of improving commitment ability is granting E the means to defend its spoils. Thus, if D grants E enough influence at the center to enable the insider coup technology—as the model captures with the discrete increase in E's probability of winning if D shares power—it is natural that this enables D to guarantee at least $\underline{x}$ for E, despite residual uncertainty over the exact spoils that D can transfer even under inclusion. For example, although a ruler can allow its generals to run certain state-owned enterprises, it cannot guarantee that international demand for its output will be robust or that workers will not strike. Giving E a foothold at the center creates a greater permanency to D's transfers as opposed to the more transient nature of many modes of sharing spoils in authoritarian regimes.

Third, in addition to D's powersharing choice, higher values of E's coercive capacity θ_E improve its ability to win either type of fight. This parameter corresponds with the size of the elite faction, perhaps, the size of its ethnic group. Higher θ_E enhances E's prospects for winning a rebellion by increasing its manpower to challenge the government, and corresponds with what Roessler (2016) and Roessler and Ohls (2018) term "threat capabilities." However, I depart by additionally assuming that θ_E affects E's ability to succeed in a coup attempt. Substantively, this assumption is natural: larger factions contain more people that can mobilize in support of a coup, and can better defend themselves against challenges in the (unmodeled) future. However, I *do not* impose any additional a priori assumptions about the boundary conditions for $p_{ex}(\theta_E)$ and $p_{in}(\theta_E)$, which correspond with substantive factors such as coup-proofing institutions $\left(\overline{p}_{in}\right)$, the location of E's identity group relative to the capital city $\left(\overline{p}_{ex}\right)$, and elite entrenchment $\left(\underline{p}_{ex}\right)$.

To motivate the latter point about elite entrenchment, in reality, if E has a foothold in power, then a purge attempt by D may engender a countercoup by E (Sudduth 2017), as opposed to the present simplifying assumption that D necessarily succeeds when excluding E from power. I can incorporate this consideration into the model by positing alternative microfoundations for $p_{ex}(\theta_E)$. Suppose that D's attempt to purge E from power fails with probability $\beta \in [0, 1]$, which enables E to stage a coup (and, E does not receive the powersharing transfer $\underline{x}$). Then, at D's powersharing information set, it expects that E's probability of winning under (attempted) exclusion is $p_e'(\theta_E) = (1 - \beta) \cdot p_{ex}(\theta_E) + \beta \cdot p_{in}(\theta_E)$, and $\beta = 0$ recovers the baseline setup. Higher β raises

E's probability of winning under attempted exclusion, and empirically corresponds with groups entrenched in power. Section 5 provides additional substantive motivation for this and the other boundary conditions.

1.3 Key Assumptions: Masses

In contrast to the strategic elite actor, with whom the dictator can choose to share power, I simplify the interaction with the masses such that the only option is repression. This enables focusing on how M affects the strategic interaction between D and E, rather than attempting to explain democratization (Acemoglu and Robinson 2006). I make two key assumptions about the mass threat. First, a unified front by the strategic players—D shares power and E accepts D's offer—lowers the probability of mass takeover from θ_M to $\overline{q}_{in} \cdot \theta_M$. This is a standard assumption in the guardianship dilemma literature if we conceive of sharing power specifically as creating a larger military; and the magnitude of this benefit of sharing power depends on $\overline{q}_{in}$, which is naturally conceived as state capacity. More broadly, disruptions at the center as well as narrowly constructed regimes with minimal societal support create openings for mass takeover, whereas the dictator and other elites banding together counteracts these opportunities. For example, "Compelling evidence exists that coups also ignite insurgencies by weakening the central government [D] and thereby opening up opportunities for rebellion . . . In the midst of Mali's March 2012 coup [military is E], for example, Tuareg rebels [M] launched a powerful military offensive. They and Islamic rebel groups proceeded to capture much of the country" (Harkness 2016, 588). Second, I also depart from existing guardianship dilemma models by parameterizing the elite's potential consumption under mass rule, κ, which—as the introduction and Section 5 discuss—enables addressing many types of mass threats.

2 Equilibrium Analysis

2.1 Spoils Transfer

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:

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

and E is indifferent between acceptance and a coup if:

$$x_{in}=x^*_{in}(\theta_E,\theta_M)\equiv\underbrace{(1-\phi)\cdot p_{in}(\theta_E)-\underline{x}}_{x^*_{in}(\theta_M=0)}+(1-\phi)\cdot p_{in}(\theta_E)\cdot\frac{\theta_M}{1-\overline{q}_{in}\cdot\theta_M}\cdot\Big[\underbrace{\kappa}_{\uparrow\text{ leverage}}\ \underbrace{-(1-\overline{q}_{in})}_{\downarrow\text{ leverage}}\Big]. \tag{2}$$

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 $x^*_{in}(\theta_M=0)$. But θ_M also affects E's bargaining leverage and creates countervailing effects. Although acceptance lowers the probability of mass takeover, summarized by the down arrow under $-(1-\overline{q}_{in})$, it also implies that E consumes 0 rather than κ if M overthrows the regime, expressed with the up arrow under κ. The uniform distribution for $\overline{x}$ implies:

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

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:

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

and E is indifferent between acceptance and rebelling if:

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

There are three differences from Equation 2. First, E does not receive the guaranteed powersharing transfer $\underline{x}$, and therefore only the probability of winning and costliness of fighting affect $x^*_{ex}(\theta_M = 0)$. Second, E's probability of coup success equals $p_{ex}(\theta_E)$ rather than $p_{in}(\theta_E)$. Third, acceptance does not lower the probability of mass takeover, although as before acceptance implies that E consumes 0 rather than κ if M takes over (indicated by the up arrow under κ). The uniform distribution for $\overline{x}$ implies:

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

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 Assumption A.1 imposes a sufficient assumption to, at $\theta_M = 0$, yield interior solutions $x^*_{in} \in (0, 1 - \overline{x})$ and $x^*_{ex} \in (0, 1 - \overline{x})$, and Appendix Lemmas A.1 through A.3 characterize corner solutions if $\theta_M > 0$. Throughout, I set $x^*_{in} = 0$ and $Pr(\text{coup} \mid \text{inclusion}, \theta_E, \theta_M) = 0$ if the right-hand side 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 right-hand side of Equation 2 exceeds $1 - \underline{x}$; and $x^*_{ex} = 1 - \underline{x}$ and $Pr(\text{rebel} \mid \text{exclusion}, \theta_E, \theta_M) = 1$ if the right-hand side of Equation 5 exceeds $1 - \underline{x}$ (this term is never less than 0).[11]

2.2 POWERSHARING

D has incomplete information over the maximum possible "pure spoils" transfer $\overline{x}$ when choosing inclusion/exclusion. D's powersharing incentive-compatibility constraint compares its expected utilities under inclusion and exclusion, given the optimal spoils transfers and fighting probabilities in each information set:

[11] Recall that $1 - \underline{x}$ is the upper bound for the Nature draw of $\overline{x}$.

$$
\begin{aligned}
\mathcal{P}\big(\theta_E,\theta_M\big) \equiv\, & Pr(\text{deal} \mid \text{inclusion}, \theta_E, \theta_M) \cdot \big[1 - \underline{x} - x^*_{in}(\theta_E,\theta_M)\big] \cdot (1 - \overline{q}_{in} \cdot \theta_M) \\
& + Pr(\text{coup} \mid \text{inclusion}, \theta_E, \theta_M) \cdot \big[1 - p_{in}(\theta_E)\big] \cdot (1-\phi) \cdot (1-\theta_M) \\
& - Pr(\text{deal} \mid \text{exclusion}, \theta_E, \theta_M) \cdot \big[1 - x^*_{ex}(\theta_E,\theta_M)\big] \cdot (1-\theta_M) \\
& - Pr(\text{rebel} \mid \text{exclusion}, \theta_E, \theta_M) \cdot \big[1 - p_{ex}(\theta_E)\big] \cdot (1-\phi) \cdot (1-\theta_M) > 0. \qquad (7)
\end{aligned}
$$

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 $\overline{x} < x^*_{in}$ and E attempts a coup in response to any offer, in which case the probability of defeating the coup attempt and the costliness of fighting determine D's expected utility. These terms are similar under exclusion. Each term is weighted by the probability of mass overthrow, which equals θ_M in all cases except if D shares power and E accepts—when it equals $\overline{q}_{in} \cdot \theta_M$.

Equivalently, D will share power if and only if the maximum probability of a coup under inclusion for which D will share power exceeds $Pr(\text{coup} \mid \text{inclusion}, \theta_E, \theta_M)$. The former term is $Pr(\text{coup} \mid \theta_E, \theta_M)^{\max}$, implicitly defined as:[12]

$$
\begin{aligned}
& \Big[1 - Pr(\text{coup} \mid \theta_E, \theta_M)^{\max}\Big] \cdot \big[1 - \underline{x} - x^*_{in}(\theta_E,\theta_M)\big] \cdot (1 - \overline{q}_{in} \cdot \theta_M) \\
& + Pr(\text{coup} \mid \theta_E, \theta_M)^{\max} \cdot \big[1 - p_{in}(\theta_E)\big] \cdot (1-\phi) \cdot (1-\theta_M) \\
& - Pr(\text{deal} \mid \text{exclusion}, \theta_E, \theta_M) \cdot \big[1 - x^*_{ex}(\theta_E,\theta_M)\big] \cdot (1-\theta_M) \\
& - Pr(\text{rebel} \mid \text{exclusion}, \theta_E, \theta_M) \cdot \big[1 - p_{ex}(\theta_E)\big] \cdot (1-\phi) \cdot (1-\theta_M) = 0. \qquad (8)
\end{aligned}
$$

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

[12] For parameter values in which this term is negative, I set $Pr(\text{coup} \mid \theta_E, \theta_M)^{\max} = 0$, that is, D will not share power even if $Pr(\text{coup} \mid \text{inclusion}, \theta_E, \theta_M) = 0$.

2.3 EQUILIBRIUM

Proposition 1 characterizes the equilibrium strategy profile.[13]

Proposition 1 (Equilibrium)**.**

- *If $\mathcal{P}(\theta_E, \theta_M) > 0$, then D shares power with E. Otherwise, D excludes.*
- *D offers $x_{in} = \min\left\{x_{in}^*, 1 - \underline{x}\right\}$ if E is included and $x_{ex} = \min\left\{x_{ex}^*, 1 - \underline{x}\right\}$ 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.*

3 ELITE THREAT

The conventional threat logic predicts that hypothetically increasing E's coercive capacity θ_E should (1) engender a powersharing regime, (2) raise the likelihood of a coup attempt, and (3) increase the overall likelihood of regime overthrow. This section sets $\theta_M = 0$, which implies that an excluded elite poses the sole outsider threat. The main result is that a strong elite does not necessarily compel a dictator to share power because an elite threat that is large on the outside would also be large on the inside. Instead, the conventional logic holds only if coup-proofing institutions are strong and elites are not entrenched in power. Appendix Section A.2 explains why D does not minimize the probability of elite overthrow, which relates to item 3a in Table 1. Section 5 connects the model to empirical cases.

[13] A continuum of equilibria exist because at the spoils-transfer stage, D is indifferent among all offers if it either includes but $\overline{x} < x_{in}^*$ or excludes but $\overline{x} < x_{ex}^*$. However, all equilibria strategy profiles in which fighting occurs along the equilibrium path are payoff equivalent.

3.1 THE DICTATOR'S TRADEOFF

If $\theta_M = 0$, then the powersharing constraint from Equation 7 reduces to:

$$\mathcal{P}\big(\theta_E, 0\big) \equiv \underbrace{\phi \cdot \Big[\Pr\big(\text{rebel} \mid \text{exclusion}, \theta_E, 0\big) - \Pr\big(\text{coup} \mid \text{inclusion}, \theta_E, 0\big)\Big]}_{\text{1 Elite conflict effect } (+/-)}$$

$$\underbrace{-(1-\phi) \cdot \Big[p_{in}(\theta_E) - p_{ex}(\theta_E)\Big]}_{\text{2 Rent-seeking effect } (-)}$$

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

Equation 9 demonstrates D's tradeoff between rents and conflict, which follows from the two consequences of sharing power if $\theta_M = 0$: although E receives more guaranteed rents $\underline{x}$, sharing power also shifts the distribution of power by raising E's probability of winning from $p_{ex}(\theta_E)$ to $p_{in}(\theta_E)$. The first consequence decreases $\Pr\big(\text{coup} \mid \text{inclusion}, \theta_E, 0\big)$ because the guaranteed transfer $\underline{x}$ increases the probability that Nature's draw of $\overline{x}$ is large enough to enable D to buy off E. This is the *conflict-prevention effect* (term 1a in Equation 9).[14] The second consequence of sharing power enables E to credibly demand more spoils, generating two effects that diminish D's incentives to share power: a *conflict-enhancing effect* because E wins a fight with higher probability (term 1b in Equation 9) and a *rent-seeking effect* 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 effect implies Lemma 1.

> **Lemma 1** (Necessity of positive conflict effect for powersharing). *A necessary condition for D to share power at $\theta_M = 0$ is $Pr\big(rebel \mid exclusion, \theta_E, 0\big) > Pr\big(coup \mid inclusion, \theta_E, 0\big)$.*

[14] Appendix Assumption A.1 restricts the powersharing transfer such that D never prefers fighting over transferring at least $\underline{x}$.

3.2 Recovering Conventional Implications

Although it is uncontroversial that insider access enables elites to overthrow a government with higher probability than challenging as insurgent outsiders, the conventional threat logic requires additional, previously unstated assumptions about the *magnitude* of this difference at different values of θ_E. 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 effect dominates conflict-enhancing effect) and large in magnitude relative to the rent-seeking effect. Equation 9 shows that, at a particular θ_E, this holds if $p_{in}(\theta_E) - p_{ex}(\theta_E)$ is small. Therefore, to yield the conventional implication that D shares power at high θ_E, we need small $\overline{p}_{in} - \overline{p}_{ex}$. This corresponds with **strong coup-proofing institutions** $\big($low $\overline{p}_{in}\big)$ or particularly strong outsider mobilizational abilities $\big($high $\overline{p}_{ex}\big)$. To additionally yield the conventional implication that D excludes at low θ_E, we need large $\underline{p}_{in} - \underline{p}_{ex}$. This corresponds with a **non-entrenched elite** $\big($low $\underline{p}_{ex}\big)$. These two conditions are individually necessary and jointly sufficient for the conventional threat logic to hold for powersharing.[15]

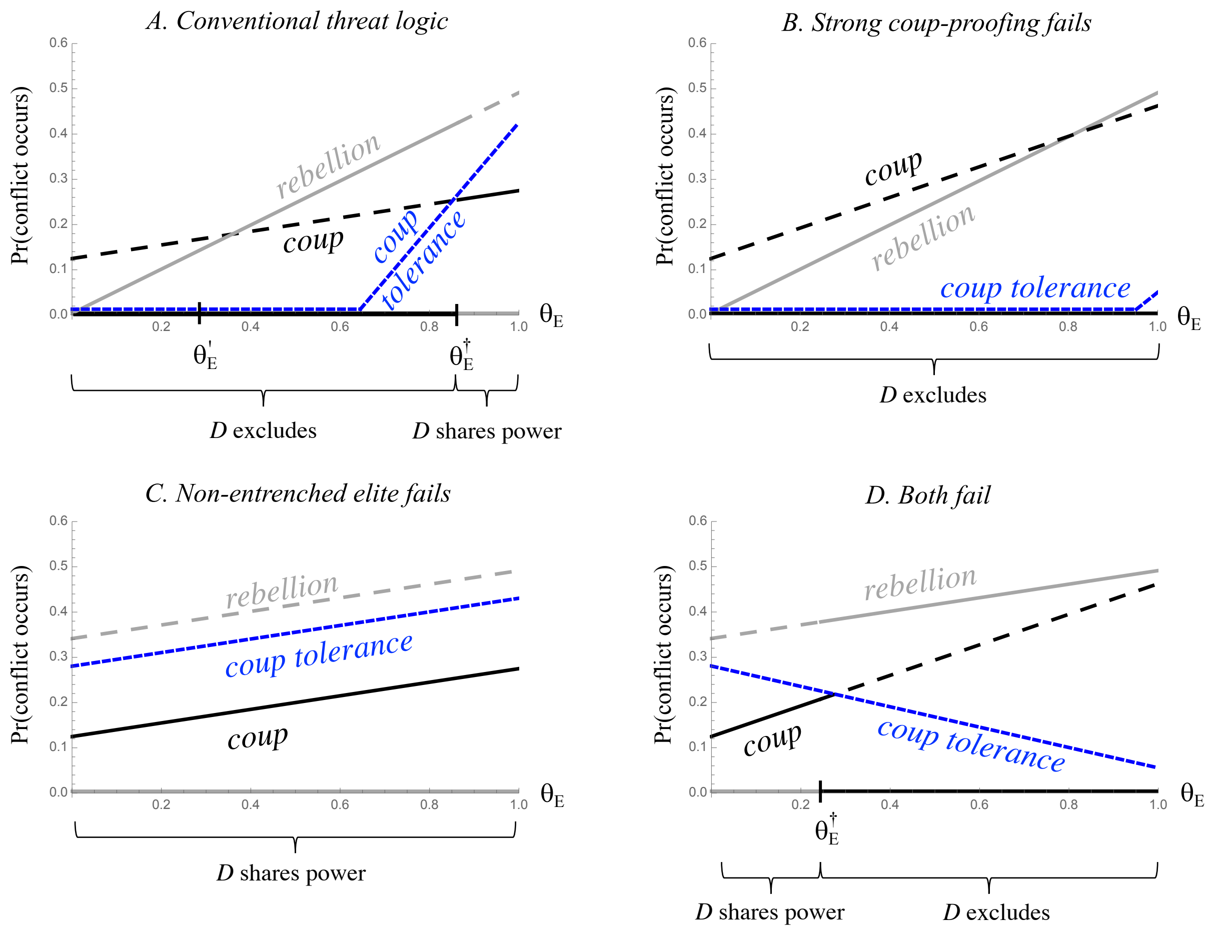
$$\underbrace{\overline{p}_{in} - \overline{p}_{ex}}_{\textbf{Strong coup-proofing}} \quad < \quad \frac{\phi \cdot \underline{x}}{(1-\phi)\cdot(\phi + 1 - \underline{x})} \quad < \quad \underbrace{\underline{p}_{in} - \underline{p}_{ex}}_{\textbf{Non-entrenched elite}}$$

Figure 1 depicts examples of each permutation of condition holding or not. Each panel depicts the probability that conflict (either coup or rebellion) occurs as a function of θ_E. Table 3 provides the legend. In Panel A, the non-entrenched elite and strong coup-proofing conditions each hold. At low θ_E, D does not face a tradeoff. Low $\underline{p}_{ex}$ implies $\Pr\big(\text{coup} \mid \text{inclusion}, \theta_E, 0\big) > \Pr\big(\text{rebel} \mid \text{exclusion}, \theta_E, 0\big)$. The negative net conflict effect reinforces the rent-seeking incentives to exclude. Without the favorable shift in the balance of power caused by D sharing power, E is too weak to punish D for exclusion, and Lemma 1 implies that D excludes.

The strong coup-proofing and non-entrenched elite conditions imply that higher θ_E raises $p_{ex}(\theta_E)$

[15] Sections 1.2 and 5 substantively link strong coup-proofing institutions to low $\overline{p}_{in}$ and non-entrenched elites to low $\underline{p}_{ex}$.

Figure 1: Elite Threat: Powersharing and Coup Attempts



Notes: Panel A sets $\theta_M = 0$, $\underline{p}_{ex} = 0$, $\overline{p}_{ex} = 0.65$, $\underline{p}_{in} = 0.5$, $\overline{p}_{in} = 0.7$, $\underline{x} = 0.2$, and $\phi = 0.4$. Panel B raises $\overline{p}_{in}$ to 0.95, Panel C raises $\underline{p}_{ex}$ to 0.45, and Panel D imposes both changes. Table 3 provides the legend.

Table 3: Legend for Figures 1 and 3

Solid black	Equilibrium probability of a coup attempt: $$Pr(coup^*) = \begin{cases} 0 & \text{if } Pr(\text{coup} \mid \theta_E, \theta_M)^{\max} < Pr(\text{coup} \mid \text{incl.}, \theta_E, \theta_M) \\ Pr(\text{coup} \mid \text{incl.}, \theta_E, \theta_M) & \text{if } Pr(\text{coup} \mid \theta_E, \theta_M)^{\max} > Pr(\text{coup} \mid \text{incl.}, \theta_E, \theta_M) \end{cases}$$
Dashed black	For parameter values in which D excludes, counterfactual probability of a coup attempt under inclusion, $\Pr\big(\text{coup} \mid \text{inclusion}, \theta_E, \theta_M\big)$; see Equation 3
Solid gray	Equilibrium probability of a rebellion, equals $\Pr\big(\text{rebel} \mid \text{exclusion}, \theta_E, \theta_M\big)$ defined in Equation 6 for parameter values in which D excludes, and 0 otherwise
Dashed gray	For parameter values in which D includes, counterfactual probability of a rebellion under exclusion, $\Pr\big(\text{rebel} \mid \text{exclusion}, \theta_E, \theta_M\big)$
Dashed blue	D's coup tolerance: the highest probability of a coup attempt under inclusion for which D will share power, $Pr(\text{coup} \mid \theta_E, \theta_M)^{\max}$; see Equation 8

considerably more than $p_{in}(\theta_E)$. This creates a threshold such that if $\theta_E > \theta'_E$,[16] then D trades off between rents and conflict. Although the rent-seeking effect is always negative, for $\theta_E > \theta'_E$, the net conflict effect is positive because $\Pr\big(\text{rebel} \mid \text{exclusion}, \theta_E, 0\big) > \Pr\big(\text{coup} \mid \text{inclusion}, \theta_E, 0\big)$. However, for θ_E only slightly larger than θ'_E, D excludes. D tolerates a higher probability of conflict—despite destroying surplus—to gain larger expected rents.

Large θ_E increases the magnitude of the elite conflict effect sufficiently relative to the rent-seeking effect that D's willingness to tolerate coup attempts, shown with the blue line for $Pr(\text{coup} \mid \theta_E, 0)^{\max}$, strictly increases and intersects the gray line for $Pr(\text{coup} \mid \text{inclusion}, \theta_E, 0)$. At $\theta_E = \theta_E^{\dagger}$, D switches to sharing power, and $Pr(coup^*)$ jumps from 0 to positive. Consistent with the conventional implication for coup attempts, further increases in θ_E strictly raise $Pr(coup^*) = Pr(\text{coup} \mid \text{inclusion}, \theta_E, 0)$ because stronger elite coercive capacity increases the probability that a coup attempt succeeds.

3.3 Violating the Conventional Threat Logic

If either the strong coup-proofing or non-entrenched elite conditions fail, so do conventional implications for powersharing and coups. In Panel B, strong coup-proofing fails because $\overline{p}_{in}$ is higher than in Panel A, raising coup risk at $\theta_E = 1$. Although the slope of p_{ex} in θ_E is steeper than that of p_{in}, this difference is less pronounced than in Panel A; the conflict effect is negative except for high θ_E, at which point the rent-seeking effect is still large enough in magnitude to prevent powersharing. Consequently, D excludes for all θ_E values and $Pr(coup^*) = 0$. This case highlights the importance of evaluating how θ_E, as opposed to $p_{ex}(\theta_E)$, affects equilibrium outcomes. Equation 9 shows that increasing $p_{ex}(\theta_E)$ unambiguously incentivizes D to share power by lowering its expected utility under exclusion. However, to assess the effects of outsider threat strength, we cannot hypothetically increase $p_{ex}(\theta_E)$ while holding $p_{in}(\theta_E)$ fixed because θ_E affects both. A high probability of rebellion success does not necessarily engender powersharing because the same increases

[16] The implicit characterization of this threshold is $\Pr\big(\text{rebel} \mid \text{exclusion}, \theta'_E, 0\big) = \Pr\big(\text{coup} \mid \text{inclusion}, \theta'_E, 0\big)$.

in θ_E that undergird rebellion success also considerably raise $p_{in}(\theta_E)$ if coup-proofing institutions are weak.

By contrast, in Panel C, the non-entrenched elite condition fails because $\underline{p}_{ex}$ is not much smaller than $\underline{p}_{in}$. Therefore, the conflict effect is positive and large enough in magnitude even at $\theta_E = 0$ to induce D to share power. In Panel D, both conditions fail and the direction of the relationships opposes the conventional logic: D switches from inclusion to exclusion for large enough θ_E, and $Pr(coup^*)$ drops at that point. Proposition 2 formalizes the different cases, which correspond respectively to the four panels in Figure 1. Section 5 discusses how empirical cases map into different parameter values.

Proposition 2 (Elite threat, powersharing, and coup attempts)**.** *Assume* $\theta_M = 0$.

Part a. Conventional threat logic for powersharing and coups. *If the strong coup-proofing and non-entrenched elite conditions hold, then a unique* $\theta_E^\dagger \in (0,1)$ *exists such that: if* $\theta_E < \theta_E^\dagger$*, then* D *excludes and* $Pr(coup^*) = 0$*; and otherwise,* D *shares power and* $Pr(coup^*) = \boldsymbol{Pr}\big(coup \mid inclusion, \theta_E, 0\big)$*, which strictly increases in* θ_E.

Part b. Weak coup-proofing institutions. *If only the strong coup-proofing condition fails, then* D *excludes for all* $\theta_E \in [0,1]$ *and* $Pr(coup^*) = 0$***; Item 1a in Table 1.***

Part c. Entrenched elites. *If only the non-entrenched elite condition fails, then* D *shares power for all* $\theta_E \in [0,1]$ *and* $Pr(coup^*) = \boldsymbol{Pr}\big(coup \mid inclusion, \theta_E, 0\big)$***; Item 1b in Table 1.***

Part d. *If both conditions fail, then for* $\theta_E^\dagger$ *from part a: if* $\theta_E < \theta_E^\dagger$*, then* D *shares power and* $Pr(coup^*) = \boldsymbol{Pr}\big(coup \mid inclusion, \theta_E, 0\big)$*; and otherwise,* D *excludes and* $Pr(coup^*) = 0$.

4 Mass Threat

How does a mass threat affect this interaction? Setting $\theta_M > 0$ can either eliminate or exacerbate the dictator's coup/civil war tradeoff with the elite, depending on the elite's affinity toward mass rule—which existing models of the guardianship dilemma do not consider. The main implications from the conventional threat logic hold only under *intermediate* affinity. Existing models 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 the conditions under which a guardianship dilemma exists and for whether mass threats imperil or enhance regime survival. Section 5 connects the model to empirical cases.

4.1 The Dictator's Tradeoff

The mass threat alters D's tradeoff between rents and elite conflict in three ways:

$$\mathcal{P}(\theta_E,\theta_M) = (1-\theta_M)\cdot\underbrace{\mathcal{P}(\theta_E,0)}_{\text{Equation 9}} + \underbrace{\theta_M\cdot(1-\overline{q}_{in})\cdot Pr(\text{deal}\mid\text{inclusion},\theta_E,\theta_M)\cdot\big[1-(1-\phi)\cdot p_{in}\big]}_{1\ \text{Direct rent-seeking effect of}\ \theta_M}$$

$$+\underbrace{\theta_M\cdot(1-\phi)\cdot\Big[Pr(\text{deal}\mid\text{inclusion},\theta_E,\theta_M)\cdot p_{in}\cdot\big[\kappa-(1-\overline{q}_{in})\big]-Pr(\text{deal}\mid\text{exclusion},\theta_E,\theta_M)\cdot p_{ex}\cdot\kappa\Big]}_{2\ \text{Indirect rent-seeking effect of}\ \theta_M}$$

$$+\underbrace{(1-\theta_M)\cdot\phi\cdot\Big[\Delta Pr(\text{rebel}\mid\text{exclusion})-\Delta Pr(\text{coup}\mid\text{inclusion})\Big]}_{3\ \text{Indirect elite conflict effect of}\ \theta_M}. \qquad (10)$$

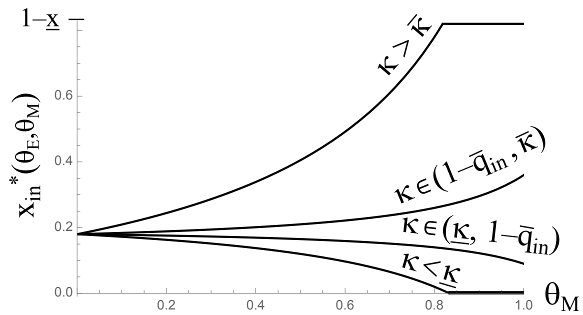
First, θ_M directly increases the rent-seeking effect in favor of powersharing by decreasing the probability of mass takeover from θ_M to $\Big[Pr(\text{deal}\mid\text{inclusion},\theta_E,\theta_M)\cdot\overline{q}_{in}+Pr(\text{coup}\mid\text{inclusion},\theta_E,\theta_M)\Big]\cdot\theta_M$.[17] Therefore, if $\theta_M>0$, the overall rent-seeking effect may *encourage* powersharing, contrary to the strictly negative term in Equation 9. Additionally, the rent-seeking effect can be sufficient to induce powersharing, and therefore Lemma 1 does not hold if $\theta_M>0$. Panel B of Figure 3 provides an example: at $\theta_M=\theta_M^{\dagger}$, D shares power despite $Pr(\text{coup}\mid\text{inclusion},\theta_E,\theta_M) > Pr(\text{rebel}\mid\text{exclusion},\theta_E,\theta_M)$.

[17] Equation 10 rearranges Equation 7 assuming interior solutions for x^*_{in} and x^*_{ex}. Appendix Lemma A.5 considers corner solutions. The new notation in term 3 is:

$$\Delta Pr(\text{coup}\mid\text{inclusion})\equiv Pr(\text{coup}\mid\text{inclusion},\theta_E,\theta_M)-Pr(\text{coup}\mid\text{inclusion},\theta_E,0)$$

$$\Delta Pr(\text{rebel}\mid\text{exclusion})\equiv Pr(\text{rebel}\mid\text{exclusion},\theta_E,\theta_M)-Pr(\text{rebel}\mid\text{exclusion},\theta_E,0)$$

Figure 2: Spoils Transfer Under Inclusion



Notes: Figure 2 sets $\phi = 0.4$, $\underline{x} = 0.18$, $\theta_E = 1$, $\overline{p}_{in} = 0.6$, $\overline{p}_{ex} = 0.4$, and $\overline{q}_{in} = 0.8$. In ascending order, the values of κ are 0, 0.15, 0.3, and 0.95.

Second, sharing power indirectly affects D's rents by influencing E's bargaining leverage. The overall effect is ambiguous because higher θ_M can either lower or raise E's bargaining leverage under inclusion, as Equation 2 highlights. On the one hand, by accepting a deal, an included E lowers the probability of mass takeover from θ_M to $\overline{q}_{in} \cdot \theta_M$. On the other hand, staging a coup enables E to consume κ rather than 0 if M takes over. Which effect dominates? If $\kappa < 1 - \overline{q}_{in}$, then the net effect of θ_M reduces E's bargaining leverage under inclusion. In fact, if κ is low enough, then $x_{in}^* = 0$ for large θ_M, hence eliminating D's coup/civil war tradeoff with E. The bottom curve in Figure 2 depicts this case, and the formal threshold is:

$$\underline{\kappa} \equiv \frac{(1 - \overline{q}_{in}) \cdot \underline{x}}{(1 - \phi) \cdot p_{in}} < 1 - \overline{q}_{in}. \tag{11}$$

However, if $\kappa > 1 - \overline{q}_{in}$, then large θ_M exacerbates D's coup/civil war tradeoff with E by enhancing E's bargaining leverage under inclusion. In fact, if κ is high enough, $x_{in}^* = 1$ for large θ_M. The top curve in Figure 2 depicts this case, and the formal threshold is:

$$\overline{\kappa} \equiv \frac{1 - \overline{q}_{in}}{(1 - \phi) \cdot p_{in}} > 1 - \overline{q}_{in}. \tag{12}$$

By contrast, under exclusion, higher θ_M unambiguously increases E's bargaining leverage; despite the same κ effect as under inclusion, the probability of mass takeover equals θ_M regardless of E's action (see Equation 5). This component of the indirect effect raises D's incentives to include. Overall, if $\kappa < 1 - \overline{q}_{in}$, then the indirect rent-seeking effect encourages powersharing, whereas the effect is ambiguous if $\kappa > 1 - \overline{q}_{in}$ because higher θ_M strengthens E's bargaining leverage under both inclusion and exclusion.

Third, these effects of θ_M on E's bargaining leverage also influence the probability of elite fighting. Consequently, the third term in Equation 10 is positive if $\kappa < 1 - \overline{q}_{in}$ and ambiguous otherwise.

Comparing D's tradeoff between rents and elite conflict for $\theta_M = 0$ and $\theta_M > 0$, Lemma 1 highlights that if $\theta_M = 0$, then D does not face a tradeoff if $Pr(\text{coup} \mid \text{inclusion}, \theta_E, \theta_M) > Pr(\text{rebel} \mid \text{exclusion}, \theta_E, \theta_M)$ because both the rent-seeking and elite conflict mechanisms encourage exclusion. By contrast, if $\theta_M > 0$, then D may not face a tradeoff for the opposite reason: if κ is low and θ_M is high, then both the rent-seeking and elite conflict mechanisms encourage powersharing. Specifically, because θ_M can lower E's bargaining leverage under inclusion relative to exclusion, it is possible to have $\underline{x} + x^*_{in} < x^*_{ex}$, which is not possible if $\theta_M = 0$ because $p_{in}(\theta_E) > p_{ex}(\theta_E)$.

4.2 Recovering Conventional Implications

Key implications of the conventional threat logic for mass threats are: (1a) D excludes for low θ_M, (1b) D includes for high θ_M, and (2) $Pr(coup^*)$ increases in θ_E. Implication 1a requires **elite exclusion** at $\theta_M = 0$, or $\mathcal{P}(\theta_E, 0) < 0$. This holds under either of two distinct sufficient conditions for D to exclude discussed above: the conventional logic for the elite threat holds and θ_E is low, or the strong coup-proofing condition fails and therefore D excludes for all θ_E.[18]

Implication 1b requires *low*-enough κ. If $\kappa > \overline{\kappa}$, then D will not share power at high θ_M because $Pr(\text{coup} \mid \text{inclusion}, \theta_E, \theta_M) = 1$, and therefore sharing power would shift the distribution of power in favor of E without yielding any benefit for D. However, $\kappa < \overline{\kappa}$ is not sufficient because the conventional logic for coups requires *high*-enough κ. This is because only if $\kappa > 1 - \overline{q}_{in}$ does $Pr(\text{coup} \mid \text{inclusion}, \theta_E, \theta_M)$ increase in θ_M. The contrary possibility that $Pr(\text{coup} \mid \text{inclusion}, \theta_E, \theta_M)$ decreases in θ_M contrasts with part a of Proposition 2 because higher θ_E necessarily empowers E to succeed at a coup attempt. Combining these two considerations

[18] Respectively, parts a and b of Proposition 2.

about κ implies that, overall, the conventional threat logic requires **intermediate affinity**:

$\kappa - (1 - \overline{q}_{in}) \in (0, \epsilon)$, for small $\epsilon > 0$.[19]

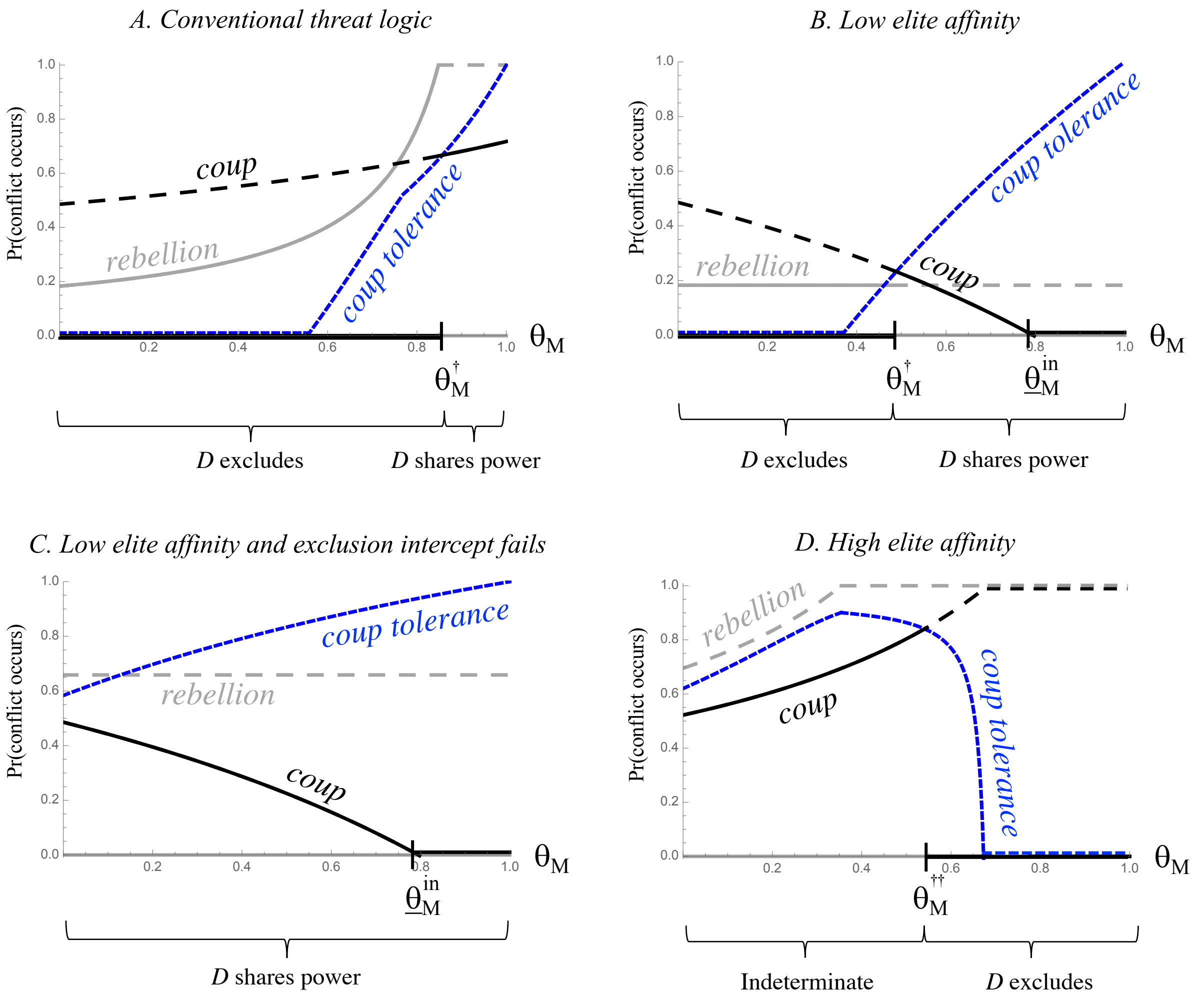
Figure 3 illustrates substantively important combinations of the elite exclusion and intermediate affinity conditions holding or not by plotting the same terms as in Figure 1, but as a function of θ_M. In Panel A, both conditions hold, and the overall relationships resemble those in Panel A of Figure 1: D switches from exclusion to inclusion at a unique threshold $\theta_M^{\dagger}$, at which point $Pr(coup^*)$ discretely increases from 0 to positive. This is often referred to as the guardianship dilemma mechanism, which Corollary 1 formalizes, because D acquiesces to a higher probability of an elite coup attempt to deter mass takeover. And, $Pr(coup^*)$ strictly increases in θ_M for all $\theta_M > \theta_M^{\dagger}$, consistent with conventional implications.

4.3 VIOLATING THE CONVENTIONAL THREAT LOGIC

Figure 3 highlights various other cases that reject the conventional threat logic. In Panels B and C, the intermediate affinity condition fails because κ is too low. In both cases, by eliminating D's coup/civil war tradeoff with E, low elite affinity toward mass rule undermines the conventional implication that strong mass threats raise coup propensity. In Panel B, the overall relationship between θ_M and $Pr(coup^*)$ is inverted U-shaped. Some components are the same as in Panel A: the elite exclusion condition holds and κ is low enough that D to switches from exclusion to inclusion at $\theta_M = \theta_M^{\dagger}$, at which point $Pr(coup^*)$ discretely increases. However, because $\kappa < 1 - \overline{q}_{in}$ in Panel B, $Pr(coup^*)$ decreases in θ_M for $\theta_M > \theta_M^{\dagger}$, yielding the non-monotonic relationship. Furthermore, $\kappa < \underline{\kappa}$ implies a unique threshold $\underline{\theta}_M^{in} \in \left(\theta_M^{\dagger}, 1\right)$ such that $Pr(\text{coup} \mid \text{inclusion}, \theta_E, \theta_M) = 0$ for $\theta_M > \underline{\theta}_M^{in}$.

[19] Although "intermediate" as just motivated encompasses a wider upper bound, $\kappa \in \left(1 - \overline{q}_{in}, \overline{\kappa}\right)$, I impose the specific assumption that $\kappa > 1 - \overline{q}_{in}$ but is contained within an open neighborhood of this threshold. This is sufficient to establish that $\mathcal{P}(\theta_E, \theta_M)$ is monotonic in θ_M, which I use to prove Proposition 3.

Figure 3: Mass Threat: Powersharing and Coup Attempts



Notes: Panel A of Figure 3 sets $\overline{p}_{in} = 0.95$, $\overline{p}_{ex} = 0.25$, $\overline{q}_{in} = 0.4$, $\underline{x} = 0.18$, $\phi = 0.4$, $\theta_E = 1$, and $\kappa = 0.8$. Panel B lowers κ to 0, Panel C lowers κ to 0 and raises $\overline{p}_{ex}$ to 0.9, and Panel D raises $\overline{p}_{in}$ to 1, $\overline{p}_{ex}$ to 0.95, and $\overline{q}_i$ to 0.7. Table 3 provides the legend.

Panel C is identical to Panel B except higher $\overline{p}_{ex}$ violates the elite exclusion condition. Consequently, D shares power for all θ_M and $Pr(coup^*)$ strictly decreases in θ_M until hitting 0 at $\theta_M = \underline{\theta}_M^{in}$.

In Panel D, intermediate affinity fails because κ is too large, which exacerbates D's coup/civil war tradeoff with E. Because $\kappa > \overline{\kappa}$, a strong mass threat disables D from buying off E. Specifically, if θ_M exceeds a threshold $\theta_M^{\dagger\dagger} < 1$, then $Pr(\text{coup} \mid \text{inclusion}, \theta_E, \theta_M) = 1$. Contrary to conventional threat implications, D necessarily *excludes* if θ_M is large. Proposition 3 formalizes this logic.[20]

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

Part a. *Assume affinity does not exceed the intermediate threshold, $\kappa < 1 - \overline{q}_{in} + \epsilon$, for small $\epsilon > 0$. If the elite exclusion condition 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 $Pr(coup^*) = 0$. If $\theta_M > \theta_M^\dagger$, then $Pr(coup^*) = Pr(coup \mid inclusion, \theta_E, \theta_M)$. There are two possibilities:*

- *If $\kappa > 1 - \overline{q}_{in}$, then $Pr(coup \mid inclusion, \theta_E, \theta_M)$ strictly increases in θ_M. This is the **conventional threat** implication; Panel A in Figure 3.*
- *If $\kappa < 1 - \overline{q}_{in}$, then $Pr(coup \mid inclusion, \theta_E, \theta_M)$ weakly decreases in θ_M; Item 2b in Table 1. Furthermore, if $\kappa < \underline{\kappa}$, then a unique $\underline{\theta}_M^{in} \in \left(\theta_M^\dagger, 1\right)$ exists such that if $\theta_M > \underline{\theta}_M^{in}$, then $Pr(coup \mid inclusion, \theta_E, \theta_M) = 0$; Panel B in Figure 3.*

If instead the elite exclusion condition fails, then D shares power for all $\theta_M \in [0,1]$ and $Pr(coup^*) = Pr(coup \mid inclusion, \theta_E, \theta_M)$ for all θ_M; Panel C in Figure 3 depicts this case for $\kappa < \underline{\kappa}$.

Part b. *Assume high affinity, $\kappa > \overline{\kappa}$. There exists $\theta_M^{\dagger\dagger} < 1$ such that if $\theta_M > \theta_M^{\dagger\dagger}$, then D excludes and $Pr(coup^*) = 0$; Item 1c in Table 1, Panel D of Figure 3.*

Corollary 1 (Guardianship dilemma mechanism)**.** *Assume $\kappa < 1 - \overline{q}_{in} + \epsilon$, for small $\epsilon > 0$.*

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

These findings differ from existing theories because my model assumes (1) variance in elite affinity to mass rule and (2) the dictator faces a constant threat from elites. The first assumption implies that increasing θ_M not only affects D's incentives to share power—as the conventional logic contends—but also affects E's incentives to stage a coup, a largely novel consideration for this literature. Even the specific finding of a non-monotonic relationship between θ_M and $Pr(coup^*)$, shown in Panel

[20]The discussion of Appendix Figure A.2 addresses parameter values not covered by Proposition 3, including the indeterminacy of D's powersharing choice if $\kappa > \overline{\kappa}$ and θ_M is low.

B of Figure 3, rests on a distinct mechanism from 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. Svolik (2012, chap. 5) shows that the contracting problem between a government and its military dissipates if the military is large—which, in equilibrium, the government creates 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 size of the threat does not affect the military's consumption. By contrast, here, a non-monotonic relationship arises if κ is low enough that θ_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 Panel A of Figure 3, which supports the conventional logic, the mechanism is distinct because it results from parameterizing E's affinity toward M.

I also build on McMahon and Slantchev's (2015) critique of the guardianship dilemma logic. They also consider how θ_M affects E's incentives for a coup, but the two assumptions highlighted above explain why my findings differ. First, they assume $\kappa = 0$, which implies $Pr(\text{coup} \mid \text{inclusion}, \theta_E, \theta_M)$ decreases in θ_M. However, I show that high κ generates the opposite relationship, given E's incentives to join the winning side. Second, if κ is low, a necessary condition to eliminate the guardianship dilemma mechanism, which their model does not contain, is a permanent elite threat. In existing models of coups, the ruler will never share power—or, using their terminology, the ruler will never construct a specialized security agency—absent a mass threat, implying that an analog of the elite exclusion condition always holds.[21] By contrast, my model presumes that excluded

[21]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 holds for their model under the full range of possible values of mass

elites can challenge the dictator. Consequently, D may share power at $\theta_M = 0$ (see Proposition 2), causing $Pr(coup^*)$ to monotonically decrease in θ_M because D shares power for all θ_M (Panel C of Figure 3). But if the elite exclusion condition holds, then the ruler faces a guardianship dilemma despite low κ (Corollary 1; Panel B of Figure 3), contrary to McMahon and Slantchev's (2015) argument.

4.4 Regime-Enhancing Mass Threats

A final implication contrary to the conventional threat logic is that stronger mass threats increase expected regime durability if κ and $\overline{q}_{in}$ are low.[22] Equation 13 states the equilibrium probability of overthrow, $\rho^*(\theta_M)$, if $\kappa < \underline{\kappa}$. For each range of θ_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).

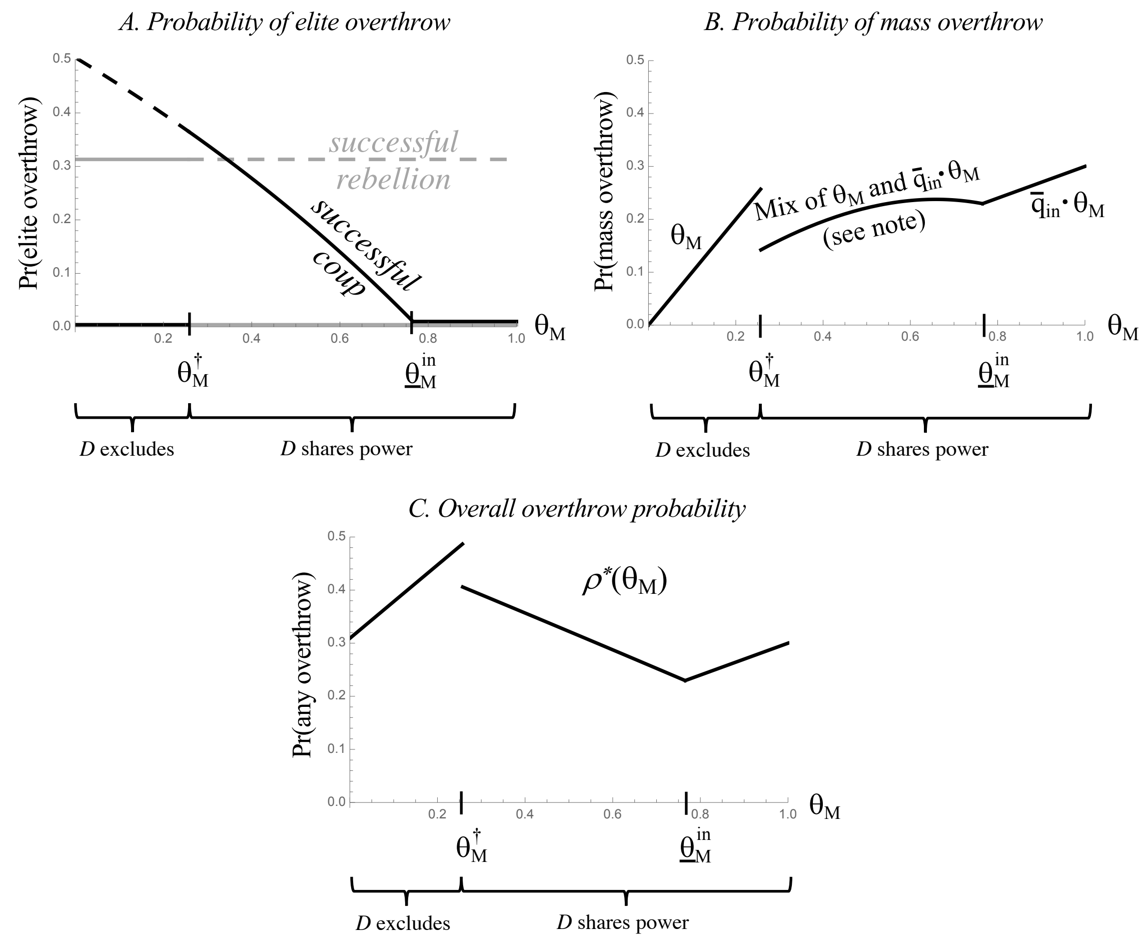
$$\rho^*(\theta_M) = \begin{cases} Pr(\text{rebel} \mid \text{excl.}, \theta_E, \theta_M) \cdot p_{ex} & \\ \quad + \Big[Pr(\text{rebel} \mid \text{excl.}, \theta_E, \theta_M) \cdot (1 - p_{ex}) + Pr(\text{deal} \mid \text{excl.}, \theta_E, \theta_M) \Big] \cdot \theta_M & \text{if } \theta_M < \theta_M^{\dagger}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

Figure 4 illustrates the contrarian result by depicting the probability of overthrow rather than of conflict occurring. Panel A depicts the equilibrium probability of overthrow by E (coup or rebellion), Panel B by M, and Panel C by either. Panel C shows that the regime is more likely to survive at $\theta_M = \underline{\theta}_M^{in}$ than at $\theta_M = 0$. For $\theta_M < \theta_M^{\dagger}$, only the direct effect operates and $\rho(\theta_M)$ increases: D excludes E, and the probability of mass overthrow equals θ_M. However, at $\theta_M = \theta_M^{\dagger}$, D switches to inclusion, which causes a discrete drop in the probability of mass takeover (Panel B) that causes the overall overthrow probability to discretely drop (Panel C). For $\theta_M \in \big(\theta_M^{\dagger}, \underline{\theta}_M^{in}\big)$, the negative effect of θ_M on $Pr(\text{coup} \mid \text{inclusion}, \theta_E, \theta_M)$ counteracts the direct effect through two

threat strength.

[22] Appendix Section A.2 discusses how θ_E affects equilibrium regime durability if $\theta_M = 0$.

Figure 4: Mass Threat and Overthrow Risk



Notes: Each panel of Figure 4 uses the same parameter values as in Panel B of Figure 3 except they raise $\overline{p}_{ex}$ to 0.65 and lower $\overline{q}_{in}$ to 0.3. In Panel 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 Panel B, the curve for $\theta_M \in \left(\theta_M^\dagger, \underline{\theta}_M^{in}\right)$ equals $\left[Pr(\text{coup} \mid \text{inclusion}, \theta_E, \theta_M) + Pr(\text{deal} \mid \text{inclusion}, \theta_E, \theta_M) \cdot \overline{q}_{in}\right] \cdot \theta_M$. Note that this differs from Equation 13 because it is the *unconditional* probability of mass overthrow. For Panel C, Equation 13 defines $\rho^*(\theta_M)$.

channels. First, the probability of elite overthrow decreases (Panel A). Second, this effect lowers the probability of mass takeover by increasing the likelihood that M wins with the lower probability $\overline{q}_i \cdot \theta_M$. Because $\kappa < \underline{\kappa}$, $Pr(\text{coup} \mid \text{inclusion}, \theta_E, \theta_M)$ eventually hits 0—hence eliminating D's coup/civil war tradeoff—and $\theta_M = \underline{\theta}_M^{in}$ minimizes the overall probability of overthrow. Modeling a permanent elite threat is necessary to generate this effect because, if instead $\theta_E = 0$ and $\underline{p}_{ex} = 0$, then $\rho^*(0) = 0$; and therefore higher θ_M must increase the probability of overthrow.

Proposition 4 (Mass threat and regime survival)**.** *Suppose affinity is low, $\kappa < \underline{\kappa}$. If $\theta_E > 0$, then a unique $\overline{q}'_{in} > 0$ exists such that if $\overline{q}_{in} < \overline{q}'_{in}$, then $\rho^*\left(\underline{\theta}_M^{in}\right) < \rho^*(0)$. This threshold is the **strong state capacity** condition; Item 3b in Table 1.*

5 Implications for Empirical Cases

5.1 Elite Threat

Table 4: Empirical Implications of Elite Threat Results

Parameter values	*Condition in model*	*Empirical cases*
Low $\overline{p}_{in}$	Strong coup-proofing holds	China, USSR, Mexico (strong party)
High $\overline{p}_{ex}$	Strong coup-proofing holds	Benin (strong rival ethnic group)
High $\overline{p}_{in}$	Strong coup-proofing fails	Angola (coup threat)
High $\underline{p}_{ex}$	Non-entrenched elite fails	Uganda (countercoup threat)

The strong coup-proofing institutions condition—which the conventional threat logic requires—is more likely to hold for low $\overline{p}_{in}$ or high $\overline{p}_{ex}$. Regimes with strong ruling parties, in particular those with revolutionary origins, often command strong coup-proofing institutions $\left(\text{low } \overline{p}_{in}\right)$ that induce a ruler to share power with a strong elite (Panel A of Figure 1). Such regimes often transform the military to exhibit high loyalty to the party. Examples include Communist parties in the Soviet Union and China, and the PRI in Mexico (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. This also relates to how multiple countervailing security agencies can check each other to counterbalance against coup attempts, lowering $\overline{p}_{in}$.

Regarding high $\overline{p}_{ex}$, Roessler and Ohls (2018) discuss one operationalization: ethnic groups located close to the capital. In such cases, rebels face lower hurdles to organizing an insurgency that can effectively strike at the capital. For example, both Benin and Ghana sustained powersharing regimes for decades after independence despite many successful coups that rotated power among different ethnic groups. The major ethnic groups were relatively large $\left(\text{high } \theta_E\right)$ and located close to the capital $\left(\text{high } \overline{p}_{ex}\right)$, and the devastating expected consequences of a civil war plausibly created high incentives to share power despite the coup risk.

By contrast, high $\overline{p}_{in}$ relative to $\overline{p}_{ex}$ violates the strong coup-proofing institutions condition because D will not tolerate the high coup risk posed by a strong E (Panel B of Figure 1). For example, in Angola, multiple rebel groups participated in a lengthy liberation war to end Portuguese rule. Portugal finally set a date for independence in January 1975, negotiating with a transitional government that shared power among the three main rebel groups—MPLA (D), and UNITA and FNLA (E)—each primarily associated with a particular ethnic group. UNITA and FNLA credibly posed rebellion threats $\left(\text{high } \theta_E \text{ and } \overline{p}_{ex}\right)$ given prior fighting and intact military wings. However, Angola's fractured process of gaining independence prevented MPLA from developing institutions to facilitate credible commitment of spoils for other factions (low $\underline{x}$), or enable MPLA to integrate other rebel groups into the regime without exacerbating coup risk $\left(\text{high } \overline{p}_{in}\right)$. This contrasted with African countries that experienced electoral competition before independence which—in some cases—engendered durable interethnic parties. Even in countries like Ghana that eventually fell into coup traps, the first post-independence ruler, Kwame Nkrumah, pressured the British for independence by organizing the Convention People's Party and promoting pan-Africanism rather than forming an ethnically exclusive coalition. By contrast, ethnic armed factions pervaded Angola by independence, which caused its transitional government to collapse in August 1975. "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).

Unfortunately, Angola is not unique as attempts at military integration following civil war often fail (Glassmyer and Sambanis 2008), likely because of high $\overline{p}_{in}$. For example, in Chad in 1979, integrating 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 also create strong inside threats, and rulers will exclude if they cannot solidify internal security.

The conventional threat logic also fails if elites are entrenched in power $\left(\text{high } \underline{p}_{ex}\right)$, causing D to share power at $\theta_E = 0$ (Panel C of Figure 1). A group entrenched in power can launch a countercoup in response to attempted exclusion—"before losing their abilities to conduct a coup" (Sudduth 2017, 1769)—which corresponds with a high probability that exclusion fails (high β; see the end of Section 1.2). For example, immediately after gaining independence from Europe, rulers in many countries inherited "split domination" regimes in which different ethnic groups controlled military and civilian political institutions (Horowitz 1985). Often, ethnic groups favored in the colonial military or bureaucracy posed a large coup threat for civilian leaders from other groups, but their entrenched position made exclusion difficult. For example, in colonial Uganda, Britain favored the Baganda, which exhibited a hierarchically organized political structure because of pre-colonial statehood and relatively high education levels. However, members of northern ethnic groups won national elections in the terminal colonial period, which engendered a tenuous and ultimately unstable powersharing regime after independence given the entrenched position of the Baganda.

5.2 Mass Threat

Table 5: Empirical Implications of Mass Threat Results

Parameter values	*Condition in model*	*Empirical cases*
High $\overline{q}_{in}$ or high κ	Strong state capacity or low affinity fails	Rwanda, Egypt (high affinity); WWI Russia (weak state)
Low $\overline{q}_{in}$ and low κ	Both hold	Malaysia, South Africa (shared elite threat)

The conventional logic that stronger mass threats decrease regime longevity holds if elites have high affinity for mass rule (high κ) or if cooperation between the dictator and elite minimally diminishes prospects for mass takeover, high $\overline{q}_{in}$ (Proposition 4). Rwanda exemplifies high κ. 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 composed the opposition (E). However, Tutsis living in Rwanda faced incentives to ally with their transnational ethnic kin, which had organized as the Rwandan Patriotic Front (RPF) in Uganda by 1990 (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 follow 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, the strong organizational position of these military and their control over important economic sectors led them to anticipate relatively good fates under a civilian regime. By contrast, in Bahrain, Libya, and Syria, personalized and ethnically distinct militaries perceived bad fates following regime change (low κ) and violently defended the incumbent regime in 2011. 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 κ is high. Otherwise, as discussed in the next cases, mass opposition should cause elites to band together against the threat—eliminating the dictator's coup/civil war tradeoff with elites. Appendix B discusses Russia in 1917, which exemplifies high $\overline{q}_{in}$.

Malaysia exemplifies low $\overline{q}_{in}$ and κ (Figure 4).[23] Japan's occupation of colonial Malaya during World War II enabled the Malayan Communist Party (M) to form. It sparked the Malayan Emergency between 1948 and 1960, which caused over 10,000 deaths, and engaged in communal violence after 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, κ was low. Communists targeted not only Malays, but also Chinese elites it labeled as conspirators. Communists' actions placed the entire Chinese community in suspicion,

[23] The following historical material draws from Slater (2010).

causing business leaders to organize the MCA. Elite unity thwarted communist pressure because prior British colonial efforts unified the security forces and raised taxes, lowering $\overline{q}_{in}$. Appendix B discusses additional durable regimes that faced strong mass threats, including apartheid South Africa.

Overall, in contrast to the conventional threat logic, dictators do not necessarily share power with elites that pose a strong rebellion threat. Nor will responding to mass threats by including other elites necessarily raise coup risk or imperil regime survival. Taken together, these results will hopefully encourage future theoretical and empirical research on how outsider threats affect powersharing, coups, and regime survival.

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Online Appendix for
"The Dictator's Powersharing Dilemma: Countering Dual Outsider Threats"

Table of Contents

A Supplementary Information for Formal Results

A.1 Proofs for Elite Threat Results

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 sharing power transfers so many resources 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.

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

$$\underline{x} < \underline{\hat{x}} \equiv \min\Big\{(1-\phi)\cdot \underline{p}_{in}, 1-(1-\phi)\cdot \overline{p}_{ex}\Big\}$$

The proof for Proposition 1 follows directly from the preceding text, and Lemma 1 follows directly from Equation 9.

Proof of Proposition 2, part a. The existence of at least one $\theta^\dagger_E \in (0,1)$ such that $\mathcal{P}\big(\theta^\dagger_E, 0\big) = 0$ follows from the strong coup-proofing and non-entrenched elite conditions and from continuity in θ_E. We can implicitly define:

$$p_{in}(\theta^\dagger_E) - p_{ex}(\theta^\dagger_E) = \frac{\phi \cdot \underline{x}}{(1-\phi)\cdot(\phi + 1 - \underline{x})} \tag{A.1}$$

Showing that $\mathcal{P}\big(\theta_E, 0\big)$ strictly increases in θ_E proves the unique threshold claim:

$$\frac{d\mathcal{P}\big(\theta_E, 0\big)}{d\theta_E} = \big[(\overline{p}_{ex} - \underline{p}_{ex}) - (\overline{p}_{in} - \underline{p}_{in})\big]\cdot(1-\phi)\cdot\left(\frac{\phi}{1-\underline{x}} + 1\right) > 0. \tag{A.2}$$

The sign follows because the strong coup-proofing and non-entrenched elite conditions imply $\overline{p}_{ex} - \underline{p}_{ex} > \overline{p}_{in} - \underline{p}_{in}$. Finally, need to show:

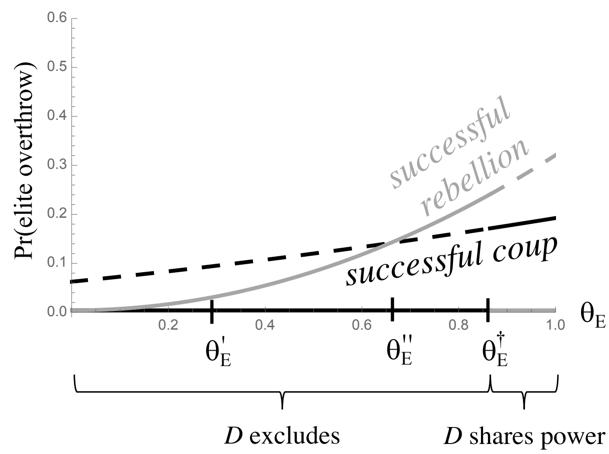
$$\frac{d}{d\theta_E} Pr(\text{coup} \mid \text{inclusion}, \theta_E, 0) = \frac{(1-\phi)\cdot\big(\overline{p}_{in} - \underline{p}_{in}\big)}{1-\underline{x}} > 0$$

Proof of parts b–d. Equation A.2 establishes that $\mathcal{P}\big(\theta_E, 0\big)$ is strictly monotonic in θ_E, which implies that its upper bound is either $\mathcal{P}(0,0)$ or $\mathcal{P}(1,0)$. Therefore, if $sgn\big(\mathcal{P}(0,0)\big) = sgn\big(\mathcal{P}(1,0)\big)$, then $sgn\big(\mathcal{P}(\theta_E,0)\big) = sgn\big(\mathcal{P}(0,0)\big)$ for all $\theta_E \in [0,1]$, proving parts b and c. The structure of the proof for part d is identical to that for Proposition 2 except it needs to be shown that $\mathcal{P}\big(\theta_E, 0\big)$ strictly decreases in θ_E, which follows because if the strong coup-proofing and non-entrenched elite conditions are each strictly violated, then $\overline{p}_{ex} - \underline{p}_{ex} < \overline{p}_{in} - \underline{p}_{in}$, which is sufficient for $\frac{d\mathcal{P}(\theta_E,0)}{d\theta_E} < 0$ (see Equation A.2). ■

A.2 Minimizing Elite Overthrow?

The third main implication from the conventional threat logic is that the equilibrium probability of regime overthrow strictly increases in θ_E. By contrast, in my model, D trades off between conflict and rents; the probability of regime survival does not directly enter its powersharing constraint in Equation 9.

Figure A.1: Elite Threats and Overthrow Risk



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

Figure A.1 uses the same parameter values as in Panel A of Figure 1, for which the strong coup-proofing and non-entrenched elite conditions each hold. It depicts intermediate values $\theta_E \in (\theta_E'', \theta_E^\dagger)$ in which the rent-seeking effect is large enough in magnitude that D excludes even though the probability of a successful rebellion under exclusion, $\Pr(\text{rebel} \mid \text{exclusion}, \theta_E, \theta_M) \cdot p_{ex}$, exceeds the probability of a successful coup attempt under inclusion, $\Pr(\text{coup} \mid \text{inclusion}, \theta_E, 0) \cdot p_{in}$. Consequently, increasing θ_E from a value slightly less than $\theta_E^\dagger$ to a value slightly greater than the inclusion threshold *decreases* the equilibrium probability of regime overthrow.

This counterintuitive result arises because higher θ_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 the strong coup-proofing and non-entrenched elite conditions imply that this term strictly decreases in θ_E. At $\theta_E = \theta_E^\dagger$, D to switches from exclusion to inclusion, which discretely lowers the equilibrium probably of overthrow because $\theta_E^\dagger$ exceeds the threshold θ_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 one implication of the conventional logic—stronger outsider threats necessarily diminish survival prospects—as well as 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 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 only consume rents if it survives, the shift in the balance of power caused by inclusion creates a disincentive for sharing power by diminishing D's rents. D's desire for rents can cause it not only to exclude a *weak* elite, but also to exclude at intermediate θ_E—risking a higher probability of fighting, $\theta_E \in (\theta_E', \theta_E^\dagger)$, or of overthrow, $\theta_E \in (\theta_E'', \theta_E^\dagger)$. 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 models such as Debs (2016), rulers may not maximize their overall probability of survival because of concerns about *post-exit* fate rather than pre-exit rents, specifically, ex-rulers expect a lower chance of being killed if the next regime is democratic rather than authoritarian.

Proposition A.1 (Dictator does not maximize probability of survival)**.** *Suppose a modified version strong coup-proofing and non-entrenched conditions holds:*

$$(\overline{p}_{ex} - \underline{p}_{ex}) - (\overline{p}_{in} - \underline{p}_{in}) > \max\left\{ \frac{\phi - \underline{x}}{(1-\phi)\cdot(\phi + 1 - \underline{x})} - (\overline{p}_{in} - \overline{p}_{ex}), \frac{(\overline{p}_{in} - \underline{p}_{in})\cdot \underline{x}}{2\cdot(1-\phi)\cdot \underline{p}_{ex}} \right\} \tag{A.3}$$

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

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 a threshold $R > 0$ 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 θ''_E threshold is implicitly defined as:

$$Pr(\text{coup} \mid \text{inclusion}, \theta''_E, 0) \cdot p_{in}(\theta''_E) = Pr(\text{rebel} \mid \text{exclusion}, \theta''_E, 0) \cdot p_{ex}(\theta''_E) \tag{A.4}$$

First show that $\theta''_E > \theta'_E$. Recall that θ'_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:

$$(1-\phi)\cdot\big[p_{in}(\theta'_E) - p_{ex}(\theta'_E)\big] = \underline{x} \tag{A.5}$$

Because $p_{in}(\theta_E) > p_{ex}(\theta_E)$ for all θ_E, Equation A.4 implies $Pr(\text{coup} \mid \text{inclusion}, \theta''_E, 0) < Pr(\text{rebel} \mid \text{exclusion}, \theta''_E, 0)$, which rearranges to:

$$(1-\phi)\cdot\big[p_{in}(\theta''_E) - p_{ex}(\theta''_E)\big] < \underline{x} \tag{A.6}$$

Combining equations A.5 and A.6 implies that $p_{in}(\theta''_E) - p_{ex}(\theta''_E) < p_{in}(\theta'_E) - p_{ex}(\theta'_E)$, which rearranges to $\theta''_E \cdot \big[(\overline{p}_{ex} - \underline{p}_{ex}) - (\overline{p}_{in} - \underline{p}_{in})\big] > \theta'_E \cdot \big[(\overline{p}_{ex} - \underline{p}_{ex}) - (\overline{p}_{in} - \underline{p}_{in})\big]$. The claim follows because the strong coup-proofing and non-entrenched elite conditions imply that $\overline{p}_{ex} - \underline{p}_{ex} > \overline{p}_{in} - \underline{p}_{in}$.

To complete the proof, it suffices to show that $\frac{d}{d\theta_E}\Big[Pr(\text{coup} \mid \text{inclusion}, \theta_E, 0) \cdot p_{in}(\theta_E) - Pr(\text{rebel} \mid \text{exclusion}, \theta_E, 0) \cdot p_{ex}(\theta_E)\Big] > 0$ for all $\theta_E > \theta'_E$. Solving the derivative enables simplifying this inequality to:

$$2 \cdot (1-\phi) \cdot \Big[\big(\overline{p}_{ex} - \underline{p}_{ex}\big) \cdot p_{ex}(\theta_E) - \big(\overline{p}_{in} - \underline{p}_{in}\big) \cdot p_{in}(\theta_E)\Big] + \big(\overline{p}_{in} - \underline{p}_{in}\big) \cdot \underline{x} > 0$$

Because $\theta_E > \theta_E'$, we know $p_{in}(\theta_E) < p_{ex}(\theta_E) + \frac{\underline{x}}{1-\phi}$, and therefore we can tighten the left-hand side:

$$2 \cdot (1-\phi) \cdot \Big[\big(\overline{p}_{ex} - \underline{p}_{ex}\big) \cdot p_{ex}(\theta_E) - \big(\overline{p}_{in} - \underline{p}_{in}\big) \cdot \Big(p_{ex}(\theta_E) + \frac{\underline{x}}{1-\phi}\Big)\Big] + \big(\overline{p}_{in} - \underline{p}_{in}\big) \cdot \underline{x} > 0$$

Algebraic rearranging yields:

$$\big(\overline{p}_{ex} - \underline{p}_{ex}\big) - \big(\overline{p}_{in} - \underline{p}_{in}\big) > \frac{\big(\overline{p}_{in} - \underline{p}_{in}\big) \cdot \underline{x}}{2 \cdot (1-\phi) \cdot p_{ex}(\theta_E)}$$

The right-hand side hits its upper bound at $\theta_E = 0$, and therefore the inequality holds for all θ_E if:

$$\big(\overline{p}_{ex} - \underline{p}_{ex}\big) - \big(\overline{p}_{in} - \underline{p}_{in}\big) > \frac{\big(\overline{p}_{in} - \underline{p}_{in}\big) \cdot \underline{x}}{2 \cdot (1-\phi) \cdot \underline{p}_{ex}}.$$

Equation A.3 states this is true.

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

$$\underbrace{\frac{\phi}{1-\underline{x}} \cdot \Big[-\big[p_{in}(\theta_E^\dagger) - p_{ex}(\theta_E^\dagger)\big] \cdot (1-\phi) + \underline{x}\Big]}_{\text{Conflict}} = \underbrace{(1-\phi) \cdot \big[p_{in}(\theta_E^\dagger) - p_{ex}(\theta_E^\dagger)\big]}_{\text{Rent-seeking}} \tag{A.7}$$

This solves explicitly to:

$$\theta_E^\dagger = \frac{1}{\overline{p}_{ex} - \underline{p}_{ex} - \big(\overline{p}_{in} - \underline{p}_{in}\big)} \cdot \Big[\underline{p}_{in} - \underline{p}_{ex} - \frac{\phi \cdot \underline{x}}{(1-\phi) \cdot (1+\phi-\underline{x})}\Big] > 0, \tag{A.8}$$

and strict positivity follows from Equation A.3 (NB: this is equivalent to the original strong coup-proofing and non-entrenched elite conditions holding). Substituting this term into the left-hand side of Equation A.7 shows that at $\theta_E = \theta_E^\dagger$, the rent-seeking effect equals:

$$(1-\phi) \cdot \big[p_{in}(\theta_E^\dagger) - p_{ex}(\theta_E^\dagger)\big] = \frac{\phi \cdot \underline{x}}{1+\phi-\underline{x}} \tag{A.9}$$

Part c. It suffices to show that $\Pr\big(\text{rebel} \mid \text{exclusion}, \theta_E, \theta_M\big) \cdot p_{ex}(\theta_E) - \Pr\big(\text{coup} \mid \text{inclusion}, \theta_E, 0\big) \cdot p_{in}(\theta_E)$ is positive at $\theta_E = \theta_E^\dagger$. Rearranging and multiplying out positive terms shows that this has the same sign as:

$$\frac{\phi}{1-\underline{x}}\cdot\left[-\left[p_{in}(\theta_E^\dagger)-p_{ex}(\theta_E^\dagger)\right]\cdot(1-\phi)+\underline{x}\right]-\frac{\phi}{1-\underline{x}}\cdot\left[p_{in}(\theta_E^\dagger)\cdot(1-\phi)-\underline{x}\right]\cdot\frac{p_{in}(\theta_E^\dagger)-p_{ex}(\theta_E^\dagger)}{p_{ex}(\theta_E^\dagger)} \tag{A.10}$$

The first term is simply the conflict effect, which by Equation A.7 equals the rent-seeking effect at $\theta_E = \theta_E^\dagger$ which in turn equals the term from Equation A.9. Therefore, we can rewrite Equation A.10 to show that the necessary inequality is:

$$\frac{\phi\cdot\underline{x}}{1+\phi-\underline{x}} > R \equiv \frac{\phi}{1-\underline{x}}\cdot\left[p_{in}(\theta_E^\dagger)\cdot(1-\phi)-\underline{x}\right]\cdot\frac{p_{in}(\theta_E^\dagger)-p_{ex}(\theta_E^\dagger)}{p_{ex}(\theta_E^\dagger)} > 0, \tag{A.11}$$

and the strict positivity of the right-hand side follows from Assumption A.1. ■

A.3 Proof of Proposition 3

Assumption A.1 guarantees interior solutions if $\theta_M = 0$. However, even with this assumption, the spoils transfer under either inclusion or exclusion can hit a corner solution for high enough θ_M because of how M changes E's bargaining leverage, which Lemma A.1 formalizes.

Lemma A.1 (Elite's willingness to accept)**.**

Part a. *Suppose E is included.*

- *If $\kappa < \underline{\kappa} \equiv \frac{(1-\overline{q}_{in})\cdot\underline{x}}{(1-\phi)\cdot p_{in}}$, then $\frac{dx_{in}^*}{d\theta_M} < 0$ and there exists a unique $\underline{\theta}_M^{in} \in (0,1)$ such that $x_{in}^* \in (0, 1-\underline{x})$ if $\theta_M < \underline{\theta}_M^{in}$ and otherwise $x_{in}^* < 0$.*
- *If $\kappa \in \left(\underline{\kappa}, 1-\overline{q}_{in}\right)$, then $\frac{dx_{in}^*}{d\theta_M} < 0$ and $x_{in}^* \in (0, 1-\underline{x})$ for all $\theta_M \in [0,1]$.*
- *If $\kappa \in \left(1-\overline{q}_{in}, \overline{\kappa}\right)$, for $\overline{\kappa} \equiv \frac{1-\overline{q}_{in}}{(1-\phi)\cdot p_{in}}$, then $\frac{dx_{in}^*}{d\theta_M} > 0$ and $x_{in}^* \in (0, 1-\underline{x})$ for all $\theta_M \in [0,1]$.*
- *If $\kappa > \overline{\kappa}$, then $\frac{dx_{in}^*}{d\theta_M} > 0$ and there exists a unique $\overline{\theta}_M^{in} \in (0,1)$ such that $x_{in}^* \in (0, 1-\underline{x})$ if $\theta_M < \overline{\theta}_M^{in}$, and otherwise $x_{in}^* > 1-\underline{x}$.*

Part b. *Suppose E is excluded.*

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

Proof of Lemma A.1, part a. First show that x^*_{in} is strictly monotonic in θ_M: strictly increasing if $\kappa > 1-\overline{q}_{in}$ and strictly decreasing otherwise. The derivative shows this clearly:

$$\frac{d}{d\theta_M}\left[p_{in}\cdot\frac{1-\theta_M\cdot(1-\kappa)}{1-\overline{q}_{in}\cdot\theta_M}\cdot(1-\phi)-\underline{x}\right] = \frac{p_{in}\cdot(1-\phi)}{(1-\overline{q}_{in}\cdot\theta_M)^2}\cdot\Big[\big[1-\theta_M\cdot(1-\kappa)\big]\cdot\overline{q}_{in}-(1-\overline{q}_{in}\cdot\theta_M)\cdot(1-\kappa)\Big]$$

$$= \frac{p_{in}\cdot(1-\phi)}{(1-\overline{q}_{in}\cdot\theta_M)^2}\cdot\big[\kappa-(1-\overline{q}_{in})\big].$$

Now prove the ordering $\underline{\kappa} < 1-\overline{q}_{in} < \overline{\kappa}$:

$$\frac{\underline{x}\cdot(1-\overline{q}_{in})}{(1-\phi)\cdot p_{in}} < 1-\overline{q}_{in} < \frac{1-\overline{q}_{in}}{(1-\phi)\cdot p_{in}} \implies$$

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

which follows from Assumption A.1 and from assuming $\phi\in(0,1)$ and $p_{in}\in[0,1]$.

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 $x^*_{in}(\theta_M=1) = p_{in}\cdot\frac{\kappa}{1-\overline{q}_{in}}\cdot(1-\phi)-\underline{x}$, we have that $x^*_{in}(\theta_M=1)<0$ if and only if $\kappa < \frac{(1-\overline{q}_{in})\cdot\underline{x}}{(1-\phi)\cdot p_{in}}$, which is how we defined $\underline{\kappa}$. Additionally, $x^*_{in}(\theta_M=1) > 1-\underline{x}$ if and only if $\kappa > \frac{1-\overline{q}_{in}}{(1-\phi)\cdot p_{in}}$, which is how we defined $\overline{\kappa}$. The implicit characterization of the two θ_M thresholds are:

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

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

which yields the respective explicit characterizations:

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

$$\overline{\theta}^{in}_M = \frac{1-(1-\phi)\cdot p_{in}}{\overline{q}_{in}-p_{in}\cdot(1-\kappa)\cdot(1-\phi)}$$

Proof of part b. If $\kappa=0$, then $x^*_{ex}=p_{ex}\cdot(1-\phi)$, which is not a function of κ and, by Assumption A.1, is contained between 0 and $1-\underline{x}$. If $\kappa>0$, show that x^*_{ex} strictly increases in θ_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, $\lim_{\theta_M \to 1} x^*_{ex} = \infty$. The implicit characterization of the θ_M threshold is:

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

which solves explicitly to:

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

■

This is not the only possible source of corner solutions. For large enough θ_M, D may prefer to face a fight rather than to buy off E, even if there exists an interior offer that E would accept. Given that the present setup contains core tenets of bargaining models of war—D makes the bargaining offers and fighting is costly, and therefore D pockets the bargaining surplus saved by avoiding fighting—this may appear puzzling. The parameter κ creates the wedge: D has to compensate E for κ if it bargains, but if it fights then κ does not affect D's expected utility.

Lemma A.2 (Dictator's willingness to make peace-inducing offer)**.**

Part a. *Suppose E is included.*

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

Part b. *Suppose E is excluded.*

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

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

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

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

Algebraic rearranging shows that the first expression is greater than the second expression iff:

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

Because the right-hand side strictly of this inequality decreases in θ_M, it hits its lower bound at $\theta_M = 1$. Substituting this in establishes that $\mathbb{E}\big[U_D(\text{offer } x^*_{in} \big| E \text{ accepts } x_{in} \geq x^*_{in})\big] > \mathbb{E}\big[U_D(\text{offer } 0)\big] \iff \kappa < \overline{\kappa}$. If instead $\kappa > \overline{\kappa}$, then we can show that $\mathbb{E}\big[U_D(\text{offer } x^*_{in} \big| E \text{ accepts } x_{in} \geq x^*_{in})\big] > \mathbb{E}\big[U_D(\text{offer } 0)\big]$ iff:

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

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

Proof of part b.

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

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

Algebraic rearranging shows that the first expression is greater than the second expression iff:

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

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

Lemma A.3 compares the thresholds from the previous two lemmas (the proof involves straightforward algebra). If $\kappa > \overline{\kappa}$, which is necessary for $\hat{\theta}^{in}_M < 1$, then $\hat{\theta}^{in}_M < \overline{\theta}^{in}_M$. As the previous expressions show, both $\hat{\theta}^{in}_M$ and $\overline{\theta}^{in}_M$ decrease in κ. The extent to which inclusion lowers E's bargaining leverage, $1 - \overline{q}_i$, determines the magnitude of the negative effect of κ on $\hat{\theta}^{in}_M$. When κ is large relative to $1 - \overline{q}_i$, D is better off facing a coup attempt for sure rather than compensating E for the high value of κ. By contrast, the difference between $\hat{\theta}^{ex}_M$ and $\overline{\theta}^{ex}_M$ is not a function of κ because there is no countervailing $1 - \overline{q}_i$ effect under exclusion. If $\underline{x} < (1-\phi) \cdot (1 - p_{ex})$, then $\hat{\theta}^{ex}_M < \overline{\theta}^{ex}_M$. This is tighter than the upper bound on $\underline{x}$ stated in Assumption A.1, but assuming this upper bound is consistent with the motivation for that assumption: although $\underline{x}$ diminishes D's ability to buy off E under exclusion by decreasing the share of the budget that D can possibly offer, $\underline{x}$ is small enough that the magnitude of this effect is not large enough to generate corner solutions. I impose Assumption A.2, which effectively means that we can ignore $\hat{\theta}^{ex}_M$ in the remainder of the analysis; under exclusion, D will always buy off E if possible.

Lemma A.3 (Comparing thresholds for corner solutions)**.**

> ***Part a.*** *If $\kappa > \overline{\kappa}$, then the minimum value of θ_M at which D prefers to face a coup attempt rather than to buy off an included E is lower than the minimum value of θ_M at which $Pr(coup \mid inclusion) = 1$: $\hat{\theta}_M^{in} < \overline{\theta}_M^{in}$.*
>
> ***Part b.*** *If $\underline{x} < (1-\phi)\cdot(1-p_{ex})$, then the minimum value of θ_M at which D prefers to face a rebellion rather than to buy off an excluded E exceeds the minimum value of θ_M at which $Pr(rebel \mid exclusion) = 1$: $\hat{\theta}_M^{ex} < \overline{\theta}_M^{ex}$.*

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

Lemma A.4 shows that if $\kappa > \overline{\kappa}$ and $\theta_M > \hat{\theta}_M^{in}$, then D necessarily excludes E. The rationale is straightforward: coups succeed with higher probability than rebellions. If D's upper bound payoff under inclusion is to face a coup attempt by E with probability 1, in which case there are also no benefits to inclusion from lowering the probability of mass takeover, then this must be lower than the lower bound payoff to exclusion, which is to face a rebellion by E with probability 1.

Lemma A.4 (High elite affinity and exclusion)**.** *If $\kappa > \overline{\kappa}$ and $\theta_M > \hat{\theta}_M^{in}$, then $\mathcal{P}(\theta_E, \theta_M) <$* 0*.*

Proof. If $\kappa > \overline{\kappa}$ and $\theta_M > \hat{\theta}_M^{in}$, then part a of Lemma A.2 shows that D's upper bound expected utility to inclusion is $(1-p_{in})\cdot(1-\phi)\cdot(1-\theta_M)$. It suffices to show that this term is strictly less than $(1-\theta_M)\cdot\Big[Pr(\text{deal} \mid \text{exclusion})\cdot(1-x_{ex}^*) + Pr(\text{rebel} \mid \text{exclusion})\cdot(1-p_{ex})\cdot(1-\phi)\Big]$. Assumption A.2 and part b of Lemma A.3 imply 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 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 indicates whether x_{in}^* is interior or is set to 0, and the second index in the subscript indicates whether x_{ex}^* is interior or is set to 1. We do not need to write a constraint if $x_{in}^* > 1$ because then D will exclude, as Lemma A.4 establishes. I refer to the aggregate piecewise function generated by the various cases in Lemma A.5 as $\boldsymbol{\mathcal{P}}\big(\theta_E, \theta_M\big)$.

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

$$\mathcal{P}_{0,int}(\theta_E,\theta_M) = \big(1-\overline{q}_{in}\cdot\theta_M\big)\cdot(1-\underline{x})$$
$$-(1-\theta_M)\cdot\Big[Pr(\textit{deal}\mid\textit{exclusion})\cdot(1-x^*_{ex}) - Pr(\textit{rebel}\mid\textit{exclusion})\cdot(1-p_{ex})\cdot(1-\phi)\Big]$$

$$\mathcal{P}_{int,1}(\theta_E,\theta_M) = \big(1-\overline{q}_{in}\cdot\theta_M\big)\cdot Pr(\textit{deal}\mid\textit{inclusion})\cdot(1-\underline{x}-x^*_{in})$$
$$+(1-\theta_M)\cdot(1-\phi)\cdot\Big[Pr(\textit{coup}\mid\textit{inclusion})\cdot(1-p_{in})-(1-p_{ex})\Big]$$

$$\mathcal{P}_{0,1}(\theta_E,\theta_M) = \big(1-\overline{q}_{in}\cdot\theta_M\big)\cdot(1-\underline{x})-(1-\theta_M)\cdot(1-p_{ex})\cdot(1-\phi)$$

Given this notation, the preceding lemmas enable writing D's powersharing constraint for all parameter values. NB: $\boldsymbol{\mathcal{P}}\big(\theta_E,\theta_M\big)$ is continuous in θ_M because $\lim\limits_{\theta_M\rightarrow\underline{\theta}_M^{in}} x^*_{in}(\theta_M)=0$ and $\lim\limits_{\theta_M\rightarrow\underline{\theta}_M^{e}} x^*_{ex}(\theta_M)=1$.

Lemma A.5 (Optimal powersharing)**.**

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

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

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

- *If $\theta_M<\underline{\theta}_M^{in}$, then D shares power if and only if $\mathcal{P}(\theta_E,\theta_M)>0$.*
- *If $\theta_M\in\big(\underline{\theta}_M^{in},\overline{\theta}_M^{ex}\big)$, then D shares power if and only if $\mathcal{P}_{0,int}(\theta_E,\theta_M)>0$.*
- *If $\theta_M>\overline{\theta}_M^{ex}$, then D shares power if and only if $\mathcal{P}_{0,1}(\theta_E,\theta_M)>0$.*

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

- *If $\theta_M<\overline{\theta}_M^{ex}$, then D shares power if and only if $\mathcal{P}(\theta_E,\theta_M)>0$.*
- *If $\theta_M\in\big(\overline{\theta}_M^{ex},\underline{\theta}_M^{in}\big)$, then D shares power if and only if $\mathcal{P}_{int,1}(\theta_E,\theta_M)>0$.*
- *If $\theta_M>\underline{\theta}_M^{in}$, then D shares power if and only if $\mathcal{P}_{0,1}(\theta_E,\theta_M)>0$.*

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

- *If $\theta_M<\overline{\theta}_M^{ex}$, then D shares power if and only if $\mathcal{P}(\theta_E,\theta_M)>0$.*
- *If $\theta_M>\overline{\theta}_M^{ex}$, then D shares power if and only if $\mathcal{P}_{int,1}(\theta_E,\theta_M)>0$.*

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

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

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

- *If* $\theta_M < \overline{\theta}_M^{ex}$, *then* D *shares power if and only if* $\mathcal{P}(\theta_E, \theta_M) > 0$.
- *If* $\theta_M \in \left(\overline{\theta}_M^{ex}, \hat{\theta}_M^{in}\right)$, *then* D *shares power if and only if* $\mathcal{P}_{int,1}(\theta_E, \theta_M) > 0$.
- *If* $\theta_M > \hat{\theta}_M^{in}$, *then* D *excludes.*

The proof strategy for the unique threshold claims in Proposition 3 is to show that $\boldsymbol{\mathcal{P}}\big(\theta_E, \theta_M\big)$ is strictly monotonic in θ_M. Lemma A.6 proves the trickiest part—establishing that D's tolerance for facing coup attempts is strictly monotonic in θ_M—before presenting the full proof.

Lemma A.6 (Effect of mass threat on dictator's coup tolerance)**.**

Part a. *If* $\kappa < \overline{\kappa}$, *then* $\frac{d}{d\theta_M} Pr(\textit{coup} \mid \theta_E, \theta_M)^{\max} > 0$ *and* $Pr(\textit{coup} \mid \theta_E, 1)^{\max} = 1$.

Part b. *If* $\kappa > \overline{\kappa}$ *and* $\theta_M \in \left(\overline{\theta}_M^{ex}, \hat{\theta}_M^{in}\right)$, *then* $\frac{d}{d\theta_M} Pr(\textit{coup} \mid \theta_E, \theta_M)^{\max} < 0$.

Proof of part a. Differentiating the implicit definition of $Pr(\text{coup} \mid \theta_E, \theta_M)^{\max}$ in Equation 8 with respect to θ_M yields:

$$\frac{d}{d\theta_M} Pr(\text{coup} \mid \theta_E, \theta_M)^{\max} = \frac{\frac{\partial}{\partial \theta_M}}{-\frac{\partial}{\partial Pr(\text{coup} \mid \theta_E, \theta_M)^{\max}}},$$

for:

$$-\frac{\partial}{\partial Pr(\text{coup} \mid \theta_E, \theta_M)^{\max}} = (1 - \overline{q}_{in} \cdot \theta_M) \cdot (1 - \underline{x} - x_{in}^*) - (1 - \theta_M) \cdot (1 - p_{in}) \cdot (1 - \phi) \quad \text{(A.12)}$$

and

$$\frac{\partial}{\partial \theta_M} = \underbrace{-\Big[1 - Pr(\text{coup} \mid \theta_E, \theta_M)^{\max}\Big] \cdot (1 - \overline{q}_{in} \cdot \theta_M) \cdot \frac{dx_{in}^*}{d\theta_M}}_{1}$$

$$+ \underbrace{Pr(\text{deal} \mid \text{exclusion}) \cdot (1 - x_{ex}^*) + Pr(\text{rebel} \mid \text{exclusion}) \cdot (1 - p_{ex}) \cdot (1 - \phi)}_{\text{First part of } 2}$$

$$\underbrace{-\Big[\Big[1 - Pr(\text{coup} \mid \theta_E, \theta_M)^{\max}\Big] \cdot (1 - \underline{x} - x_{in}^*) \cdot \overline{q}_{in} + Pr(\text{coup} \mid \theta_E, \theta_M)^{\max} \cdot (1 - p_{in}) \cdot (1 - \phi)\Big]}_{\text{Second part of } 2}$$

$$\underbrace{+(1-\theta_M)\cdot\left\{Pr(\text{deal}\mid\text{exclusion})\cdot\frac{dx^*_{ex}}{d\theta_M}+\frac{dPr(\text{rebel}\mid\text{exclusion})}{d\theta_M}\cdot\Big[1-x^*_{ex}-(1-p_{ex})\cdot(1-\phi)\Big]\right\}}_{3} \tag{A.13}$$

First, show $-\frac{\partial}{\partial Pr(\text{coup}\mid\theta_E,\theta_M)^{\max}}>0$. Because we are currently assuming $\kappa<\overline{\kappa}$, this follows directly from part a of Lemma A.2.

Second, show $\frac{\partial}{\partial\theta_M}>0$. Term 3 in Equation A.13 is weakly positive because if $x^*_{ex}=1$, then it equals 0; and if $x^*_{ex}<1$, then it equals $\phi+\frac{\theta_M}{1-\theta_M}\cdot\kappa\cdot(1-\phi)\cdot p_{ex}>0$. Therefore, it suffices to show that $\kappa<\overline{\kappa}$ implies that the following term is strictly positive:

$$\underbrace{-\big[1-Pr(\text{coup}\mid\theta_E,\theta_M)^{\max}\big]\cdot(1-\overline{q}_{in}\cdot\theta_M)\cdot\frac{dx^*_{in}}{d\theta_M}}_{1}$$

$$+\underbrace{Pr(\text{deal}\mid\text{exclusion})\cdot(1-x^*_{ex})+Pr(\text{rebel}\mid\text{exclusion})\cdot(1-p_{ex})\cdot(1-\phi)}_{\text{First part of } 2}$$

$$\underbrace{-\Big[\big[1-Pr(\text{coup}\mid\theta_E,\theta_M)^{\max}\big]\cdot(1-\underline{x}-x^*_{in})\cdot\overline{q}_{in}+Pr(\text{coup}\mid\theta_E,\theta_M)^{\max}\cdot(1-p_{in})\cdot(1-\phi)\Big]}_{\text{Second part of } 2} \tag{A.14}$$

There are four possible cases. Before solving each case, it is useful rearrange Equation 8 to explicitly solve for $Pr(\text{coup}\mid\theta_E,\theta_M)^{\max}$ (for parameter values in which it attains an interior solution):

$$Pr(\text{coup}\mid\theta_E,\theta_M)^{\max}=$$
$$\frac{(1-\overline{q}_{in}\cdot\theta_M)\cdot(1-\underline{x}-x^*_{in})-(1-\theta_M)\cdot\Big[Pr(\text{deal}\mid\text{exclusion})\cdot(1-x^*_{ex})+Pr(\text{rebel}\mid\text{exclusion})\cdot(1-p_{ex})\cdot(1-\phi)\Big]}{(1-\overline{q}_{in}\cdot\theta_M)\cdot(1-\underline{x}-x^*_{in})-(1-\theta_M)\cdot(1-p_{in})\cdot(1-\phi)} \tag{A.15}$$

NB: the denominator of Equation A.15 is strictly positive; it is the same term as in Equation A.12.

Case 1. Suppose $Pr(\text{coup}\mid\text{inclusion})\in(0,1)$ and $Pr(\text{rebel}\mid\text{exclusion})\in(0,1)$. We can substitute the interior solutions defined in Equations 2, 5, and 6 into Equation A.15; and then substitute that term as well as the interior solutions into Equation A.14. Algebraic rearranging shows that the strict positivity of this term is equivalent to $\kappa<\overline{\kappa}$.

Case 2. Suppose $Pr(\text{coup}\mid\text{inclusion})\in(0,1)$ and $Pr(\text{rebel}\mid\text{exclusion})=1$. We can substitute x^*_{in} defined in Equation 2 as well as $Pr(\text{rebel}\mid\text{exclusion})=$

1 into Equation A.15; and then substitute that term as well as x^*_{in} and $Pr(\text{rebel} \mid \text{exclusion}) = 1$ into Equation A.14. Algebraic rearranging shows that the strict positivity of this term is equivalent to $\kappa < \overline{\kappa}$.

Case 3. Suppose $Pr(\text{coup} \mid \text{inclusion}) = 0$ and $Pr(\text{rebel} \mid \text{exclusion}) = 1$. Because $x^*_{in} = 0$, term 1 in Equations A.13 and A.14 equals 0, so we need to show that term 2 is positive. This is true if and only if the following inequality holds:

$$Pr(\text{coup} \mid \theta_E, \theta_M)^{\max} \cdot \Big[(1-p_{in})\cdot(1-\phi)-(1-\underline{x})\cdot\overline{q}_{in}\Big] < (1-p_{ex})\cdot(1-\phi)-(1-\underline{x})\cdot\overline{q}_{in}$$

Because the left-hand side strictly increases in $Pr(\text{coup} \mid \theta_E, \theta_M)^{\max}$ and $Pr(\text{coup} \mid \theta_E, \theta_M)^{\max}$ hits its upper bound at 1, it suffices to show:

$$(1-p_{in})\cdot(1-\phi)-(1-\underline{x})\cdot\overline{q}_{in} < (1-p_{ex})\cdot(1-\phi)-(1-\underline{x})\cdot\overline{q}_{in},$$

which follows from assuming $p_{ex} < p_{in}$.

Case 4. Suppose $Pr(\text{coup} \mid \text{inclusion}) = 0$ and $Pr(\text{rebel} \mid \text{exclusion}) \in (0,1)$. As in the previous case, term 1 in Equations A.13 and A.14 equals 0, so we need to show that term 2 is positive. This is true if the following inequality holds:

$$Pr(\text{coup} \mid \theta_E, \theta_M)^{\max} \cdot \Big[(1-p_{in})\cdot(1-\phi)-(1-\underline{x})\cdot\overline{q}_{in}\Big] <$$

$$Pr(\text{deal} \mid \text{exclusion})\cdot(1-x^*_{ex})+Pr(\text{rebel} \mid \text{exclusion})\cdot(1-p_{ex})\cdot(1-\phi)-(1-\underline{x})\cdot\overline{q}_{in}.$$

Because $Pr(\text{rebel} \mid \text{exclusion}) \in (0,1)$, it suffices to show that $1 - x^*_{ex} > (1 - p_{ex}) \cdot (1-\phi)$. Assumption A.2 and Lemma A.3 imply that this is true.

Non-case. From Lemma A.1, we know that $\kappa < \overline{\kappa}$ implies $Pr(\text{coup} \mid \text{inclusion}) < 1$, and therefore we do not have to consider this case.

Finally, $x^*_{in} < 1 - \underline{x}$ implies $Pr(\text{coup} \mid \theta_E, 1)^{\max} = 1$, as can be seen easily from Equation A.15.

Proof of part b. Given the following two facts, the same proof as in Case 2 for part a establishes that if $\kappa > \overline{\kappa}$, then $\frac{d}{d\theta_M} Pr(\text{coup} \mid \theta_E, \theta_M)^{\max} < 0$:

1. If $\theta_M < \hat{\theta}^{in}_M$, then part a of Lemma A.2 establishes that $-\frac{\partial}{\partial Pr(\text{coup} \mid \theta_E, \theta_M)^{\max}} > 0$. NB: This also held in the proof for part a of the present lemma.
2. If $\theta_M > \overline{\theta}^{ex}_M$, then term 3 in Equation A.13 equals 0. ■

The strict monotonicity results in part a of Lemma A.6 apply if $Pr(\text{coup} \mid \theta_E, \theta_M)^{\max} > 0$. Although this is always true at $\theta_M = 1$ if $\kappa < \overline{\kappa}$, as the lemma states, at lower values of θ_M the interior characterization of $Pr(\text{coup} \mid \theta_E, \theta_M)^{\max}$ in Equation A.15 can be negative. For example, see Figure 1; for some parameter values, $Pr(\text{coup} \mid \theta_E, \theta_M)^{\max} > 0$, and for others we set $Pr(\text{coup} \mid \theta_E, \theta_M)^{\max} = 0$. Part a of Lemma A.6 implies the existence of a unique threshold $\theta_M^{\max} < 1$ such that we set $Pr(\text{coup} \mid \theta_E, \theta_M)^{\max} = 0$ if $\theta_M > \theta_M^{\max}$, but $Pr(\text{coup} \mid \theta_E, \theta_M)^{\max} > 0$ otherwise. This threshold is implicitly defined as:

$$Pr(\text{coup} \mid \theta_E, \theta_M^{\max})^{\max} = 0 \tag{A.16}$$

Proof of Proposition 3, part a. Applying the intermediate value theorem establishes that at least one $\theta_M^\dagger < 1$ exists that satisfies $\boldsymbol{\mathcal{P}}\big(\theta_E, \theta_M^\dagger\big) = 0$:

- *Lower bound*: If the elite exclusion condition holds, then $\boldsymbol{\mathcal{P}}(\theta_E, 0) < 0$, which implies $\theta_M^\dagger > 0$.
- *Upper bound*: $\boldsymbol{\mathcal{P}}(\theta_E, 1) = Pr(\text{coup} \mid \theta_E, \theta_M)^{\max} - Pr(\text{coup} \mid \text{inclusion}, \theta_E, 1) > 0$ follows
  from:
  - Lemma A.6 states that if $\kappa < \overline{\kappa}$, then $Pr(\text{coup} \mid \theta_E, 1)^{\max} = 1$.
  - Lemma A.1 states that if $\kappa < \overline{\kappa}$, then $Pr(\text{coup} \mid \text{inclusion}, \theta_E, \theta_M) < 1$ for all $\theta_M \in [0, 1]$.
- Lemma A.5 establishes continuity.

Uniqueness follows from the previous lemmas that establish strict monotonicity. Specifically, for $\theta_M^{\max}$ defined in Equation A.16, if $\theta_M^{\max} < 0$, then $\boldsymbol{\mathcal{P}}\big(\theta_E, \theta_M^\dagger\big)$ strictly increases in θ_M for all $\theta_M \in [0, 1]$. If $\theta_M^{\max} > 0$, then $\boldsymbol{\mathcal{P}}\big(\theta_E, \theta_M^\dagger\big)$ strictly increases in θ_M for all $\theta_M \in \big[\theta_M^{\max}, 1\big]$, and $\theta_M^\dagger$ lies within this range.

The coup results as well as Corollary 1 follow directly from Lemma A.1.

Proof of part b. Lemma A.4 states that $\boldsymbol{\mathcal{P}}(\theta_E, 0) < 0$ for all $\theta_M > \hat{\theta}_M^{in}$, so in general we can set $\theta_M^{\dagger\dagger} \leq \hat{\theta}_M^{in}$. If $\overline{\theta}_M^{ex} < \hat{\theta}_M^{in}$, then we can tighten this bound. The strict monotonicity result from part b of Lemma A.6 implies the existence of a unique $\theta_M^{\dagger\dagger}$, implicitly defined below, such that $\boldsymbol{\mathcal{P}}(\theta_E, 0) < 0$ for all $\theta_M < \theta_M^{\dagger\dagger}$:

$$\begin{aligned} &Pr(\text{deal} \mid \text{inclusion}, \theta_E, \theta_M^{\dagger\dagger}) \cdot \big[1 - \underline{x} - x_{in}^*(\theta_E, \theta_M^{\dagger\dagger})\big] \cdot (1 - \overline{q}_{in} \cdot \theta_M^{\dagger\dagger}) \\ &+ Pr(\text{coup} \mid \text{inclusion}, \theta_E, \theta_M^{\dagger\dagger}) \cdot \big[1 - p_{in}(\theta_E)\big] \cdot (1 - \phi) \cdot (1 - \theta_M^{\dagger\dagger}) \\ &= \big[1 - p_{ex}(\theta_E)\big] \cdot (1 - \phi) \cdot (1 - \theta_M^{\dagger\dagger}) \end{aligned} \tag{A.17}$$

■

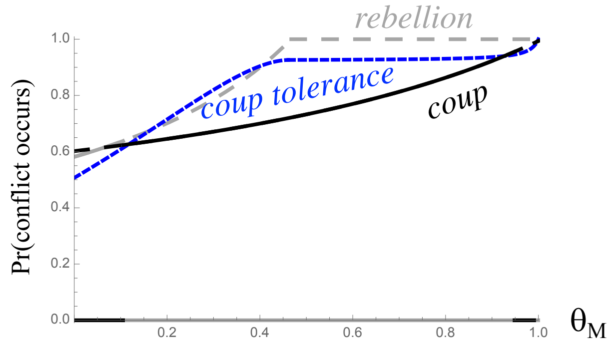
Although Proposition 3 demonstrates how κ alters equilibrium prospects for powersharing and coup attempts, it does not characterize these outcomes for all possible values of κ and θ_M. The proof for the proposition relies primarily on the monotonicity results for $\boldsymbol{\mathcal{P}}(\theta_E, \theta_M)$ established in the preceding lemmas. These proofs rely on the facts that x^*_{in} weakly decreases in θ_M if $\kappa < 1-\overline{q}_{in}$, and the increasing relationship between θ_M and x^*_{in} is arbitrarily small in magnitude if $\kappa > 1-\overline{q}_{in}$ but is contained within a neighborhood of this threshold. However, for larger κ, it is not possible the sign the difference between how θ_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.2 depicts several specific parameter values that highlight other theoretically possible relationships between θ_M and equilibrium powersharing for values of κ and θ_M not covered in Proposition 3. In Panel A, $\kappa \in \left(1-\overline{q}_{in}, \overline{\kappa}\right)$ but is very close to $\overline{\kappa}$. This implies that x^*_{in} never hits 1 but it gets close. As in Panel A of Figure 3, the elite exclusion condition 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 κ in Proposition 3 does not hold: θ_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.

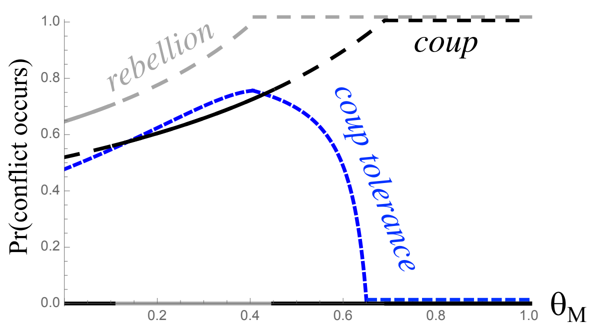
Proposition 3 ensures that if $\kappa > \overline{\kappa}$, then D will exclude for high enough θ_M. However, there are several possibilities for smaller θ_M. Panel D of Figure 3 highlights one, and Panels B and C of Figure A.2 highlight two others. The elite exclusion condition holds in the latter two. In Panel B, D switches from exclusion to powersharing at $\theta_M = 0.11$ before switching back to exclusion at $\theta_M = \hat{\theta}^{in}_M = 0.44$. In Panel C, $Pr(\text{coup} \mid \theta_E, \theta_M)^{\max}$ begins decreasing in θ_M before this function intersects $Pr(\text{coup} \mid \text{inclusion})$, and therefore D does not share power for any $\theta_M \in [0, 1]$. Yet, for all three cases in Figure A.2, the complexity of the $Pr(\text{coup} \mid \theta_E, \theta_M)^{\max}$ function disables offering statements for general parameter ranges beyond those covered in Proposition 3.

Figure A.2: Effects of Mass Threat: Additional Cases

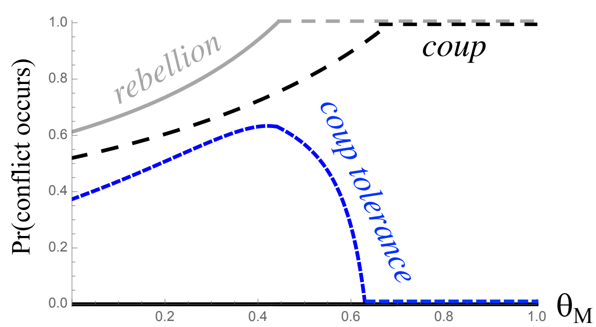
A. Affinity almost in high range



B. High affinity and elite exclusion: Non-monotonic powersharing



C. High affinity and exclusion: Always exclude



Notes: In Panel A, $\phi = 0.4$, $\underline{p}_{ex} = 0$, $\overline{p}_{ex} = 0.95$, $\underline{p}_{in} = 0.95$, $\overline{p}_{in} = 1$, $\theta_E = 1$, $\overline{q}_{in} = 0.5$, $\underline{x} = 0.02$, and $\kappa = 0.82$. In Panel B, $\phi = 0.4$, $\underline{p}_{ex} = 0$, $\overline{p}_{ex} = 0.95$, $\underline{p}_{in} = 0.95$, $\overline{p}_{in} = 1$, $\theta_E = 0.93$, $\overline{q}_{in} = 0.7$, $\underline{x} = 0.18$, and $\kappa = 0.8$. Panel C is identical to Panel B except $\overline{p}_{ex} = 0.9$.

A.4 Proof of Proposition 4

Proof of Prop. 4. The minimum value of $\rho^*(\theta_M = 0, \overline{q}_{in})$ is $\min\Big\{Pr(\text{rebel} \mid \text{exclusion}, \theta_E, 0) \cdot p_{ex},$ $Pr(\text{coup} \mid \text{inclusion}, \theta_E, 0) \cdot p_{in}\Big\}$, which Assumption A.1 guarantees is strictly positive if $\theta_E > 0$. We are assuming $\kappa < \underline{\kappa}$ and, therefore, $\underline{\theta}_M^{in} < 1$. Solving for $\rho^*\left(\underline{\theta}_M^{in}, \overline{q}_{in}\right) = \frac{\underline{x} - (1-\phi)\cdot p_{in}}{\overline{q}_{in}\cdot \underline{x} - (1-\phi)\cdot p_{in}\cdot(1-\kappa)} \cdot \overline{q}_{in}$, it is clear that $\rho^*\left(\underline{\theta}_M^{in}, 0\right) = 0 < \rho^*(0,0)$. The following generates the unique threshold claim:

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

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

B SUPPLEMENTARY EMPIRICAL INFORMATION

The last section of the article discusses mass threats and regime survival. Either high κ, as discussed with cases in the article, or high $\overline{q}_{in}$ imply that stronger mass threats increase the probability of regime overthrow. Russia in 1917 exemplifies a case with low state capacity (high $\overline{q}_{in}$). "The Provisional Government 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, 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). This provided the backdrop for Bolshevik (M) takeover later that year and the bloody civil war that followed.

By contrast, low κ and low $\overline{q}_{in}$ generate the opposite implication that a strong mass threat should enhance regime survival. The article discussed Malaysia, but this case is not unique. Existing research on coalitions in authoritarian regimes analyzes many others, including Singapore, South Africa, South Korea, and Taiwan (Waldner 1999; Bellin 2000; Lieberman 2003; Doner, Ritchie and Slater 2005; Slater 2010). The three East and Southeast Asian cases resemble Malaysia: World War II provided a common shock because of the interruption to colonial governance. Nor did the threats end after World War II. 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 a more general external actor. In all cases, κ was low because elites (e.g., top generals, business leaders) feared a bad fate if the masses or external actor took over, and elites faced strong incentives to invest in military power to mitigate the security threats (Doner, Ritchie and Slater 2005), resulting in lower $\overline{q}_{in}$. 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. Separately, Bellin (2000) studies 20th century democratization. She argues that 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).

Whites in South Africa faced a stark mass threat that stemmed from racial differences with the African majority ($\sim$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 κ). 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 contrary 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 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 low $\overline{q}_{in}$. Thus, although this a borderline case of *power*sharing per se between Afrikaners and English, it is clear that the white community banded together to keep Africans out of power and succeeded in delaying majority rule for roughly three decades after most of the rest of Africa.

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