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Howell, William and Shepsle, Kenneth and Wolton, Stephane

University of Chicago, Harvard University, London School of Economics and Political Science

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William G. Howell Kenneth A. Shepsle Stephane Wolton*

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Abstract

Separated powers cannot permanently constrain individual ambitions. Concerns about a government's ability to respond to contemporary and future crises, we show, invariably compromise the principled commitments one branch of government has in limiting the authority of another. We study a dynamic model in which a politician (most commonly an executive) makes authority claims that are subject to a hard constraint (administered, typically, by a court). At any period, the court is free to rule against the executive and thereby permanently halt her efforts to acquire more power. Because it appropriately cares about the executive's ability to address real-world disruptions, however, the court is always willing to affirm more authority. Neither robust electoral competition nor alternative characterizations of judicial rule fundamentally alters this state of affairs. The result, we show, is a persistent accumulation of executive authority.

*University of Chicago, whowell@uchicago.edu

Harvard University, kshepsle@iq.harvard.edu

London School of Economics and Political Science, s.wolton@lse.ac.uk

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This paper confronts the institutional optimism of *The Federalist Papers*. Broadly speaking, the separation of powers does not meet the stated aspirations of either the Founders or the lore that surrounds their project. In the model developed here, when the ambition of an executive is pitted against the ambition of a court, the result is not a standoff between two coequal adversaries. Rather, it is a political mismatch in which the executive inevitably prevails.

Politicians generally, and executive officeholders in particular, regularly assert authority that neither a constitution nor prior statute expressly recognizes. Rather than wait on Congress, Donald Trump has simply averred that he justifiably retains authority over immigration policy, trade, (de-)regulation, international diplomacy, and plenty more policy domains (Milkis and Jacobs 2017). And in this regard, at least, he is hardly exceptional. Trump's immediate predecessors rather brashly asserted new authority to grant conditional state waivers over federal statutes, fabricate new tools of executive policymaking, re-interpret the meanings of laws, and expand their reach into all manner of policy domains (Howell 2013).

In the aftermath of these interventions, the adjoining branches of government have the right to step in and offer a corrective—and occasionally they do, amending or overturning an executive's unilateral directive. Commonly, though, Congress and the courts assume a very different posture. Not only do they affirm a unilateral directive—whether by writing its contents into law, appropriating the necessary funds to implement it, or denying a complainant's claims (Howell 2003, chapters 5-6). The adjoining branches also affirm the general right of the executive officeholder to intervene into a policy domain, thereby remaking both a political office and the legal landscape in which it functions.

When adjudicating disputes over presidential actions involving executive agreements, war powers, recess appointments, pardons, executive privilege, travel bans, and a wide range of other issues, the courts not only have looked to past practice for guidance; they have inferred political authority on the basis of such practice (Bradley and Morrison 2012, 2013; Levinson 2005; Levinson and Pildes 2006). So doing, the judiciary manufactures new authority upon which future executive officeholders can act. Authority, in this sense, grows first by initiative and then by recognition. And what previously might have been viewed as "rule-breaking" (Shepsle 2017), now becomes standard practice.

To clarify the politics of authority acquisition, we study a dynamic model in which a politician claims authority subject to the hard constraint of an adjoining branch of government, which we henceforth recognize as a court. In each period, the politician has the opportunity to expand the scope of her authority over a unit interval, where zero indicates no authority over the matter in question, one indicates full authority, and interior values indicate intermediate levels of authority. Should the court affirm the claim, then the politician's authority expands up to the point of the claim, and all future courts are obligated to uphold claims within the affirmed domain. Should the court reject the claim, however, the politician's authority collapses to its previous maximum, and all future expansionary claims are rejected.

While the politician wishes to expand her authority over the full interval, the court, strictly as a matter of constitutional interpretation, would prefer that the politician have something less. What the court formally sanctions, however, is a function of both its constitutional preferences, which are constant across all periods, and exogenous shocks, which are realized each period of play, and which stylistically represent current circumstances (the state of the economy, international conflict, natural disasters). Depending upon the size of a contemporaneous shock, the court may tolerate smaller or larger claims of authority. Additionally, the court worries about a decision in one period disabling the politician from responding in the future to disruptive events or unforeseen contingencies. Consequently, both present values of these shocks and expectations about their future realizations cause the court to qualify its constitutional preferences over authority.

To expand her authority beyond the court's nominal constitutional preference, the politician exploits the court's concerns about present and future flexibility to respond to these random disturbances. Indeed, we show, even when realized shocks assume the lowest possible values (such that any new authority claim necessarily decreases the court's present payoff), the politician can still expand her authority outward. This authority then grows each period so that, eventually, the politician assumes plenary authority over the entire unit interval. These findings, which constitute the central contribution of our paper, hold even though the politician starts the game with virtually no authority whatsoever; are a feature of all equilibria; and are robust to various model extensions, which include alternative characterizations of court precedent and the introduction of political competition.

The model also reveals several features of the evolution of authority acquisition. In every period, if the politician is patient enough, there exists an equilibrium in which the politician expands her authority as far as the court will permit. And consistent with a literature on wartime jurisprudence (Howell and Ahmed 2014; Epstein et al 2005), larger exogenous shocks induce the court to affirm larger claims of authority. Interestingly, though, small acquisitions of authority in one period portend larger acquisitions in the next. In some instances, moreover, these dynamics enable one politician with significantly less authority to overtake another politician, yielding a demonstrable "reversal of fortunes."

Lastly, the model reveals a weakness within a separation of powers system in constraining executives. Precisely because a court rejection is damaging to an executive's present and future authority, courts are inclined not to stand in her way. The ability to administer a significant punishment—a big club behind the door, so to speak—actually discourages the court from opposing ever expanding authority.

We proceed as follows. The first section characterizes formal literatures that speak to the politics of authority acquisition. The second section introduces a baseline model, while the third characterizes both the features of all equilibria and the specific strategies within one that is particularly germane to contemporary politics. The final three sections consider the relevance of both a new judicial rule and electoral competition for authority acquisition, discuss our results, and conclude. Proofs for all the technical results are found in the Online Appendix.

1 Literature Review

Our paper speaks to a large body of work recognizing that political manipulation by an officeholder today affects what a successor can do tomorrow. A host of papers investigates the efforts of politicians to restrict the actions of their replacements, either by increasing debt (Persson and Svensson 1989; Alesina and Tabellini 1990; Milesi-Ferretti 1995a and b), over-privatizing (Montagnes and Bektemirov 2018), constraining the information available to them (Callander and Hummel 2014), strategically manipulating the status quo in "divide the dollar" settings (Kalandrakis 2004; Baron and Bowen 2016; Nunnari 2019), or legislative policy-making (Bowen et al. 2014; Dziuda and Loeper 2015; Buisseret and Bernhardt 2016). None of these models, however, expressly recognizes, much less parameterizes, a notion of political "authority." That a politician has a legal right to intervene into a policy space, instead, is either assumed or treated as irrelevant.

A substantial body of work, of course, does investigate the issue of delegation. In economics, scholars have mostly focused on how a principal can best advance her interest while delegating decisions to better informed agents (e.g., Athey, Atkeson, and Kehoe 2005; Alonso and Matouschek 2008; Amador and Blagwell 2013). A central concern in this work, much like ours, is the trade-off between flexibility (allowing the agent to respond to present circumstances) and bias (keeping the agent from adopting policies that deviate from the principal's preferences). In most of these models, the principal can set limits on what the agent can do (for one exception, where agents themselves commit to a certain limit, see Kartik, Van Weelden, and Wolton 2017). In our model, instead, we show how the executive can incrementally exploit a court's concerns for flexibility and ultimately secure full authority over a policy domain.

In political science, numerous scholars have studied the conditions under which one branch of government (typically Congress) will delegate authority to another (typically the executive). Its willingness to do so, this work shows, crucially depends upon the levels of ideological convergence, the complexity of the policy domain, and the independent costs of lawmaking (see, e.g., Epstein and O'Halloran 1999, Huber and Shipan 2002, Bendor and Meirowitz 2004). All of this work, however, puts a legislature firmly in the driver's seat. Whether a president or executive agency acquires new authority is left entirely to Congress's discretion. These models do not so much as recognize even the possibility that politicians within an executive branch might unilaterally claim new authority for themselves.

In this regard, our paper is in closer conversation with Svolik (2009), Howell and Wolton (2018), and a burgeoning literature on democratic backsliding. Like us, Svolik (2009) is interested in the growth of a leader's power. Unlike us, he focuses on authority acquisition in autocracy, not democracy. As such, his leader faces the threat of a coup by the regime selectorate, whereas our officeholder is constrained by the court. Further, Svolik imposes exogenously fixed incremental jumps in power, whereas we allow the officeholder to choose a continuous amount of new authority. The two works also differ in their treatment of what information is available to the leader and other political actors when they take an action.

Howell and Wolton (2018) examine the conditions under which a politician will either request new authority or claim it outright. In important respects, however, our paper differs from theirs. First, we consider how authority is built over time rather than instantly. Second, we take a more fine-grained approach to authority that allows the officeholder to claim more or less authority, rather than only a fixed amount. Finally, we consider a setting in which a strategic judiciary functions as a constraint, and in which a well-defined notion of "precedent" governs the judiciary's behavior—features, both, that are entirely missing from Howell and Wolton's model.

Recent scholarship has started paying close attention to a perceived decline in democratic norms. In some papers, democratic backsliding takes the form of a weakening of electoral institutions (Luo and Przeworski 2019; Helmke, Kroeger, and Paine 2019). In others, would-be autocrats exploit polarization (Graham and Svolik 2019; Nalepa, Vanberg, and Chiopris 2019), voters' behavioral biases (Grillo and Prato 2019), or the electorate's lack of democratic values (Besley and Persson, 2019) in order to remove checks on their power.[1] In all, the focus is on the electorate's limited ability to constrain executive ambitions. Our paper offers a complementary, and possibly more depressing, account–complementary because we focus on judicial constraints on the executive; and depressing, because we establish that executive absolutism may derive not from an electorate's failings, but from the very design of a system of separated powers.

The presence of a strategic and forward-looking judiciary also connects our work to the formal literature on court behavior. As in Gennaoili and Shleifer (2008), Fox and Stephenson (2011, 2014, 2015), Almendares and Le Bihan (2015), Gailmard and Patty (2017), among others, court decisions, anticipated or issued, impose constraints on other political actors. As in Baker and Mezzetti (2012), Fox and Vanberg (2012), Beim (2017), Clark and Kastellec (2013), and Clark (2016), the court makes decisions while uncertain of their long term consequences. With some important exceptions, including Fox and Vanberg (2015) and Beim, Clark, and Patty (2017), the literature assumes that cases exogenously arise before the courts. In contrast, we suppose that the cases brought before the court are the result of a strategic decision by a rational actor.[2] We further innovate on the literature by investigating the acquisition of authority by executives in the shadow of judicial constraint.

We set to one side the constraining weight of a legislature on executive authority, though others have made it a central concern (see, for example, Howell 2003; Chiou and Rothenberg 2017). Similarly, we do not explicitly account for the relevance of parties or public opinion, though they too are the subjects of considerable scholarship. Levinson and Pildes (2007), for instance, argue it is the fact of partisan division among the branches, more than the clout of the separate branches themselves, that constrains executive aggression; while Christenson and Kriner (2019) find that low public approval limits an executive's ability to exercise existing authority or acquire new authority unilaterally. Our intention, instead, is to hone in on the capacity of the courts, as a final line of defense, to limit executive authority when neither Congress, traditional parties, nor the public seem up to the job. Our findings offer little by way of reassurance.

[1]Some (slightly older) works provide a less gloomy picture. Lagunoff (2001) shows how tolerance can decrease over time as the state becomes more able to monitor deviant behavior. Vigorous electoral competition, however, provides a corrective and leads to a tolerant society. Wolitzky (2013), in turn, highlights how polarization can actually encourage an incumbent to invest in institutional constraints to avoid too large policy swings in the future. In our model, we show that political turnover in itself is no bulwark against executive absolutism.

[2]In the context of lower and upper court relationships, Carubba and Zorn (2010), Carubba and Clark (2012), Clark and Carubba (2012), Beim, Hirsch, and Kastellec (2014), and Hübert (2019) consider how a lower court may strategically issue a judgement to avoid being overturned by an upper court. These papers generally consider a one-shot game and cannot explain the evolution of jurisprudence over time.

2 The Baseline Model

Our baseline model consists of a dynamic game with two players: a politician P, which we interchangeably refer to as politician, executive, or officeholder; and a strategic court C. In each period, denoted by t, P asserts authority over a policy domain. To keep the model manageable, the authority claimed by P is assumed to be unidimensional, and is represented at time t by $a_t \in [0, 1]$. We assume that authority is finite in recognition of the limits (e.g., institutional capacity constraints, overarching principles) on what an officeholder can do. Authority facilitates (un-modeled) actions that advance the officeholder's (again un-modeled) agenda. As such, in our baseline model, more authority is always beneficial.

Authority is governed by precedent, by which we mean the prior rulings of the court C. At the outset of period t, the court's prior rulings have partitioned the authority space $[0, 1]$ into three subsets: a permissible set $\mathcal{R}_t$, which consists of the authority acquired by prior court rulings; an impermissible set $\mathcal{W}_t$, also determined by prior court rulings, which limits the office-holder's authority; and the remainder $[0, 1] \setminus (\mathcal{R}_t \cup \mathcal{W}_t)$, which represents authority that remains up for grabs and thus constitutes the court's discretion set.

After observing the officeholder's authority claim a_t, the court decides whether to uphold ($d_t = 0$) or overturn ($d_t = 1$) P's action. The court's decision affects both the outcome of period t and the dynamic of precedents. We discuss each in turn.

The court's decision affects the scope of P's authority, which we denote $y_t(d_t)$. We assume that if the court upholds the politician's action in period t, then P claims the full scope of authority, a_t. If the court overturns the politician's action, then (without loss of generality) we impose that P claims the maximum of previously permissible authority. Hence, the authority acquired in period t assumes the following form:

$$y_t(d_t) = \begin{cases} a_t & \text{if court upholds } (d_t = 0) \\ \max \mathcal{R}_t & \text{if court overturns } (d_t = 1) \end{cases}$$

The court's decision is constrained by past precedent on executive authority. Consistent with the broad contours of judicial history, we assume that what has been permitted in the past cannot be rescinded, and what has been forbidden in the past cannot be reconsidered. Thus, if in period t, P stays within the bounds of acquired authority, the court has no choice but to uphold: $d_t = 0$ if $a_t \in \mathcal{R}_t$. In turn, if the politician claims authority which has already been refused to her, the court must overturn the officeholder's action: $d_t = 1$ if $a_t \in \mathcal{W}_t$. The court is free to evaluate the claim of new authority only if the new authority claim belongs to its discretion set: $a_t \notin \mathcal{R}_t \cup \mathcal{W}_t$.

A court ruling also introduces dynamic changes to the precedents governing authority. At the beginning of the game, we assume that the court has discretion over almost the whole set: $\mathcal{R}_1 = \{0\}$ and $\mathcal{W}_1 = \emptyset$. For any authority claim a_t in the court's discretion set ($a_t \notin \mathcal{R}_t \cup \mathcal{W}_t$), if C upholds a_t ($d_t = 0$), then the permissible range of authority in period $t+1$ becomes $\mathcal{R}_{t+1} = [0, a_t]$, and the impermissible range is unaffected. If, on the other hand, C overturns the authority claim, then the permissible range remains unchanged, $\mathcal{R}_{t+1} = \mathcal{R}_t$, and the impermissible range expands to $\mathcal{W}_{t+1} = [0,1] \setminus \mathcal{R}_t$.

With one important caveat, our characterization of precedent evolution follows the literature (e.g., Baker and Mezzetti 2012). As in previous papers, if a_t is upheld, then P accumulates executive authority. In our baseline model, however, overreach, as determined by the court, has severe consequences. If C determines that P has "gone too far" and rejects a claim for enhanced authority, then parameters for authority are fixed permanently at the level previously acquired. While we relax this assumption in Section 4 below, we want, first, to establish a baseline in which an adverse court ruling has lasting and deleterious consequences for political authority.

Given the dynamic nature of the game, we impose that payoffs are discounted by β. To allow for comparative statics on the discount rate without modifying other model parameters, we suppose that $0 < \beta < \overline{\beta}$, with $\overline{\beta} < 1$. We suppose that the officeholder always prefers more authority. Politicians may want authority for either instrumental or intrinsic reasons, but we will have nothing to say about the distinctive implications of one motivation or another. Instead, we simply assume that politicians want more of it, for as Bueno de Mesquita and Smith (2012, p. xviii) remind us, politics, at its very heart, "is about getting and keeping power." Recalling that y_t is the authority acquired in period t, therefore, we assume that $U_P(y_t) = v(y_t)$ is strictly increasing in its argument. We further impose that $v(\cdot)$ is continuously differentiable and its derivative satisfies $v'(y) < \infty$ for all $y \in [0,1]$.

In contrast, the judiciary may favor restrictions on executive authority for constitutional reasons. As such, we assume that everything else equal, the optimal amount of authority from C's perspective is $\kappa^C \in [0,1]$. The court's evaluation of P's authority, however, is also affected by the overall context. In certain circumstances—say, during war, a natural disaster, or a deep economic slump—

the court may be prepared to grant legitimacy to greater exercises of authority by politicians.[3] We capture this with a random state variable, θ_t, which is drawn i.i.d. each period according to the pdf $f(\cdot)$, and which is continuous and symmetric over the interval $[-\overline{\theta}, \overline{\theta}]$, with associated CDF $F(\cdot)$. Higher θ implies an environment more favorable to authority claims, and lower values suggest an environment less amenable to such. In particular, we suppose that there exist exceptional circumstances in which interventions by P are recognized as being valuable to the court and, by extension, an (un-modeled) public. We therefore assume that $\overline{\theta}$ is large and, in particular, $\overline{\theta} > \frac{1}{1-\overline{\beta}}$. This assumption facilitates the analysis and simplifies the characterization of equilibrium outcomes. We do not require that extreme events are common. Indeed, it is enough that there exists an extremely small probability that θ is large (in formal terms, we only require that $F(1/(1-\overline{\beta})) < 1-\epsilon$, with ϵ strictly positive, but potentially arbitrarily small). Given our interpretation of the state θ_t, we assume that θ_t is observed by all players at the beginning of period t. Future circumstances (θ_{t+1}, θ_{t+2}, ...) can only be predicted using the common prior CDF $F(\cdot)$.

For ease of exposition, we assume that only the court's per-period payoff is affected by the state of the world.[4] Further, to provide some characterization of equilibrium strategies, we assume that C's utility takes the form of a quadratic loss function: $U_C(y_t) = -(y_t - \kappa^C - \theta_t)^2$, which may be re-written as $-\big(y_t - (\kappa^C + \theta_t)\big)^2$ to convey the adjustment C makes to what it regards as "ideal" depending on the nature of the times.

The game proceeds as follow. Each period,

0. The state, θ_t, is drawn by Nature and observed by both P and C. The current permissible ($\mathcal{R}_t$) and impermissible ($\mathcal{W}_t$) sets are known by P and C as well.
1. Politician P chooses an authority claim $a_t \in [0, 1]$.
2. Court C chooses whether to uphold or overturn: $d_t \in \{0, 1\}$.
3. The authority employed is $y_t(d_t) = d_t \max \mathcal{R}_t + (1 - d_t)a_t$, and the permissible and impermissible sets are amended to $\mathcal{R}_{t+1}$ and $\mathcal{W}_{t+1}$, if required.
4. The period t payoffs are realized and the game moves to period $t + 1$.

To reduce the number of equilibria, we follow the literature on dynamic games and use Markov Perfect Equilibrium as our equilibrium concept. In addition, we restrict attention to pure strategy

[3]Examples include the extraordinary authority recognized by the Supreme Court in allowing the internment of Japanese citizens during World War II (*Korematsu v. United States*, 323 U.S. 214 (1944)) or in permitting state legislatures during the Great Depression to annul debt contracts and restrict property foreclosures by allowing repayment moratoriums (*Home Building & Loan Association v. Blaisdell*, 290 U.S. 398 (1934)).

[4]All our results would hold if θ also figured into the executive's utility function, provided that the executive never wants less authority.

equilibria. Finally, we assume that when indifferent, the court upholds the office-holder's authority claim. This assumption guarantees that the politician's maximization problem is well-defined.

3 Analysis

In this section, we first describe some general properties of all equilibria of the baseline model, with particular attention to the vulnerabilities of the judicial constraint. We then characterize the dynamics of authority acquisition within one specific equilibrium.

3.1 All equilibria lead to executive absolutism

Given our assumed construction of precedents, the set of permissible authority claims always takes the form of an interval. In addition, P can always lay claim to the authority she previously acquired without any risk ($d_t = 0$ for all $a_t \in \mathcal{R}_t$), whereas, whenever C has overturned P, then $\mathcal{W}_t \neq \{\emptyset\}$ and $\mathcal{R}_t \cup \mathcal{W}_t = [0, 1]$, so the officeholder always chooses $a_t = \max \mathcal{R}_t$. Hence, the only relevant information for both the court and politician is the maximum of the permissible set and the minimum of the impermissible sets.

We then can think of P's strategy as a mapping from the present environment, the maximum of the permissible set, and the minimum of the impermissible set (denoting this value 1 if $\mathcal{W}_t = \{\emptyset\}$) into an authority claim: $a_t : [-\overline{\theta}, \overline{\theta}] \times [0, 1] \times [0, 1] \to [0, 1]$. Likewise, C's strategy maps the state, the authority claim, the maximum of $\mathcal{R}_t$, and the minimum of $\mathcal{W}_t$ to a ruling: $d_t : [-\overline{\theta}, \overline{\theta}] \times [0, 1] \times [0, 1] \times [0, 1] \to \{0, 1\}$. We note that, because we focus on Markov Perfect Equilibrium, the time subscript is superfluous to define the court and executive strategies. We nonetheless keep the time subscripts in order to highlight the period-specific strategic choices of the political actors. Recall that by assumption, if $\max \mathcal{R}_t = \min \mathcal{W}_t = a$, then $a_t(\theta_t, a, a) = a$ for all θ_t. As a result, in all that follows, we consider the cases when the politician has not yet obtained all authority (hence $\max \mathcal{R}_t = a \in [0, 1))$ and when the court has not overturned any politician's claim ($\mathcal{W}_t = \{\emptyset\}$).

With these preliminaries, Lemma 1 below indicates that the court can act as a day-to-day constraint on executive power (i.e., limit the scope of her authority). Each period, there is a strictly positive probability that P is forced to restrict her authority claim if she wants to avoid being overturned by the court.

Lemma 1. *Denote* $\widehat{\theta}(a) \equiv \frac{\frac{1+a}{2} - \kappa^C}{1-\beta}$. *In any equilibrium, the court overturns a full authority claim,* $d_t(\theta_t, 1, a, 1) = 1$, *if and only if* $\theta_t < \widehat{\theta}(a)$.

Lemma 1 states that, for any given maximum of currently permitted executive authority, a, so long as θ_t is not too large, then there are authority claims judged "excessive" by the court and struck down. The court, as noted, can act as a day-to-day constraint on executive authority claims. Still, the next proposition shows that in all possible circumstances ($\theta_t \in [-\overline{\theta}, \overline{\theta}]$) there exists a set of new authority claims ($a_t \notin \mathcal{R}_t \cup \mathcal{W}_t$) that a court will not overturn.

Proposition 1. *In any equilibrium, for all* $\theta_t \in [-\overline{\theta}, \overline{\theta}]$*, there exists* $\overline{a}(\theta_t, a) > a$ *such that* C *upholds* P*'s authority claim* a_t*,* $d_t(\theta_t, a_t, a, 1) = 0$*, if* $a_t \in [a, \overline{a_t}(\theta_t, a)]$*.*

Proposition 1 has important substantive implications. In our baseline model, in which we have set to one side the constraining role of the legislature, parties, electoral competition, and public opinion, C is the only bulwark against executive absolutism. And in principle, it would appear up to the task. With the power to set new precedents, after all, the court can put a permanent end to the extension of executive authority. In any equilibrium, however, the court's practical ability to restrain the politician is limited, for the politician can always make authority claims that the court would approve, *even when* the circumstances are quite unfavorable ($\theta_t = -\overline{\theta}$).

Why is the executive always able to expand her authority, should she so choose? Here is the key intuition. Each time it must make a decision (i.e., $a_t \notin \mathcal{R}_t$), the court is faced with a binary choice: either recognize the legitimacy of P's encroachment or overturn it and be stuck with the previously granted authority level forever. This generates a trade-off for the court between present and future payoffs. On the one hand, when the state of the world is unfavorable to the executive (θ_t is low), the court may be tempted to reject the authority claim whenever it induces a payoff loss for the court today compared to the existing permissible actions. For a new authority claim very close to the current maximum permitted authority (a_t very close to $\max \mathcal{R}_t$), however, the court's present payoff loss is arbitrarily close to 0. Yet, if it overturns the new authority claim, the court loses all future chances for the executive's authority to adapt to special circumstances (high θ). Given that there exist states such that the court values full authority by the executive ($\overline{\theta}$ is large by assumption), the future cost of impeding flexibility by overturning a new authority claim is always bounded away from zero.[5] Hence, there always exists a sufficiently small new authority claim for which the present cost from upholding it is dominated by the future loss from overturning it, leading the court to sanction the increase in executive authority. Importantly, it is

[5]As long as extreme states are possible ($\overline{\theta} > \frac{1}{1-\overline{\beta}}$), the cost of overturning the office-holder is bounded away from zero for all discount factors $\beta \leq \overline{\beta}$, even if the court is more patient than the office-holder. Since this force is the key force behind all our results, none of our main conclusions relies on the assumption that players are similarly patient.

the court's forward looking perspective, even as it anticipates future authority claims by P, that allows executive authority to grow in every period, no matter the circumstances.

Anticipating the court's strategy, the politician always chooses a new claim that is upheld by the court. After all, if she were to go too far, she would be overturned, stuck with current precedents, and relinquish all future opportunities to expand her authority. Hence, the politician recognizes the benefit of waiting for more favorable circumstances in the future (this result is formally proven in the Online Appendix). Each period, the executive makes either no authority claim or an admissible claim–that is, one that the Court upholds. Thus, in any equilibrium, the court never punishes the politician and the growth of executive authority only comes to a halt when it has been utterly exhausted. Over time, the production of authority is defined by one-way "ratchets." And in the limit, *in any equilibrium*, the officeholder gains full authority over the policy domain.

Proposition 2. *In any equilibrium,* $\lim_{t\to\infty} \mathcal{R}_t = [0, 1]$ *with probability* 1*.*

Our model highlights an important contrast between the day-to-day operation of the court and the long-run relationship between the judiciary and the executive. On a short-run basis, we see that the court can effectively impose limits on executive authority (Lemma 1). But this view of judicial constraint does not tell the full story. The politician, after all, always manages to play the court to her own advantage. She strategically chooses a new authority claim that will survive court scrutiny. Each period, the executive can break out beyond what was previously allowed, sometimes by a little, sometimes by a lot, but always successfully (Proposition 1). At the end of the process, despite the judiciary fully anticipating it, the executive gains full control over the policy domain (Proposition 2). The judiciary is thus a weak constraint on the growth of executive authority: it can delay the onset of executive absolutism, but it does not stop it.

3.2 Features of a period-by-period maximally admissible equilibrium

There exist multiple equilibrium paths in this dynamic game. Propositions 1 and 2 cover all of them. To investigate the dynamics of authority growth over time, however, we must select a specific equilibrium. We focus on one in which P relies upon an intuitive strategy: she claims as much authority as the court will allow each period–that is, the amount that leaves the court indifferent between upholding and overturning her action. We label this equilibrium, in which executive authority strictly increases each period, the "period-by-period maximally admissible" equilibrium.

As the next lemma shows, this strategy is indeed an equilibrium whenever the politician does not value the future too heavily.

Lemma 2. *There exists $\widehat{\beta} \in (0, \overline{\beta}]$ such that if $\beta \leq \widehat{\beta}$, then an equilibrium exists in which P is never overturned and, each period, either claims full authority ($a = 1$) or chooses a new level of authority that leaves the court indifferent between upholding and overturning it.*

In such an equilibrium, the politician always maximizes her present payoff by pushing her authority as far as she can each period. The court observing P's behavior today and anticipating her action tomorrow then uses a very simple strategy: it upholds if the claim is below a certain threshold and overturns otherwise. This tolerance threshold, which we denote $\overline{a}(\theta_t, a)$, is a function of the upper bound on the set of already permissible claims, $\max \mathcal{R}_t = a$, and the current circumstances θ_t. The next lemma characterizes some properties of the court's tolerance threshold, and, thus, P's authority claim each period.

Lemma 3. *The court's tolerance threshold $\overline{a}(\theta_t, a)$ satisfies:*
(i) $\overline{a}(\theta_t, a) = 1$ if and only if $\theta_t \geq \widehat{\theta}(a) \equiv \frac{\frac{1+a}{2} - \kappa C}{1-\beta}$;
(ii) for all $\theta_t < \widehat{\theta}(a)$, $\overline{a}(\theta_t, a)$ is strictly increasing with θ_t;
(iii) for all θ_t, the distance between $\overline{a}(\theta_t, a)$ and a is decreasing with a.

The first point is simply the contra-positive of Lemma 1. Each period, there exist states under which the court tolerates full authority acquisition due to the inefficiency loss induced by constraining P, ever more, to the prior authority level. Rather intuitively, the second point indicates that the politician's ability to claim more authority is increasing in the favorability of state circumstances.

The third point highlights that past authority acquisition can reduce the gains in authority acquisition.[6] To understand this result, let us return to the court's trade-off between present loss when upholding an expansive authority claim and the cost from losing future flexibility when overturning. When the politician has already acquired a relatively large scope of authority, the court's concern about her future flexibility is relatively low since P already can do a great deal with her current authority. Hence, a large stock of existing authority makes the court less lenient regarding contemporary claims for even more. The difference between what the politician already has and what the court will tolerate (and hence, under this equilibrium, what the politician will claim) reliably decreases as the politician secures ever more authority.

[6] This last point also explains why claiming authority up to the court's tolerance threshold each period t is not necessarily an equilibrium for all discount factors β. The politician needs to sufficiently discount the possible lower authority claim in the future.

In combination, points (ii) and (iii) of Lemma 3 have important substantive consequences for the dynamics of authority acquisition: past authority acquisitions do not predict future ones. A politician who starts period t with a lot of room for action (a large $\max \mathcal{R}_t$) may end up in period $t+1$ with less authority than an office-holder who started with a smaller permissible set.

Proposition 3. *Take any two possible sets of permissible authority claim $\mathcal{R}_t^l$ and $\mathcal{R}_t^h$ satisfying $\max \mathcal{R}_t^l = a^l < \max \mathcal{R}_t^h = a^h$, there exists $\theta^\dagger(a^l, a^h) < \widehat{\theta}(a^l)$ such that for all $\theta_t \in (\theta^\dagger(a^l, a^h), \widehat{\theta}(a^h))$, then $\max \mathcal{R}_{t+1}^l > \max \mathcal{R}_{t+1}^h$.*

This result again follows from the court becoming less tolerant of an executive's ambitions when she already has acquired substantial authority. The complement also is true. Indeed, precisely because past restrictions on authority portend future advancements, a politician may experience a "reversal of fortune," allowing her to overcome the levels of authority she would have acquired had the court previously adopted a more accommodating posture. Past restrictions, in this sense, have the potential to hasten the onset of executive absolutism.

This, though, is certain: a politician's authority today poorly predicts her authority tomorrow. Even after restricting attention to a specific strategy, we can only know that the executive will increase her scope of authority over time. We cannot say anything definitive about the pace of its expansion, as smaller jumps may beget larger ones, and vice versa. When it comes to authority, whoever understands the past has no special insight into the future.

To see how these dynamics function, consider Figure 1. Here, we track the authority acquired by two executives over ten periods. The two executives, square and triangle, face a common realization of θ in every period except the first. In period 1, the square executive benefits from more favorable circumstances than the triangle executive and therefore is able to acquire more authority. Notice, though, that this initial advantage is not permanent. In period 3, the common realization of θ allows the triangle executive to acquire more authority than the square executive. Additional reversals of fortune appear in periods 6 and 8. We also see how different realizations of θ can produce relatively smaller or larger jumps in authority. And illustrating Proposition 1, both executives acquire more authority in every period until each, illustrating Proposition 2, acquires full authority.

We can also use the period-by-period maximally admissible equilibrium to study some comparative statics on authority acquisition. We first consider how the variance of the state of the world affects authority acquisition each period. Quite intuitively, the greater the chances of extreme

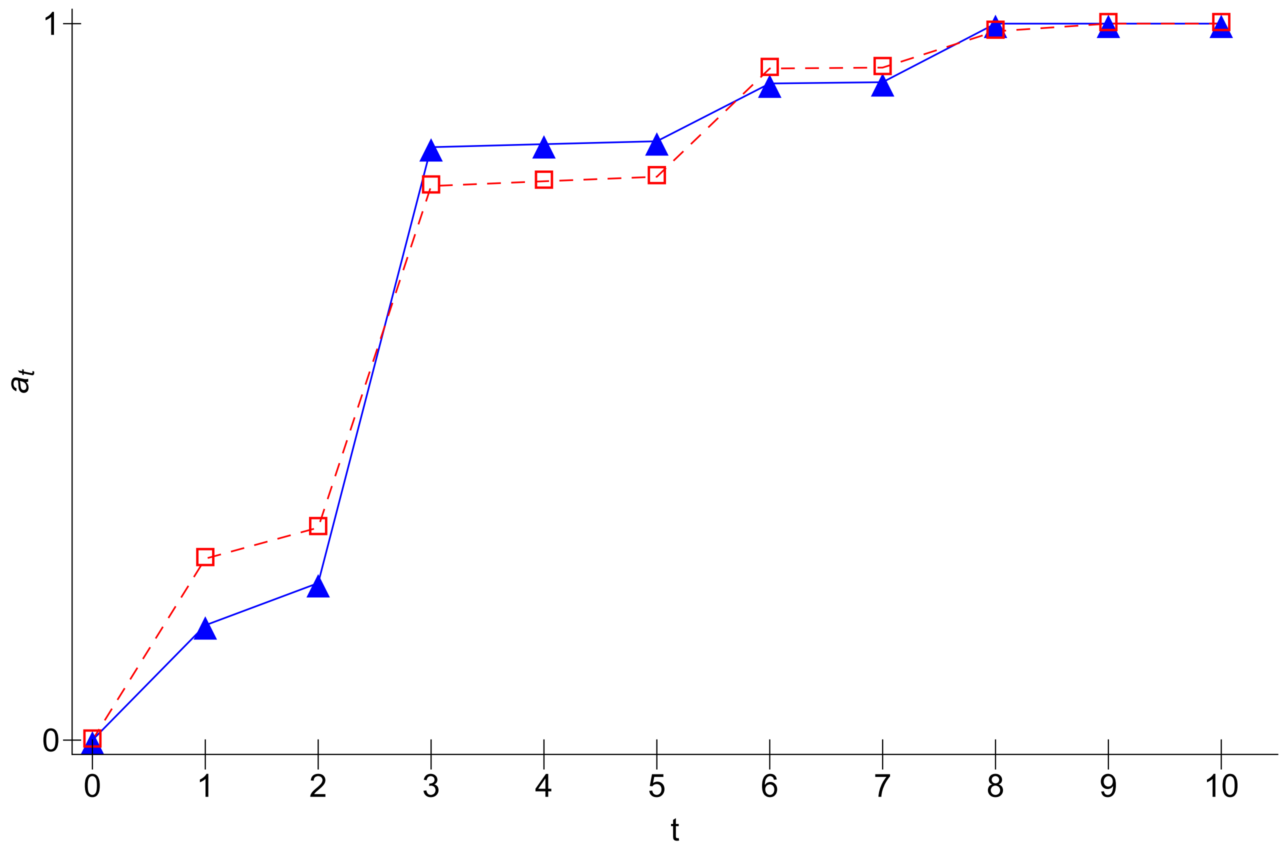

Figure 1: Dynamics of authority acquisition

circumstances, the more attuned the court becomes to the costs of permanently constraining the politician. The executive, for her part, takes advantage of this heightened demand for flexibility in order to acquire greater authority each period for herself. We therefore obtain the following result:

Corollary 1. *Take two CDFs of the state of the world θ, F_A and F_B, such that F_B is a mean-preserving spread of F_A. Denote $\overline{a}_A(\theta, a)$ and $\overline{a}_B(\theta, a)$ the tolerance thresholds under distributions F_A and F_B, respectively. For all $a \in [0, 1)$ and all $\theta \in [0, \widehat{\theta}(a))$, $\overline{a}_B(\theta, a) \geq \overline{a}_A(\theta, a)$.*

Our model, thus, indicates that we should observe a greater push for authority in environments that are more volatile (among presidential systems, think of Latin American regimes) than in those that are relatively stable (e.g., the United States).

Can we generate similarly clear comparative statics on players' patience, as characterized by the discount factor β? The answer is no. As the court becomes more patient, it puts more weight on the need for flexibility. This tends to make the court more lenient, as we have just seen. But greater patience also means that the court cares more about the cost of future extensions of executive authority, which reduces the court's incentive to permit further authority acquisition. Depending on circumstances (the state of the world, but also the stock of authority already acquired), one or the other force can dominate, and the tolerance threshold can either increase or decrease with β.

Finally, we evaluate the effects of judicial appointments, albeit in a very reduced form. It is well known that presidents tend to use their appointment powers to create a more accommodating judiciary. What happens when the ideal point of the court is allowed to change? Quite obviously, the more a judge is aligned with the executive (higher κ^C), the more authority the office-holder can obtain each period.

A more interesting question, though, concerns how an incumbent judge alters his behavior in anticipation of his subsequent replacement. To study this matter, suppose that a judge with ideal point κ^C learns he is to be replaced next period by a judge with ideal point κ^N (where N stands for new judge). Denote $\overline{a}(\theta, a; \kappa^N)$ the judge's tolerance threshold after he learns that he will be permanently replaced in the next period. The following proposition shows that, compared to the case when he is not replaced, the incumbent judge is more stringent if he is to be replaced by a judge who is more favorable to the executive, and more lenient otherwise.

Corollary 2. *If $\kappa^N > \kappa^C$, then $\overline{a}(\theta, a; \kappa^N) \leq \overline{a}(\theta, a)$, with strict inequality if and only if $\theta < \widehat{\theta}(a)$. If $\kappa^N < \kappa^C$, then $\overline{a}(\theta, a; \kappa^N) \geq \overline{a}(\theta, a)$ with strict inequality if and only if $\theta < \widehat{\theta}(a)$.*

This corollary identifies an inter-temporal tradeoff associated with judicial appointments. On the one hand, packing the courts with constitutionally like-minded judges is beneficial for the executive in the long run. In the short run, however, it comes at some cost. Incumbent judges, after all, become less favorable to the office-holder as they anticipate greater expansion of authority in the future. Should the politician appoint judges with a more restrictive view of executive authority, however, she can expect the incumbent judge to assume a more accommodating posture. Once the less favorable replacement judge takes office, however, the executive will claim less authority than she otherwise would if the incumbent judge had remained on the bench.

4 Extensions

Thus far, we have studied a setting in which a single politician faces a court whose only recourse when faced with an objectionable authority claim is to lock down the status quo ever more. In this section, we relax both of these assumptions. First, we consider the role of electoral competition in constraining the growth of the executive. And second, we moderate the effects of an objectionable court ruling. Both of these changes can alter the politician's authority claims in any given period. Neither, though, guarantees a halt in the march toward executive absolutism.

4.1 Political turnover and executive authority

In this extension, we allow for the possibility that the incumbent executive loses office. As such, the authority acquired today by the incumbent may be used against her tomorrow by an opposing successor. More specifically, we assume that at the beginning of each period, before θ_t is realized, Nature determines the identity of the officeholder, which can be either P_l or P_r. Once a politician is in power in period t, there is a probability π that she remains in office next period. This probability captures in reduced form an office-holder's incumbency advantage (if $\pi \geq 1/2$) or disadvantage (if $\pi < 1/2$).

When politician $J \in \{P_l, P_r\}$ holds authority, her utility from having deployed authority y_t remains $v(y_t)$, as in the baseline model. When her opponent $-J$ is in office, however, J's utility from authority y_t being used is $-v(y_t)$. That is, for $J \in \{P_l, P_r\}$,

$$U_J(y_t) = \begin{cases} v(y_t) & \text{if } J \text{ is in office} \\ -v(y_t) & \text{otherwise} \end{cases}$$

The rest of the model remains unchanged. In particular, we assume that the court cares only about constitutional considerations and the state of the world.

With or without political turnover, the court's problem remains the same as in the baseline model. The court cannot impose a hard constraint on the executive since it always wants to give itself some flexibility to deal with exceptional future circumstances. Hence, any constraint on authority can only come from changes in equilibrium behavior induced by (expected) fluctuations in personnel. Our next result establishes that as long as the incumbency disadvantage is not too high (that is, π is not too low), then the unique outcome of the game is executive absolutism, much like Proposition 2.

Proposition 4. *There exists $\underline{\pi} < 1/2$ such that if the probability the incumbent remains in power satisfies $\pi > \underline{\pi}$, then any equilibrium satisfies $\lim_{t\to\infty} \mathcal{R}_t = [0,1]$ with probability 1.*

Our revised framework predicts that electoral competition *may* generate restraints on authority acquisition, but only if there is a strong enough incumbency *dis*advantage. Only then, after all, is the incumbent sufficiently afraid to leave her opponent unchecked in next period and, thus, acts so that legal bounds are placed on authority. In the U.S. setting where the incumbency advantage is well documented (see, e.g., Fowler 2016), the likelihood of electoral competition curtailing authority acquisition hovers right around zero.

4.2 Alternative judicial rule

A reader may be concerned that the court's unwillingness to constrain the executive is an artifact of the stringent rejection rule in the baseline model. Concerns about future executive flexibility, after all, induce the court to authorize claims of new authority each period. And in the baseline model, a court rejection shuts this down, once and for all. This section demonstrates that the reader's concern is unwarranted. When we introduce a rejection rule that allows for future claims of executive authority, the court nonetheless behaves much as it does in the baseline model.

Recall that in the baseline model, when the court overturns an authority claim, the discretion set collapses ($\mathcal{R}_t \cup \mathcal{W}_t = [0, 1]$), and future authority extension becomes impossible. Suppose, instead, that if the court overturns an authority claim $a' > \max \mathcal{R}_t$, then the impermissible set only extends up to the claim recently struck down: $\mathcal{W}_t = (a', 1]$.[7] We still assume the authority deployed this period is the maximum of the permissible set (i.e., $y_t(d_t) = a_t$ if the court upholds the claim a_t, and $\max \mathcal{R}_t$ if the court overturns it).

This seemingly benign assumption change generates a string of complexities when analyzing the relationship between the executive and the court. In the baseline model, the stringent rejection rule allows us to straightforwardly compute the court's and executive's payoffs in the aftermath of a rejection. We can then compare the expected payoff from overturning the authority claim with the expected payoff from permitting it, which allows us to determine both the limit outcomes of all equilibria and the behavior in the period-by-period maximally admissible equilibrium. In this extension, we are no longer able to do so. Here, once the court overturns a possible authority claim a', a "new" game starts between the judiciary and the executive, where authority is bounded to a' rather than 1. The payoffs from overturning an authority claim, therefore, are undetermined, as they depend on the strategies subsequently played by both actors. Absent a well-defined outside option, it becomes harder to determine the behaviors of the judiciary and the executive. Despite these difficulties, however, we find several similarities between this set-up and our baseline model.

[7] We assume that $a' \notin \mathcal{W}_t$ so that the executive's problem remains well-behaved.

Our next result shows that the behavior of the court under the more permissive rejection rule resembles its choice under the more stringent one. In every period, for every precedent, the court is willing to accept a full authority claim whenever circumstances require it (for a high enough value of θ). Further, in all states of the world, there exist some new authority claim that the judiciary upholds. As such, Proposition 5 indicates that, once more, the judiciary remains a weak constraint on the executive.

Proposition 5. *Suppose* $\max \mathcal{R}_t = a \in [0, 1)$ *and* $\min \mathcal{W}_t = a^R \in (a, 1]$. *Then in any equilibrium:*
(i) There exists a unique $\widehat{\theta}^{\mathscr{L}}(a, a^R)$ *such that for all* $\theta_t \geq \widehat{\theta}^{\mathscr{L}}(a, a^R)$, *the court upholds any authority claim in the discretion set: for all* $a' \in [a, a^R]$, $d(\theta_t, a', a, a^R) = 0$.
(ii) For all θ_t, *there exists* $\overline{a}(\theta, a, a^R) \in (a, a^R]$ *such that the court upholds the executive's authority claim* a_t, *that is* $d(\theta_t, a_t, a, a^R) = 0$, *if* $a_t \in [a, \overline{a}(\theta, a, a^R)]$.

The change in the rejection rules (from stringent in the baseline model to permissive in this extension) does not substantially alter the judiciary's behavior. First, there exist circumstances under which the court allows a claim of full authority even though it induces a cost in the future. Note that this implies that the gain from greater flexibility upon overturning is limited. Indeed, if the court overturns $a_t = 1$, this does not change future interactions since the executive's authority can never exceed 1. Yet, the expectations of future encroachment make this greater flexibility of limited interest to the court, who is willing to accept a full authority claim when circumstances are dire (i.e., when θ_t is sufficiently high).

A consequence of the Proposition's first result is that the court does not want to constrain the executive so much that any adaptation becomes impossible. As we have already discussed, the executive can then, if she wishes, exploit the judiciary's demand for flexibility to claim and obtain still more authority. In short, the court in every situation is willing to let authority grow, sometimes by a little, sometimes by a lot.

Does the judiciary's behavior lead to executive absolutism, as in the baseline model? In this setting, that is, can we prove an equivalent to Proposition 2? We cannot, at least not definitively. We cannot rule out the possibility that an executive will constrain herself—that is, she will choose some authority claim that is overturned—in the hopes of converging faster to a new, albeit lower, limit. Even if such equilibria exist, however, they are likely to be fragile. As long as the executive is sufficiently impatient or sufficiently patient, after all, we can be sure that she will eventually acquire full authority, again as in the baseline model. Indeed, when the office-holder's discount factor is low, she cares less about the future and therefore always chooses to maximize her per-period authority. Consequently, the executive always chooses an authority extension as high as the tolerance threshold permits, and no claim is ever overturned in equilibrium. In the limit, then, full authority is granted to the office-holder, almost despite herself. In turn, if the executive is very patient, she puts significant weight on the maximum authority she can claim in the limit. Since anything below full authority provides a lower payoff than total control over the domain in the long run, the politician prefers to be prudent in the short run in order to eventually realize these long-term gains.

5 Discussion

This section addresses three broad considerations, followed by a more specific conceptual elaboration of our treatment of precedent. The three broad considerations are: first, the verisimilitude of our model and judicial reasoning; second, different understandings of authority acquisition; and finally, the ultimate need for executive moderation in a system of separated powers that intends to guard against executive absolutism.

Verisimilitude. In our model, the politician extends the reach of her authority well past what the court would constitutionally prefer by exploiting the court's concern about changes in the material world. The introduction of θ, however, is not just a technical conceit. Rather, it figures prominently in the judicial record on executive power.

When deciding how to rule on a case, judges consult more than their jurisprudential values and understandings. They also monitor basic facts about the state of the world. A substantial body of scholarship documents the allowances that judges routinely extend to presidents during times of national calamity. Nearly 75 years ago, Edward Corwin (1947, 80) put the point this way:

> War does not of itself render constitutional limitations liable to outright suspension by either Congress or President, but does frequently make them considerably less stiff—the war emergency infiltrates them and renders them pliable. Earlier constitutional absolutism is replaced by constitutional relativity: it all depends ...[on] what the Supreme Court finds to be reasonable in the circumstances.

In search of rules and principles that establish what is "reasonable in the circumstances," a voluminous body of legal scholarship on "crisis jurisprudence" has elaborated on Corwin's observation that the judiciary adapts and reinterprets constitutional provisions in light of contemporary exigencies (see, for example, Cole 2003; Tushnet 2003; Gross and Ni Aolain 2006). More recently still, empirical research has demonstrated that the federal judiciary routinely approves presidential actions during times of war that, during peace, it would invariably strike down (Epstein et al 2005; Howell and Ahmed 2014; Clark 2006).[8]

Concerns about future flexibility, which propel many of the core findings in our model, also inform judicial decision-making. In addition to present shocks, judges regularly worry about the implications of their rulings for executive efforts to attend to future circumstances. Hence, during periods of peace, judges anticipate the possibility of war's return;[9] and so doing, they may issue rulings that look very different from those that would emerge in a world that had rid itself of human conflict, once and for all. Similarly, in the throes of war, judges reflect upon the implications of their rulings for peace-time governance;[10] and consequently, they may appear less understanding of executive authority claims than they would if they were convinced that a present war would persist ad infinitum. In these ways, past empirical research that compares war-time and peace-time rulings may understate the true relevance of war for judicial decisions.

Our characterization of judicial precedence also broadly conforms with American jurisprudence on executive authority. In every version of our model, authority, once conferred, can never be subsequently retracted. Likewise, American courts have appeared reticent to overturn past rulings that involve the president. Of course, precedence is not full proof, and the courts do occasionally revisit their previous decisions. (Think, most obviously, of Brown v. Board and Plessy v. Ferguson). Hardly ever, though, does this happen on matters that concern executive authority. The courts assuredly have overturned executive claims, sometimes quite famously (Youngstown v. Sawyer or U.S. v. Nixon). But quite consistent with our characterization of precedence, American courts generally never reconsider past rulings and disallow that which they previously authorized. We elaborate further on the treatment of precedent momentarily.

Authority. Our model treats authority acquisition in terms of general involvement in and influence over a specified policy domain (which we represent as the [0,1] interval). In a world of multiple policy domains, our model may be understood as treating each such domain independently. Thus, the acquisition of presidential authority over immigration policy is treated as separate from

[8]When reflecting upon changing "circumstances," of course, judges pay attention to more than just war. Brennan, Epstein, and Staudt (2009), for instance, document the relevance of a variety of macroeconomic factors for judicial decision-making. During major economic downturns, they show, judges are especially likely to uphold actions taken by the adjoining branches of government.

[9]See, for example, *United States v. Curtiss-Wright Export Corp.*, 299 U.S. 304 (1936).

[10]For a particularly thoughtful treatment of the subject, see Justice Robert Jackson's dissenting opinion in *Korematsu v. United States*, 323 U.S. 214 (1944).

the acquisition of authority in some other domain, say civil rights enforcement. And the courts may look differently at different domains; that is, its jurisprudential ideal, represented in the model by κ^C, would be subscripted by policy domain. Nevertheless, Proposition 2 applies to each policy domain individually; and in the limit, the executive acquires full authority in each domain.[11]

An alternative reading of authority acquisition consistent with our model focuses not on a specific policy domain, but rather on a specific type of action that would apply across policy domains. On this interpretation, the executive acquires authority, say, to re-program appropriated funds across accounts, to pardon individuals, to exercise unilateral action through executive orders, to reorganize agencies and bureaucracies, to hire and fire agency personnel off her own bat. The court rules, in these instances, on the general ability of the executive to act authoritatively in specific ways. And, once again, Proposition 2 applies.

Moderation. Our model reveals the inadequacies of judicial restraints on executive ambition. Court impediments notwithstanding, the politician in our model ultimately acquires all the authority she wishes. To ensure that this acquisition does not deplete all available authority, one of two conditions must hold: in the baseline model, the politician must want something less than full authority; or in the expanded model with electoral competition, at least one of the politicians must want less than full authority and act in ways that provoke a judicial rejection, which henceforth constrains the future authority claims of both politicians.

Executive absolutism, as such, may be avoided, but only if politicians exercise what Steven Levitsky and Daniel Ziblatt (2018) call "forbearance." On their own accord, politicians must exercise individual self-restraint and moderate their claims to authority. This proviso, however, offers little reassurance in American politics. Since Richard Neustadt's seminal work (1960), nearly every major presidential scholar has recognized the extraordinary expectations that the public places upon presidents. This basic fact, more than any other, leads presidents to seek authority at every turn. Indeed, those presidents who reveal a modest appetite for power (think James Buchanan, William Howard Taft, or Herbert Hoover) are routinely excoriated for their failed tenures in office. To be president, at its very core, is to want, seek, nurture, and preserve power (Howell 2013).

Notice, moreover, that the need for individual moderation runs counter to the very premise of the founders' constitutional project. The founders certainly lauded modesty, virtue, and the like,

[11]A more sophisticated treatment would allow for a court decision in one domain to have spillovers into other domains. Decisions in one domain, that, is, would affect court utility in other domains and, by backward induction, would induce a more nuanced, cross-domain, strategic anticipation by the executive in the first instance.

but they did not count upon them to protect their fledgling democratic experiment—"if men were angels" and all that. To their core, the founders were realists. They took as given the nature of men (and to be clear, politically, they only had men in mind); and in men they recognized extraordinary appetites for power. It is for precisely this reason that the founders put their faith in external checks on presidential power; that they looked to an independently elected Congress and a judiciary filled with life-time appointees to frustrate and delimit the president's claims of authority. What the founders did not appreciate, and what our model reveals, is that these checks could only forestall executive absolutism. They could not permanently impede it. For that, executive forbearance would be needed after all.

Precedent. The court, in our model, adheres strictly to precedent. Once an executive claim of authority is granted, it is never reversed; and once a claim is rejected, it is never reconsidered. In either scenario, there is no going back.

To appreciate the importance that precedent plays in our model, it is worth noting that our result on executive absolutism would continue to hold even if the court, and not an independent executive, determined the reach of authority acquisition in each period. In some circumstances, the court would grant full authority to the office-holder; and in expectation of this possibility, it would never want to impose restrictions on executive authority. As in our baseline model, the court's concern for flexibility propels the growth of executive authority. A key difference, however, is that the court would suspend authority expansion whenever present circumstances were sufficiently unfavorable to the executive (i.e., for sufficiently low θ).[12] In this way, the politician's ability to make authority claims for herself hastens the onset of executive absolutism (Proposition 1), but it does not cause it.

As an empirical matter, however, there exist important exceptions to the doctrine of judicial precedent. The courts, after all, do in fact reverse themselves, and do in fact reconsider previous precedents. Consequently, at least three interrelated concerns with our assumption of strict adherence to precedent warrant some consideration.

There is, first of all, the slipperiness of the concept itself. Any lawyer worth her salt will argue that an adverse prior precedent-setting ruling does not apply to the case at hand. This raises what might be called "the dimensionality problem"—namely, that authority is multidimensional, a particular precedent may apply to some dimensions but not to others, and, in particular, that it

[12] All these results are proven formally in Lemma B.1 in the Online Appendix for a lenient rejection rule, but they also hold for the stringent rule of the baseline model.

does not apply to the particular case under consideration. This manoeuver granulates precedent and, in the extreme, renders it altogether irrelevant. For understood this way, precedent is binding only on cases that match the precedent-setting case in all its particulars.

Closely related, and a more general way of putting the preceding concern, is the matter of "state-contingent rulings," which dictate that precedent applies only when external circumstances warrant, so that decisions in a state of war do not constrain during peace-time, that decisions taken during economic emergencies do not apply when the emergency has lifted, and so on.[13] While we take an extreme view that precedents are always binding, the view that precedents are state-contingent (in the terms of our model, θ) constitutes the other extreme. In this latter view, after all, past precedents effectively play no role, as they apply to a set of measure-zero events, and, consequently, there is no accumulation of judicial doctrine.

An intermediate view applies precedent to a category of states. This allows the court to employ a state-contingent precedent to any authority claim made during states falling within a particular range of θ's. Solving such a set up would entail many modifications of our model and thus is beyond the scope of this paper. We conjecture, however, that the limiting case for each category of states will have the executive acquiring as much authority as possible (though the possibility frontier may be less than full authority).[14]

[13] A famous example of this is the dictator institution practiced by the Roman Republic for several centuries. This institution was common during periods of crisis—famines, epidemics, internal insurrections, external attacks. On such occasions, the Senate appointed an individual—the dictator—who was given a brief period (usually six months) in which to exercise extraordinary authority, including the suspension of civil liberties and other constitutionally guaranteed rights, in order to restore normal order. After this period, in a manner practiced by Cincinnatus, the extraordinary authority was relinquished. In terms of our model, the dictator institution is a state-contingent extension of authority that is withdrawn when the designated states of the world no longer obtain. Yet, history teaches us that even these provisions were not enough. After all, the institution of dictator was abused by Sulla in 80 BCE and ultimately brought to an end in 45 BCE when Julius Caesar forced the Senate to name him "dictator for life," which effectively ended the Republic, precipitated civil war, and led eventually to the rise of an imperial regime.

[14] This conjecture builds on observations drawn from simple modifications of our set-up. Suppose that $\overline{\theta} < \frac{1}{1-\overline{\beta}}$ (but $\overline{\theta} > \frac{1-2\kappa^C}{2(1-\beta)}$). Under these parameter values, when the executive's stock of existing authority is low ($\max \mathcal{R}_t = a$ is relatively small) and when the situation is dire (θ_t is sufficiently high), the court is willing to uphold a full authority claim ($a_t = 1$) over the domain ($d_t(\theta_t, 1, a, 1) = 0$). As long as this stock remains low, meanwhile, the court's interest in flexibility also leads it to accede to less-than-full authority claims for lower realizations of θ_t. But once the executive has accumulated a large amount of authority ($\max \mathcal{R}_t = a$ is relatively large), the court becomes less concerned about additional flexibility and therefore it overturns full authority claims in all states. Under these circumstances, it is not obvious that the executive will be able to claim any additional authority for any realizations of θ_t. More formally, there exists $\widehat{a} \in (0, 1]$ such that: (i) the court upholds $a_t = 1$ in some states if $\max \mathcal{R}_t = a < \widehat{a}$; (ii) the politician can claim more authority every period as long as $a < \widehat{a}$ (Proposition 2 holds for $a < \widehat{a}$); and (iii), as a result, the lower bound of executive's authority in the limit is at least $\widehat{a}$ ($\lim_{t\to\infty} \max \mathcal{R}_t \geq \widehat{a}$). We cannot precisely characterize the limit of executive authority since the executive has strong incentives to strategically wait for particularly favorable circumstances when her stock of existing authority is relatively low, which allows her to claim authority levels that exceed $\widehat{a}$. This much, however, is certain: even for these smaller values of $\overline{\theta}$, we cannot rule out the possibility of executive absolutism.

Third is the matter of reversals. A court may determine that authority previously falling in the permissible set is no longer permissible, or it may determine that authority previously rejected is now to be allowed. In either case, reversals are most likely to occur when the composition of the court (and hence its jurisprudential ideal, κ^C) changes. Such changes are unmodeled in our approach, as are the reputational costs that presumably accompany rejections of past precedent. Introducing them, though, assuredly would qualify the role of precedent as we have modeled it, and would possibly affect the dynamics of authority acquisition.[15]

All of these observations suggest that a richer elaboration of precedent may yield results that differ from the conclusions we draw. Indeed, they raise deep issues about why courts so strenuously rely on a relatively strict adherence to precedent in the first place (Clark 2016, Fox and Vanberg 2014, Bueno de Mesquita and Stephenson 2002.). By adopting an uncompromising view of precedent, however, the model on offer clarifies its implications for judicial behavior when conjoined with an equally uncompromising need for flexibility. Insisting upon both, we show, the court eventually relinquishes to the executive every bit of authority to be had. If not as a matter of empirical prediction, then certainly as a matter of institutional design, this is a fact worth knowing.

6 Conclusion

Our model pits the authority aspirations of an executive politician against the restraints of judicial review. Both players in the model, the politician and the court, have preferences over authority. The politician's is unbounded, the better to prosecute her policy agenda, to feel efficacious, to leave a legacy, or to accomplish whatever else may motivate her; all these objectives are monotonic in authority. The court, by contrast, is motivated by jurisprudential considerations, today and into the future. These constitutional principles, however, are adjusted each period to reflect the period-specific nature of the times. The court, therefore, seeks to balance what seems optimal today in terms of its principles, its concerns about the present situation, and its assessment of future contextual circumstances. And this is the opening exploited strategically by the politician. The

[15]Much of the effect of reversal depends on the assumptions one makes. If the court can reverse past decisions after the executive has acquired full authority, then, *by assumption*, executive absolutism becomes impossible. But if full authority over a domain becomes permanent after it is granted, and if the court continues to value flexibility (e.g., it can only modify the permissible and impermissible sets from time to time or at great cost), then the forces at play in our model would continue to inform the judiciary's behavior and we should expect executive absolutism to arise again.

court's need to balance present payoffs against the need for flexibility in light of future possibilities enables the politician to push the authority envelope until all that is available is eventually acquired.

Notice that this finding is recovered from an austere and rather idealized setting. Plenty of scholars have recognized numerous institutional weaknesses associated with the judiciary: lack of enforcement powers, informational asymmetries, political vulnerabilities, and so forth (Bickel 1955; Rosenberg 1992). The court in our model does not suffer any of these liabilities; and yet, still, it cannot put a stop to the politician's claims for more authority.

This does not mean that the court has no effect. As Lemma 1 reports, it is always possible for the politician to "go too far," and to be punished for her transgression. But "going too far" is determined endogenously in our model—the result of the court balancing today's payoff against future concerns for flexibility—and, as Proposition 1 reports, this provides the politician with the opportunity, if prudent, to expand her authority. Together, these results imply that complete and total acquisition of authority by the executive is inevitable for all possible equilibrium paths (Proposition 2).

Two extensions suggest that this (rather alarming) conclusion is robust. First, we examine electoral competition. Perhaps, one might conjecture, the prospect of competition between political opponents with opposed policy objectives will deter an incumbent executive from maxing out on authority acquisition for fear of handing off enhanced authority to an opponent who will make policy mischief. Proposition 4, however, stipulates that such behavior occurs only if today's office-holder is highly likely to lose office tomorrow; that is, only if the incumbency disadvantage is sufficiently large. Hence, in many situations (especially the United States today), Proposition 2 applies and electoral competition is not a bulwark against the extension of executive authority.

A second extension proposes a seemingly less potent judicial role. In the baseline model, if the court overturns an authority claim, then the previously authorized level is imposed in perpetuity. As Proposition 2 tells us, though, the court's club behind the door has the counter-intuitive effect of being no constraint at all—at least not in the limit. Suppose instead, then, that a court rejection conveys only a present limitation on unacceptable authority, and does not shut off the prospect of further increases in authority altogether; an overruling, that is, reduces the court's discretion set but does not eliminate it. Proposition 5 establishes that this judicial rule essentially reproduces the result under the more draconian rule. To be sure, on-the-equilibrium-path developments will differ between the two rules. But in either case, limiting outcomes look a good deal like executive absolutism. The baseline judicial rule will produce full executive authority, while the modified judicial rule will fall short of that only if the executive, herself, opts to adopt a strategy that yields something less.

There are additional avenues of generalization that we have not explored. Future work may wish to allow the court to revisit previously rejected authority claims or treat the court as a draw each period from a distribution of possible courts. Herein, though, we have established at least a prime facie case for suspending the almost religious faith that separation of powers, all by itself, guards against executive absolutism.

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Online Appendix

(Not for publication)

A Proofs for the baseline model

From the reasoning in the text, recall that:

(a) Given our assumption on the construction of precedent ($\mathcal{R}_0 = \{0\}$ and $\mathcal{R}_{t+1} = [0, a_t]$ if $a_t \notin \mathcal{R}_t \cup \mathcal{W}_t$ and $d_t = 0$), in any equilibrium $\mathcal{R}_t$ is an interval from 0 to some upper bound.

(b) In the proofs, we focus on the case when for all $t' < t$, then $d_{t'} = 0$ (otherwise, $\mathcal{R}_t \cup \mathcal{W}_t = [0, 1]$ under the assumption).

(c) Given the office-holder's utility function and the constraint precedents impose on the court, in any equilibrium, for all periods t, the politician's authority choice satisfies $a_t \geq \max \mathcal{R}_t$. For all $a_t \leq \max \mathcal{R}_t$, the executive's authority claim is not overturned. Since the politician's utility is increasing in y_t and $y_t = a_t$ for all $a_t \in \mathcal{R}_t$, $a_t = \max \mathcal{R}_t$ strictly dominates any choice of authority strictly smaller than $\max \mathcal{R}_t$.

Using (a)-(c), we can thus define $\mathcal{R}_t := [0, a_{t-1}]$, with $a_0 = 0$.

(d) Finally, the politician never selects any authority above 1 in the baseline model so we can (without loss of generality) assume that the minimum of the impermissible set $\mathcal{W}_t$ is 1.

Proof of Lemma 1

Denote the court's continuation value in period t (i.e., her expected utility present and future at the beginning of period t) as a function of past sanctioned authority claim $\max \mathcal{R}_t = a$ and past overturned claim $min \mathcal{W}_t = a'$: $V(a, a')$. Note that under the assumption and our slight change of notation $a' \in \{a, 1\}$. Note further that we do not include time subscript in the continuation value since we consider a Markov Perfect Equilibrium.

When an authority claim has been overturned in a previous period so $\min \mathcal{W}_t = a \in [0, 1]$, the court's continuation value is simply:

$$V(a,a) = -\frac{E_\theta\big(a-\kappa^C-\theta\big)^2}{1-\beta}. \tag{A.1}$$

Observe that since we consider Markov Perfect Equilibrium, all relevant information for players' actions is contained in the state variables (the bounds of the permissible and impermissible sets). Hence, we can drop the time indices from the continuation values. Further, because in this lemma we assume equilibrium existence, these continuation values can be assumed to exist.

Absent previous overturning, given $\max\mathcal{R}_t = a \in [0,1]$ and faced with an authority claim $a_t \notin \mathcal{R}_t \cup \mathcal{W}_t$, the court decides to uphold the claim if and only if:

$$-\big(a_t-\kappa^C-\theta_t\big)^2 + \beta V(a_t,1) \geq -\big(a-\kappa^C-\theta_t\big)^2 + \beta V(a,a) \tag{A.2}$$

If the executive proposes $a_t = 1$, the court knows that if it upholds, R will exert full authority in the future. Hence, C's continuation value is then $V(1,1) = \frac{E_\theta\left(-(1-\kappa^C-\theta')^2\right)}{1-\beta}$. Hence, the court upholds $a_t = 1$ in state θ if and only if $-\big(1-\kappa^C-\theta\big)^2+\beta\frac{E_{\theta'}\left(-(1-\kappa^C-\theta')^2\right)}{1-\beta} \geq -\big(a-\kappa^C-\theta\big)^2+\beta\frac{E_{\theta'}\left(-(a-\kappa^C-\theta')^2\right)}{1-\beta}$. Simple but tedious computation reveals that this inequality is satisfied for all θ such that $\theta \geq \frac{\frac{1+a}{2}-\kappa^C}{1-\beta}$ (strictly if the inequality is strict). Note that $\frac{\frac{1+a}{2}-\kappa^C}{1-\beta} < \frac{1}{1-\beta} < \overline{\theta}$. $\square$

Proof of Proposition 1

Recall from the main text that we define R's strategy as $a_t(\theta_t, a, 1)$ (with θ_t the state in period t and $a = \max\mathcal{R}_t$, and $1 = \min\mathcal{W}_t$ under the assumption and slight abuse of notation). Using the notation introduced in the proof of the previous lemma, observe then that in any equilibrium, we can write (ignoring arguments in a_t) $V(a_t,1) = E_\theta\Big[\max\{-\big(a_{t+1}(\theta,a_t,1)-\kappa^C-\theta\big)^2 + \beta V(a_{t+1}(\theta,a_t,1),1), -\big(a_t-\kappa^C-\theta\big)^2+\beta V(a_t,a_t)\}\Big]$. By Lemma 1, for all $\theta_t \geq \widehat{\theta}(a_t)$, the court prefers full authority claim to the status quo a_t and $a_{t+1}(\theta_t,a_t,1) = 1$ since full authority forever is the politician's preferred outcome. This implies that for any $a_t < 1$, for all $\theta_{t+1} \in (\widehat{\theta}(a_t), \overline{\theta}]$ (a non-empty interval), $-\big(a_{t+1}(\theta_{t+1},a_t,1)-\kappa^C-\theta_{t+1}\big)^2+\beta V(a_{t+1}(\theta_{t+1},a_t,1),1) > -\big(a_t-\kappa^C-\theta_{t+1}\big)^2+\beta V(a_t,a_t)$. Hence, necessarily $V(a_t,1) > E_\theta\Big[-\big(a_t-\kappa^C-\theta\big)^2+\beta V(a_t,a_t)\Big] = V(a_t,a_t)$ for any $a_t \in [0,1)$. Further, $V(a_t,1) \geq F(\widehat{\theta}(a_t))E_t\Big[-\big(a_t-\kappa^C-\theta\big)^2+\beta V(a_t,a_t)|\theta \leq \widehat{\theta}(a_t)\Big]+(1-F(\widehat{\theta}(a_t))E_t\Big[-\big(1-\kappa^C-

$\theta)^2 + \beta V(1,1)|\theta > \widehat{\theta}(a_t)\Big]$ so $V(a_t,1) - V(a_t,a_t) \geq (1 - F(\widehat{\theta}(a_t)))\Bigg(E_t\Big[-\big(1-\kappa^C-\theta\big)^2 + \beta V(1,1)|\theta > \widehat{\theta}(a_t)\Big] - E_t\Big[-\big(a_t - \kappa^C - \theta\big)^2 + \beta V(a_t,a_t)|\theta > \widehat{\theta}(a_t)\Big]\Bigg) = (1-a_t)\int_{\widehat{\theta}(a_t)}^{\overline{\theta}}\Big(2\theta - \frac{1+a_t-2\kappa^C}{1-\beta}\Big)\,dF(\theta)$ (using Lemma 1).

We now prove that there exists $\gamma(\theta,a) > 0$ such that for all $\gamma \in (0,\gamma(\theta,a))$, $-(a+\gamma-\kappa^C-\theta)^2 + \beta V(a+\gamma,1) \geq -(a-\kappa^C-\theta)^2 + \beta V(a,a)$. This is equivalent to showing that the following inequality holds $-2\gamma\big(a+\gamma/2-\kappa^C-\theta\big) + \beta\Big[V(a+\gamma,1) - V(a,a)\Big] \geq 0$. To do so, we first prove that there exists a $\overline{\gamma}$ and a $\xi > 0$ such that $V(a+\gamma,1) - V(a,a) \geq \xi$ for all $\gamma \in [0,\overline{\gamma})$.

Suppose that $V(a,1)$ is continuous in a neighborhood of a. Then using $V(a,1) > V(a,a)$, there exists $\overline{\gamma} > 0$ such that for all $\gamma \in [0,\overline{\gamma})$, $V(a+\gamma,1) > V(a,a)$ (with $\overline{\gamma}$ either the upper bound of say neighborhood or the smallest solution to $V(a+\gamma,1) = V(a,a)$ in say neighborhood).

We now assume that $V(a,1)$ exhibits a discontinuity at some $a \in [0,1)$. For simplicity, we assume that there exists $\overline{\gamma} \in (0,1-a]$ such that for all $\gamma \in (0,\overline{\gamma})$, $V(a+\gamma,1) \leq V(a,a)$ (the proof can be extended to take care of the case when there exists $\epsilon \to 0$ such that for all $\gamma \in (0,\overline{\gamma}) \setminus \{\epsilon\}, V(a+\gamma,1) > V(a,a)$ and $V(a+\epsilon,1) \leq V(a,a)$).[16] Recall from the end of the first paragraph that $V(a+\gamma,1) - V(a+\gamma,a+\gamma) \geq (1-a-\gamma)\int_{\widehat{\theta}(a+\gamma)}^{\overline{\theta}}\Big(2\theta - \frac{1+a+\gamma-2\kappa^C}{1-\beta}\Big)\,dF(\theta)$. Thus, there exists $\widehat{\gamma} \in (0,\overline{\gamma})$ (a well-defined interval since $\overline{\gamma} > 0$) such that there exist $\phi > 0$ and $\psi > 0$ such that for all $\gamma \in (0,\widehat{\gamma})$, $1-a-\gamma \geq \phi$ ($1-a-\gamma > 1-a-\widehat{\gamma} > 0$ since $\widehat{\gamma} < \overline{\gamma} \leq 1-a$) and $\int_{\widehat{\theta}(a+\gamma)}^{\overline{\theta}}\Big(2\theta - \frac{1+a+\gamma-2\kappa^C}{1-\beta}\Big)\,dF(\theta) \geq \psi$ (by Lemma 1, recall that $\widehat{\theta}(a) < \overline{\theta}$ for all $a \in [0,1]$). Hence, there exists $\chi > 0$ (e.g., $\chi = \phi\psi$) such that for all $\gamma \in (0,\widehat{\gamma})$, $V(a+\gamma,1) - V(a+\gamma,a+\gamma) \geq \chi$. Under the assumption that $V(a+\gamma,1) \leq V(a,a)$ for all $\gamma \in (0,\widehat{\gamma}) \subset (0,\overline{\gamma})$, we then obtain that for all $\gamma \in (0,\widehat{\gamma})$, $|V(a+\gamma,a+\gamma) - V(a,a)| \geq \chi$. This means that for all $\eta \in (0,\chi)$ (a well defined interval given $\chi > 0$), $|V(a+\gamma,a+\gamma) - V(a,a)| > \eta$ for all $\gamma \in (0,\widehat{\gamma})$ violating the finding that $V(a',a')$ is continuous in a'. Hence, even if $V(a,1)$ exhibits a discontinuity at a, it must be that there exists $\overline{\gamma} > 0$ such that for all $\gamma \in (0,\overline{\gamma})$, $V(a+\gamma,1) > V(a,a)$.

In turn, $-2\gamma\big(a+\gamma/2-\kappa^C-\theta\big)$ is continuous in γ and goes to 0 as $\gamma \to 0$. Given that there exists $\overline{\gamma} > 0$ such that $\beta(V(a+\gamma,1) - V(a,a))$ is bounded below away from zero for all $\gamma \in (0,\overline{\gamma})$ (by

[16] Obviously, if the discontinuity is such that for all $\gamma \in (0,\overline{\gamma})$, $V(a+\gamma,1) > V(a,a)$, the claim holds. Note, further, that, in practice, $\overline{\gamma}$ and all the bounds below depend on a, we omit this dependence in the notation for ease of exposition.

the reasoning above), for all θ and all $a = \max \mathcal{R}_t \in [0, 1)$, there exists $\gamma(\theta, a) > 0$ such that the court upholds any new authority claim satisfying $a_t \in [a, a + \gamma(a, \theta)]$. Denote $\overline{a}(\theta, a) = a + \gamma(\theta_t, a)$ to complete the proof of the Lemma. $\square$

Lemma A.1. *In any equilibrium, the executive never makes an authority claim which is overturned: The executive's strategy $a_t(\theta, a, 1)$ satisfies $d_t(\theta, a_t(\theta, a, 1), a, 1) = 0$ in every period t and for all θ, a.*

Proof. Suppose there exists a θ and a such that in equilibrium the executive picks $a_t(\theta, a, 1)$ and is overturned. R's continuation value is then $\frac{v(a)}{1-\beta}$. We now show that there is a profitable deviation upon reaching the state θ with permissible set a (keeping the executive's strategy unchanged in any other state or for any other authorized claims). Suppose that instead the executive picks $\hat{a}_t(\theta, a, 1) = a$ and then follows her prescribed strategy in all other states and sets of precedent. Since for all permissible sets $[0, a'] \subset [0, 1]$, there exists $\widehat{\theta}(a') < \overline{\theta}$ such that $a_t(\theta, a', 1) = 1$ for all $\theta \in [\widehat{\theta}(a'), \overline{\theta}]$, it must be that the deviation yields a continuation value strictly greater than $\frac{v(a)}{1-\beta}$. Hence, we have constructed a profitable deviation. $\square$

Proof of Proposition 2

Using Lemma A.1, we know that the court never overturns the politician's authority claim on the equilibrium path. From the proof of Lemma 1, we know that for all sets of precedents satisfying $\max \mathcal{R} = a < 1$, there exists a positive probability (i.e., $F(\widehat{\theta}(a))$) that circumstances are such that the office-holder makes a full authority claim ($a_t(\theta_t, \mathcal{R}_t, \mathcal{W}_t) = 1$) and the court upholds. Joining both facts together yield the proposition. $\square$

Before proving Lemma 2, the next technical lemmas prove the existence and uniqueness of continuation values for the court and the executive when P in each period either claims full authority if possible or makes the court indifferent between upholding and overturning the claim. We first prove by construction that the court's continuation value exists and is unique.

Lemma A.2. *Suppose that in all periods $t' \geq t$, the court anticipates that R's strategy satisfies if $\max R_{t'} = a \in [0, 1)$, $a_{t'}(\theta_{t'}, a, 1) = 1$ if $\theta_{t'} \geq \widehat{\theta}(a)$ and $a_{t'}(\theta_{t'}, a, 1)$ leaves the court's indifferent* *between upholding and overturning $a_{t'}(\cdot)$ otherwise. In period t, the court's continuation value exists and is unique.*

Proof. Denote the court's continuation value $V(\cdot)$ and assume it exists. Under the specified strategy, in all period t such that $\max \mathcal{R}_t = a \in [0,1)$ and $\theta_t < \widehat{\theta}(a)$, $a_t(\theta_t, a, 1)$ satisfies:

$$-(a_t(\theta,a,1)-\kappa^C-\theta)^2+\beta V(a_t(\theta,a,1),1) = -(a-\kappa^C-\theta)^2+\frac{\beta}{1-\beta}E_\theta(-(a-\kappa^C-\theta)^2) \quad \text{(A.3)}$$

We can then rewrite $V(a,1)$ as

$$\begin{aligned}
V(a,1) =& \int_{-\bar{\theta}}^{\widehat{\theta}(a)} -(a_t(\theta,a,1)-\kappa^C-\theta)^2+\beta V(a_t(\theta,a,1),1)dF(\theta)\\
&+\int_{\widehat{\theta}(a)}^{\bar{\theta}} -(1-\kappa^C-\theta)^2+\beta\frac{E_\theta(-(1-\kappa^C-\theta)^2)}{1-\beta}dF(\theta)\\
=&\int_{-\bar{\theta}}^{\widehat{\theta}(a)} -(a-\kappa^C-\theta)^2+\beta\frac{E(-(a-\kappa^C-\theta)^2)}{1-\beta}dF(\theta)\\
&+\int_{\widehat{\theta}(a)}^{\bar{\theta}} -(1-\kappa^C-\theta)^2+\beta\frac{E(-(1-\kappa^C-\theta)^2)}{1-\beta}dF(\theta) \quad \text{(using Equation A.3)}\\
=&\frac{1}{1-\beta}\big(-F(\widehat{\theta}(a))(a-\kappa^C)^2-(1-F(\widehat{\theta}(a)))(1-\kappa^C)^2-Var(\theta)\big)\\
&+\int_{-\bar{\theta}}^{\widehat{\theta}(a)} 2(a-\kappa^C)\theta dF(\theta)+\int_{\widehat{\theta}(a)}^{\bar{\theta}} 2(1-\kappa^C)\theta dF(\theta) \quad \text{(decomposing and using } E_\theta(\theta)=0)\\
=&\frac{1}{1-\beta}\big(-(a-\kappa^C)^2-(1-F(\widehat{\theta}(a)))(1-a)(a+1-2\kappa^C)-Var(\theta)\big)+\int_{\widehat{\theta}(a)}^{\bar{\theta}} 2(1-a)\theta dF(\theta)\\
=&\frac{1}{1-\beta}\left(-(a-\kappa^C)^2-Var(\theta)+(1-a)\int_{\widehat{\theta}(a)}^{\bar{\theta}} 2((1-\beta)\theta+\kappa^C)-(a+1)dF(\theta)\right) \qquad \text{(A.4)}
\end{aligned}$$

Equation A.4 directly shows (i) the continuation value exists, (ii) it is unique, and (iii) it is continuous and differentiable in a. □

Having established the existence and uniqueness of the court's continuation value given P's strategy, we now show that in each period, the court uses a threshold rule to decide whether to uphold or overturn (anticipating P's future actions).

Lemma A.3. *Suppose that in all periods $t' > t$, the court anticipates that P's strategy satisfies if $\max R_{t'} = a \in [0,1)$, $a_{t'}(\theta_{t'}, a, 1) = 1$ if $\theta_{t'} \geq \widehat{\theta}(a)$ and $a_{t'}(\theta_{t'}, a, 1)$ leaves the court's indifferent* *between upholding and overturning $a_{t'}(\cdot)$ otherwise. Then in period t, for all $\max R_t = a \in [0,1)$ and all $t_t < \widehat{\theta}(a)$, there exists a unique $\overline{a}(\theta_t, a) \in (a,1)$ such that the court upholds authority claim a_t if and only if $a_t \le \overline{a}(\theta_t, a)$.*

Proof. Using Equation A.4, the court upholds in period t a claim a_t if and only if

$$\begin{aligned}
&-(a-\kappa^C-\theta)^2 - \beta\frac{(a-\kappa^C)^2}{1-\beta} \\
&\quad \le -(a_t-\kappa^C-\theta)^2 - \beta\frac{(a_t-\kappa^C)^2}{1-\beta} + \frac{\beta}{1-\beta}(1-a_t)\int_{\widehat{\theta}(a_t)}^{\overline{\theta}} 2((1-\beta)\theta+\kappa^C)-(a_t+1)dF(\theta)
\end{aligned} \tag{A.5}$$

To show existence and uniqueness, rearrange the inequality in (A.5) as:

$$\frac{1}{1-\beta}(a_t-a)(a_t+a-2(\kappa^C+(1-\beta)\theta)) \le \frac{\beta}{1-\beta}(1-a_t)\int_{\widehat{\theta}(a_t)}^{\overline{\theta}} 2((1-\beta)\theta+\kappa^C)-(a_t+1)dF(\theta)$$

$$\Leftrightarrow 2(\kappa^C+(1-\beta)\theta)-(a+a_t)+\beta\frac{1-a_t}{a_t-a}\int_{\widehat{\theta}(a_t)}^{\overline{\theta}} 2((1-\beta)\theta+\kappa^C)-(a_t+1)dF(\theta) \ge 0 \tag{A.6}$$

For all, $a_t \le a$, the court is constrained to uphold. We thus focus on the interval $[a,1]$. Denote

$$H(a_t;\theta,a) = 2(\kappa^C+(1-\beta)\theta)-(a+a_t)+\beta\frac{1-a_t}{a_t-a}\int_{\widehat{\theta}(a_t)}^{\overline{\theta}} 2((1-\beta)\theta+\kappa^C)-(a_t+1)dF(\theta) \tag{A.7}$$

That is, $H(\cdot)$ is the left-hand side of the inequality in (A.6). Observe that $H(\cdot)$ is strictly decreasing with a_t. To see this, notice that

$$\begin{aligned}
\frac{\partial H(a_t;\theta,a)}{\partial a_t} &= -1-\beta\frac{1-a}{(a_t-a)^2}\int_{\widehat{\theta}(a_t)}^{\overline{\theta}} 2((1-\beta)\theta+\kappa^C)-(a_t+1)dF(\theta) \\
&\quad + \beta\frac{1-a_t}{a_t-a}\left(-\frac{\partial\widehat{\theta}(a_t)}{\partial a_t}\right)\Big(2((1-\beta)\widehat{\theta}(a_t)+\kappa^C)-(a_t+1)\Big) f(\widehat{\theta}(a_t))
\end{aligned}$$

Given $\widehat{\theta}(a_t) = \frac{\frac{1+a_t}{2}-\kappa^C}{1-\beta}$, the term on the second line above is equal to zero. Hence,

$$\frac{\partial H(a_t;\theta,a)}{\partial a_t} = -1-\beta\frac{1-a}{(a_t-a)^2}\int_{\widehat{\theta}(a_t)}^{\overline{\theta}} 2((1-\beta)\theta+\kappa^C)-(a_t+1)dF(\theta) < 0$$

since $2((1-\beta)\theta + \kappa^C) - (a_t + 1) > 0$ for all $\theta > \widehat{\theta}(a_t)$.

Further, by definition of $\widehat{\theta}(a)$, $H(1;\theta,a) < 0$. In addition, $\lim_{a_t \to a} H(a_t;\theta,a) = \infty$. Hence there exists a unique $\overline{a}_t(\theta,a) \in (a,1)$ such that the court upholds a_t if and only if $a_t \leq \overline{a}_t(\theta,a)$. $\square$

Having established the continuation value and the strategy of the court, we can now turn to the continuation value of the office-holder.[17]

Lemma A.4. *Suppose that in all periods $t' \geq t$, the court anticipates that R's strategy satisfies if $\max R_{t'} = a \in [0,1)$, $a_{t'}(\theta_{t'}, a, 1) = 1$ if $\theta_{t'} \geq \widehat{\theta}(a)$ and $a_{t'}(\theta_{t'}, a, 1)$ leaves the court's indifferent between upholding and overturning $a_{t'}(\cdot)$ otherwise, in period t, R's continuation value exists and is unique. Further, the continuation value is differentiable and its derivative with respect to a is bounded.*

Proof. Denote $W(\theta,a,1)$ R's payoff as a function of the circumstances θ_t and precedents $a = \max \mathcal{R}_t$ and (again slightly abusing notation) $\min \mathcal{W}_t = 1$. Using Proposition 1, R only chooses $a_t \in [a, \overline{a}_t(\theta_t, a)]$, with, extending the notation introduced in Lemma A.3, $\overline{a}_t(\theta_t,a) = 1$ if $\theta_t \geq \widehat{\theta}(a)$ or $a = 1$. We can then write:

$$W(\theta_t, a, 1) = \max_{a_t \in [a, \overline{a}_t(\theta_t,a)]} v(a_t) + \beta E_\theta\big(W(\theta, a_t, 1)\big) \tag{A.8}$$

To show existence, uniqueness, and differentiability, we use the Blackwell's theorem (Blackwell, 1965; Stokey and Lucas, 1989). A very clear proof, which serves as a model for the present paper, can be found in Baker and Mezzetti (2012, Lemma 1).

Let $\mathbf{S}$ be the metric space of continuously differentiable, real-valued function $\omega : [-\overline{\theta}, \overline{\theta}] \times [0,1] \to \mathbb{R}$. Let the metric on $\mathbf{S}$ be $\rho(\omega^0, \omega^1) = \sup_{\theta \in [-\overline{\theta}, \overline{\theta}], a \in [0,1]} |\omega^0(\theta,a) - \omega^1(\theta,a)|$. Define the operator T mapping the metric space $\mathbf{S}$ into itself as follows:

$$T\omega(\theta_t, a) = \max_{a_t \in [a, \overline{a}_t(\theta_t,a)]} v(a_t) + \beta E_\theta\big(\omega(\theta, a_t)\big), \tag{A.9}$$

with $\omega(\cdot,\cdot)$ an original guess for the continuation value and $T\omega(\cdot)$ the updated guess.

[17] As it will become clear in the proof of Lemma A.4, we proceed slightly differently than for the court's. For the court's continuation value, we look at the ex-ante period t continuation value (before the circumstances θ_t are realized). For R, we look at the interim continuation value (after θ_t is drawn). This difference of approach is to simplify the proof, but has no bearing on the main result.

First, note that $\overline{a}_t(\theta_t, a)$, implicitly defined as the solution to $H(a_t; \theta_t, a) = 0$, with $H(\cdot)$ defined in Equation A.7, is continuously differentiable. Indeed, by assumption $F(\cdot)$ is continuously differentiable so all the terms in $H(\cdot)$ are continuously differentiable and so is the solution of the equation $H(a_t; \theta_t, a) = 0$.

We now show that $W(\cdot)$ defined in Equation A.8 exists and is unique by proving that T is a contraction mapping. This requires to show that T satisfies monotonicity and discounting. Monotonicity is easily verified: if $\omega^1(\theta_t, a) \geq \omega^0(\theta_t, a)$ for all $\theta_t, a \in [-\overline{\theta}, \overline{\theta}] \times [0, 1]$, then from Equation A.9 $T\omega^1(\theta_t, a) \geq T\omega^0(\theta_t, a)$. For discounting, let z be a non negative constant map defined by $z(\theta_t, a) = z$ for all $\theta_t, a \in [-\overline{\theta}, \overline{\theta}] \times [0, 1]$. Let the map $(\omega+z)$ be defined by $(\omega+z)(\theta_t, a) = \omega(\theta_t, a)+z$. From Equation A.9, it can easily be checked that $T(\omega + z)(\theta_t, a) = T\omega(\theta_t, a) + \beta z$. Since $\beta \in (0, 1)$, discounting holds as well. Thus, T is a contraction. Its unique fixed point is the continuously differentiable real-valued function $W(\cdot)$ defined in Equation A.8.

We finally prove that the derivative of $W(\cdot)$ with respect to a is bounded. Consider the set $\overline{\mathbf{S}}$ the metric space of continuously differentiable, real-valued function $\omega : [-\overline{\theta}, \overline{\theta}] \times [0, 1] \to \mathbb{R}$, whose derivative with respect to their second argument is bounded. The set $\overline{\mathbf{S}}$ is a subset of the set $\mathbf{S}$ so to prove the result we need to show that T maps $\overline{\mathbf{S}}$ onto itself. For this denote K^v a finite upper bound on $v'(\cdot)$ ($v'(y) \leq K^v$ for all y). Consider a function $\omega(\cdot)$ satisfying $|\omega_a(\theta, a)| < K^\omega$ for some $K^\omega > 0$ and for all $\theta_t, a \in [-\overline{\theta}, \overline{\theta}] \times [0, 1]$ (with ω_l the derivative with respect to the variable l). Denote $a_t^* = \arg \max_{a_t \in [a, \overline{a}_t(\theta_t, a)]} v(a_t) + \beta E_\theta\big(\omega(\theta, a_t)\big)$ assuming uniqueness (the proof is slightly more complicated, but similar otherwise). Using Equation A.9, we obtain:

$$\frac{\partial T\omega(\theta_t, a)}{\partial a} = \begin{cases} 0 & \text{if } a_t^* \in (a, \overline{a}_t(\theta_t, a)) \\ v'(a) + \beta E_\theta(\omega_a(\theta, a)) & \text{if } a_t^* = a \\ \frac{\partial \overline{a}_t(\theta_t, a)}{\partial a}\Big(v'(\overline{a}_t(\theta_t, a)) + \beta E_t(\omega_a(\theta_t, \overline{a}_t(\theta_t, a)))\Big) & \text{if } a_t^* = \overline{a}_t(\theta_t, a) \end{cases}$$

Using Equation A.6, it can be checked that $\frac{\partial \overline{a}_t(\theta_t, a)}{\partial a}$ is bounded (we prove this point formally below). Hence, there exist $K^{T\omega} < \infty$ such that $\left|\frac{\partial T\omega(\theta_t, a)}{\partial a}\right| < K^{T\omega}$. Hence T maps function with bounded derivative into function with bounded derivative so $W(\theta, a)$ satisfies $W_a(\theta, a)$ is bounded. $\square$

Proof of Lemma 2

From Proposition 1, we know that if $\theta_t \geq \widehat{\theta}(a)$ for any $\max \mathcal{R}_t = a < 1$ or if $a = 1$, then $a_t(\theta_t, a) = 1$ and the court upholds. In what follows, we exclusively focus on periods t satisfying $\max \mathcal{R}_t = a < 1$ and $\theta_t < \widehat{\theta}(a)$.

From Lemma A.3, we know that if the court anticipates that R's strategy satisfies for all $t' > t$: if $\max R_{t'} = a' \in [0, 1)$, $a_{t'}(\theta_{t'}, a', 1) = 1$ if $\theta_{t'} \geq \widehat{\theta}(a')$ and $a_{t'}(\theta_{t'}, a', 1) = \overline{a}_{t'}(\theta_{t'}, a')$, then in period t, the court plays a threshold strategy in which she upholds if and only if $a_t \leq \overline{a}_t(\theta_t, a)$. We now demonstrate that there exists $\widehat{\beta}$ such that if $\beta \leq \widehat{\beta}$ in each period t, R makes a new authority claim satisfying $a_t(\theta_t, a, 1) = \overline{a}(\theta_t, a)$.

Fix $a, \theta_t \in [0, 1) \times [-\overline{\theta}, \widehat{\theta}(a))$. R prefers $a_t = \overline{a}(\theta_t, a)$ to any other authority claim if and only if $v(\overline{a}(\theta_t, a)) + \beta E_\theta\big(W(\theta, \overline{a}(\theta_t, a))\big) \geq \max\limits_{a' \in [a, \overline{a}(\theta_t, a)]} v(a') + \beta E_\theta\big(W(\theta, a')\big)$. A sufficient condition is that the function $M(a') = v(a') + \beta E_\theta\big(W(\theta, a')\big)$ is weakly increasing in a' for all $a' \in [a, \overline{a}(\theta_t, a)]$. By Lemma A.4, $M(a')$ is continuously differentiable so we can write $\frac{\partial M(a')}{\partial a'} = v'(a') + \beta E_t\big(W_a(\theta, a')\big)$. We know that $W_a(\theta, a)$ satisfies $W_a(\theta, a) \geq -K^W$ for all $\theta, a \in [-\overline{\theta}, \overline{\theta}] \times [0, 1]$ for some finite K^W (see Lemma A.4). Hence $\frac{\partial M(a')}{\partial a'} \geq v'(a') - \beta K^W$. If $K^W = 0$ (i.e., $W_a(\theta_t, a)$ is always weakly increasing), define $\widehat{\beta} = \overline{\beta}$. If $K^W > 0$, define $\widehat{\beta} = \min\limits_{a' \in [0,1]} \frac{v'(a')}{K^W} > 0$ since K^W is finite. For all $\beta \leq \widehat{\beta}$, $M(a')$ is strictly increasing in a' for $a' \in [a, \overline{a}(\theta_t, a)]$ for all $\theta_t, a \in [-\overline{\theta}, \widehat{\theta}(a)] \times [0, 1)$ so $a_t = \overline{a}(\theta_t, a)$ is a best response to the court's strategy. $\square$

Proof of Lemma 3

Point (i) follows directly from the proof of Proposition 1.

For the remaining points, we ignore arguments for ease of exposition, from Lemma A.3, recall that $\overline{a}$ is the unique solution to $H(\overline{a}; \theta, a) = 0$ with

$$H(a_t; \theta, a) = 2(\kappa^C + (1 - \beta)\theta) - (a + a_t) + \beta \frac{1 - a_t}{a_t - a} \int_{\widehat{\theta}(a_t)}^{\overline{\theta}} 2((1 - \beta)\theta + \kappa^C) - (a_t + 1) dF(\theta),$$

strictly decreasing in a_t.

$H(\cdot)$ is clearly $\mathcal{C}^1$ in all arguments given $\widehat{\theta}(a) = \frac{\frac{1+a}{2} - \kappa^C}{1-\beta}$. Thus we can apply the Implicit Function

Theorem. We obtain (using H_z to denote the partial derivative with respect to z):

$$H_{a_t}(\overline{a};\theta,a)\overline{a}_\theta + 2(1-\beta) = 0,$$

which immediately proves point (ii) since $H_{a_t}(\overline{a};\theta,a) < 0$ from Lemma A.3.

For point (iii), notice again that by the Implicit Function Theorem, $\frac{\partial \overline{a}(\theta,a)}{\partial a} = -\frac{H_a(\overline{a};\theta,a)}{H_{a_t}(\overline{a};\theta,a)}$. Since $H_{a_t}(\overline{a};\theta,a) < 0$, $\frac{\partial(\overline{a}-a)}{\partial a}$ has the same sign as $H_a(\overline{a};\theta,a) + H_{a_t}(\overline{a};\theta,a)$.

Using Equation A.7, we obtain

$$H_a(\overline{a};\theta,a) = -1 + \frac{1}{\overline{a}-a}\beta\frac{1-\overline{a}}{\overline{a}-a}\int_{\widehat{\theta}(\overline{a})}^{\overline{\theta}}(2((1-\beta)\theta+\kappa^C) - \overline{a}+1)dF(\theta)$$

and (noting that $2((1-\beta)\widehat{\theta}(a_t)+\kappa^C) - (a_t+1) = 0$ by definition of $\widehat{\theta}(a_t)$)

$$H_{a_t}(\overline{a};\theta,a) = -1 - \frac{1}{\overline{a}-a}\beta\frac{1-a}{\overline{a}-a}\int_{\widehat{\theta}(\overline{a})}^{\overline{\theta}}(2((1-\beta)\theta+\kappa^C) - \overline{a}+1)dF(\theta) - \beta\frac{1-\overline{a}}{\overline{a}-a}(1-F(\widehat{\theta}(\overline{a})).$$

Hence, $H_a(\overline{a};\theta,a) + H_{a_t}(\overline{a};\theta,a) < 0$ and the distance between $\overline{a}(\theta,a)$ and a decreases with a as claimed. □

Proof of Proposition 3

Given $\widehat{\theta}(a) = \frac{\frac{1+a}{2}-\kappa^C}{1-\beta}$, $\widehat{\theta}(a^l) < \widehat{\theta}(a^h)$. From Lemma 3, $\overline{a}(\theta,a)$ is continuously strictly increasing in θ for all $\theta < \widehat{\theta}(a)$. Combining both properties together, there exists $\theta^\dagger(a^l,a^h)$ satisfying the property of the proposition. Note that $\theta^\dagger(a^l,a^h) < \widehat{\theta}(a^l)$ since at $\theta_t = \widehat{\theta}(a^l)$, $\overline{a}(\widehat{\theta}(a^l),a^l) = 1$ and $\overline{a}(\widehat{\theta}(a^l),a^h) < 1$. □

Proof of Corollary 1

Recall that $\overline{a}_t$ (ignoring arguments) is the solution to $H(a_t;\theta,a) = 0$ with

$$H(a_t;\theta,a) = 2(\kappa^C + (1-\beta)\theta) - (a+a_t) + \beta\frac{1-a_t}{a_t-a}\int_{\widehat{\theta}(a_t)}^{\overline{\theta}} 2((1-\beta)\theta+\kappa^C) - (a_t+1)dF(\theta),$$

Recall as well that $\widehat{\theta}(a) = \frac{\frac{1+a}{2}-\kappa^C}{1-\beta}$ and does not depend on the distribution of the states of the world.

Denote $H_J(\cdot)$ the $H(\cdot)$ function associated with the distribution F_J: $H_J(a_t;\theta,a) = 2(\kappa^C+(1-\beta)\theta)-(a+a_t)+\beta\frac{1-a_t}{a_t-a}\int_{\widehat{\theta}(a_t)}^{\overline{\theta}} 2((1-\beta)\theta+\kappa^C)-(a_t+1)dF_J(\theta)$, $J\in\{A,B\}$. To prove the result, it is sufficient that $H_A(a_t;\theta,a)\le H_B(a_t;\theta,a)$ for all a_t (since $H(\cdot)$ is strictly decreasing with a_t). This is equivalent to showing that $\int_{\widehat{\theta}(a_t)}^{\overline{\theta}} 2((1-\beta)\theta+\kappa^C)-(a_t+1)dF_A(\theta) \le \int_{\widehat{\theta}(a_t)}^{\overline{\theta}} 2((1-\beta)\theta+\kappa^C)-(a_t+1)dF_B(\theta)$. Notice that (by integrating by parts):

$$\begin{aligned}\int_{\widehat{\theta}(a_t)}^{\overline{\theta}} 2((1-\beta)\theta+\kappa^C)-(a_t+1)dF_J(\theta) =& \big(2(1-\beta)\overline{\theta}+\kappa^C)-(a_t+1)\big)\\ &-\big(2(1-\beta)\widehat{\theta}(a_t)+\kappa^C)-(a_t+1)\big)F_J(\widehat{\theta}(a_t))\\ &-\int_{\widehat{\theta}(a_t)}^{\overline{\theta}} 2(1-\beta)F_J(\theta)d\theta\end{aligned}$$

By definition of $\widehat{\theta}(a_t)$, $2(1-\beta)\widehat{\theta}(a_t)+\kappa^C)-(a_t+1)=0$. Hence, we just need to compare $\int_{\widehat{\theta}(a_t)}^{\overline{\theta}} F_A(\theta)d\theta$ and $\int_{\widehat{\theta}(a_t)}^{\overline{\theta}} F_B(\theta)d\theta$.

Suppose $\widehat{\theta}(a_t)\ge 0$. Since F_B is a mean preserving spread of F_A, $\int_{-\overline{\theta}}^{\widehat{\theta}(a_t)} F_A(\theta)d\theta \le \int_{-\overline{\theta}}^{\widehat{\theta}(a_t)} F_B(\theta)d\theta$ and $\int_{-\overline{\theta}}^{\overline{\theta}} F_A(\theta)d\theta = \int_{-\overline{\theta}}^{\overline{\theta}} F_B(\theta)d\theta$ (to see this, note that $\int_{-\overline{\theta}}^{\overline{\theta}} \theta dF_J(\theta) = \overline{\theta} - \int_{-\overline{\theta}}^{\overline{\theta}} F_J(\theta)d\theta$ by integrating by parts). Hence, $\int_{\widehat{\theta}(a_t)}^{\overline{\theta}} F_A(\theta)d\theta \ge \int_{\widehat{\theta}(a_t)}^{\overline{\theta}} F_B(\theta)d\theta$. This directly implies $\int_{\widehat{\theta}(a_t)}^{\overline{\theta}} 2((1-\beta)\theta+\kappa^C)-(a_t+1)dF_A(\theta) \le \int_{\widehat{\theta}(a_t)}^{\overline{\theta}} 2((1-\beta)\theta+\kappa^C)-(a_t+1)dF_B(\theta)$.

Suppose now that $\widehat{\theta}(a_t)<0$. Since $F_J(\cdot)$ is symmetric, we have $F_J(-\theta)=1-F_J(\theta)$. Decompose $\int_{\widehat{\theta}(a_t)}^{\overline{\theta}} F_J(\theta)d\theta = \int_{\widehat{\theta}(a_t)}^{0} F_J(\theta)d\theta + \int_{0}^{-\widehat{\theta}(a_t)} F_J(\theta)d\theta + \int_{-\widehat{\theta}(a_t)}^{\overline{\theta}} F_J(\theta)d\theta$. By change of variables, $\int_{\widehat{\theta}(a_t)}^{0} F_J(\theta)d\theta = \int_{-\widehat{\theta}(a_t)}^{0} -F_J(-\theta)d\theta = \int_{-\widehat{\theta}(a_t)}^{0} -(1-F_J(\theta))d\theta = \int_{0}^{-\widehat{\theta}(a_t)}(1-F_J(\theta))d\theta$ (where the second equality uses the symmetry). Hence, $\int_{\widehat{\theta}(a_t)}^{0} F_J(\theta)d\theta = -\widehat{\theta}(a_t) - \int_{0}^{-\widehat{\theta}(a_t)} F_J(\theta)d\theta$ and $\int_{\widehat{\theta}(a_t)}^{\overline{\theta}} F_J(\theta)d\theta = -\widehat{\theta}(a_t) + \int_{-\widehat{\theta}(a_t)}^{\overline{\theta}} F_J(\theta)d\theta$. Since F_B is a mean preserving spread of F_A, by the same reasoning as above, $\int_{-\widehat{\theta}(a_t)}^{\overline{\theta}} F_A(\theta)d\theta \ge \int_{-\widehat{\theta}(a_t)}^{\overline{\theta}} F_B(\theta)d\theta$ so $\int_{\widehat{\theta}(a_t)}^{\overline{\theta}} 2((1-\beta)\theta+\kappa^C)-(a_t+1)dF_A(\theta) \le \int_{\widehat{\theta}(a_t)}^{\overline{\theta}} 2((1-\beta)\theta+\kappa^C)-(a_t+1)dF_B(\theta)$ again. $\square$

Proof of Corollary 2

Throughout, we assume that the executive plays a maximum grab strategy. Before proceeding with the proof, denote $V^C(a,1;\kappa^N)$ the continuation value of a judge with ideal point κ^C when a judge with ideal point κ^N decides on authority extension this period and in the following ones. Note that $V(a,1) = V^C(a,1;\kappa^C)$. Denote further $\overline{a}^N(\theta,a)$ the tolerance threshold of the replacement judge after he takes over the court and let $\widehat{\theta}(\cdot)$ now be a function of κ: $\widehat{\theta}(a;\kappa) \equiv \frac{\frac{1+a}{2}-\kappa}{1-\beta}$.

Using $H(\cdot)$ defined in Equation A.7 and a similar reasoning as in the proof of Lemma 3, it can easily be shown that $\overline{a}^N(\theta,a) \leq \overline{a}(\theta,a)$ if and only if $\kappa^N < \kappa^C$ (with strict inequality whenever $\theta < \widehat{\theta}(a;\kappa^N)$), and $\overline{a}^N(\theta,a) \geq \overline{a}(\theta,a)$ if and only if $\kappa^N > \kappa^C$ (with strict inequality whenever $\theta < \widehat{\theta}(a;\kappa^C)$).

Ignoring all arguments but κ^N, When the court is not changing hands, the tolerance threshold is defined by:

$$-(a-\theta-\kappa^C)^2 + \beta\frac{E_\theta\big(-(a-\theta-\kappa^C)^2\big)}{1-\beta} = -(\overline{a}-\theta-\kappa^C)^2 + \beta V(\overline{a},1)$$

In turn, the tolerance threshold of a judge about to be replaced—denoted $\overline{a}(\kappa^N)$ when other arguments are ignored—is defined by:

$$-(a-\theta-\kappa^C)^2 + \beta\frac{E_\theta\big(-(a-\theta-\kappa^C)^2\big)}{1-\beta} = -(\overline{a}(\kappa^N)-\theta-\kappa^C)^2 + \beta V^C(\overline{a}(\kappa^N),1;\kappa^N)$$

We can show using a similar reasoning as in the proof of Lemma A.4 that $V^C(\cdot)$ exists and is continuous. Note that $\overline{a}=1$ whenever $\theta \geq \widehat{\theta}(a;\kappa^C)$ whether or not the judge is replaced since $V(1,1) = V^C(1,1;\kappa^N) = \frac{E_\theta\big(-(1-\theta-\kappa^C)^2\big)}{1-\beta}$. We focus on the cases when $\theta < \widehat{\theta}(a;\kappa^C)$ in what follows. We first show that $V^C(a,1;\kappa^N) < V(a,1)$ for all $a \in [0,1)$ when $\kappa^N > \kappa^C$. To do so, suppose that when the set of precedents is $[0,a]$, the justice characterised by ideal point κ^C is forced to accept authority claim $\overline{a}^N(\theta,a)$ in that period before the game resuming as normal. Her continuation value is then: $\hat{V}(a,1) = \int_{-\overline{\theta}}^{\widehat{\theta}(a;\kappa^N)}\Big(-(\overline{a}^N(\theta,a)-\kappa^C-\theta)^2 + \beta V(\overline{a}^N(\theta,a),1)\Big)dF(\theta) + \int_{\widehat{\theta}(a;\kappa^N)}^{\overline{\theta}}\Big(-(1-\theta-\kappa^C)^2 + \beta V(1,1)\Big)dF(\theta)$. Given $\overline{a}^N > \overline{a}$ and using the proof of Lemma A.3, $\hat{V}(a,1) < V(a,1)$.

Repeating the process, we obtain that:

$$
\begin{aligned}
V(a,1) > \hat{V}(a,1) > \int_{-\overline{\theta}}^{\widehat{\theta}(a;\kappa^N)} \Bigg(& -(\overline{a}^N(\theta,a)-\kappa^C-\theta)^2 \\
& + \beta\Big(\int_{-\overline{\theta}}^{\widehat{\theta}(\overline{a}^N(\theta,a);\kappa^N)} \big(-(\overline{a}^N(\tilde{\theta},\overline{a}^N(\theta;a))-\kappa^C-\tilde{t})^2+\beta V(\overline{a}^N(\tilde{\theta},\overline{a}^N(\theta;a));1)dF(\tilde{\theta}) \\
& + \int_{\widehat{\theta}(\overline{a}^N(\theta,a);\kappa^N)}^{\overline{\theta}} \big(-(1-\tilde{\theta}-\kappa^C)^2+\beta V(1,1)\big)dF(\tilde{\theta})\Big)\Bigg)dF(\theta) \\
& + \int_{\widehat{\theta}(a;\kappa^N)}^{\overline{\theta}} \Big(-(1-\theta-\kappa^C)^2+\beta V(1,1)\Big)dF(\theta)
\end{aligned}
$$

Note that in this process, the authority claim implemented in two subsequent periods is the same as if the court is controlled by a judge with ideal point κ^N and the incumbent plays a maximum grab strategy, before a judge with ideal point κ^C takes control again. Hence, repeating the process again k times with k very large (and using the fact that we have continuity at infinity with the discount factor β), we can get arbitrarily close to $V^C(a,1;\kappa^N)$. Since inequalities are all strict along the way, we obtain $V(a,1) > V^C(a,1;\kappa^N)$.

By Lemma A.3, we know that (i) at $a_t = \overline{a}$, $-(a-\theta-\kappa^C)^2 + \beta\frac{E_\theta\left(-(a-\theta-\kappa^C)^2\right)}{1-\beta} = -(a_t-\theta-\kappa^C)^2 + \beta V(a_t,1)$ and (ii) for all $a_t > \overline{a}$, $-(a-\theta-\kappa^C)^2 + \beta\frac{E_\theta\left(-(a-\theta-\kappa^C)^2\right)}{1-\beta} > -(a_t-\theta-\kappa^C)^2 + \beta V(a_t,1)$. Combining $V(a,1) \geq V^C(a,1;\kappa^N)$ (strictly if $a<1$) with the two properties above, we obtain that $-(a-\theta-\kappa^C)^2 + \beta\frac{E_\theta\left(-(a-\theta-\kappa^C)^2\right)}{1-\beta} > -(a_t-\theta-\kappa^C)^2 + \beta V^C(a_t,1;\kappa^N)$ for all $a_t \geq \overline{a}$. Hence, it must be that $\overline{a}(\kappa^N) < \overline{a}$ as claimed.

We now show that $V^N(a,1;\kappa^N) > V(a,1)$ for all $a \in [0,1)$ and $\kappa^N < \kappa^C$. Adapting the proof of Lemma A.3, $\overline{a}^N(\theta,a)$ is defined by $H^N(\overline{a}^N(\theta,a);\theta,a) = 2(\kappa^N + (1-\beta)\theta) - (a+\overline{a}^N(\theta,a)) + \beta\frac{1-\overline{a}^N(\theta,a)}{\overline{a}^N(\theta,a)-a}\int_{\widehat{\theta}(\overline{a}^N(\theta,a);a)}^{\overline{\theta}} 2((1-\beta)\theta+\kappa^N) - (\overline{a}^N(\theta,a)+1)dF(\theta) = 0$ and it is strictly increasing with κ^N. Now, for all $\kappa^N \in [0,\kappa^C)$ and all $\theta < \widehat{\theta}(a,\kappa^N)$ (so $\overline{a}^N(\theta,a) \in (a,1)$), we can rewrite (ignoring arguments in the tolerance threshold, i.e. $\overline{a}^N = \overline{a}^N(\theta, a)$):

$$
\begin{aligned}
H(\overline{a}^N;\theta,a) =& 2(\kappa^C + (1-\beta)\theta) - (a+\overline{a}^N) \\
& + \beta\frac{1-\overline{a}^N}{\overline{a}^N - a}\int_{\widehat{\theta}(\overline{a}^N;\kappa^C)}^{\overline{\theta}} 2((1-\beta)\theta + \kappa^C) - (\overline{a}^N + 1)dF(\theta) \\
=& 2(\kappa^C + (1-\beta)\theta) - (a+\overline{a}^N) \\
& + \beta\frac{1-\overline{a}^N}{\overline{a}^N - a}\int_{\widehat{\theta}(\overline{a}^N;\kappa^C)}^{\overline{\theta}} 2((1-\beta)\theta + \kappa^C) - (\overline{a}^N + 1)dF(\theta) \\
& - \Bigg[2(\kappa^N + (1-\beta)\theta) - (a+\overline{a}^N) \\
& + \beta\frac{1-\overline{a}^N}{\overline{a}^N - a}\int_{\widehat{\theta}(\overline{a}^N;\kappa^N)}^{\overline{\theta}} 2((1-\beta)\theta + \kappa^N) - (\overline{a}^N + 1)dF(\theta)\Bigg] \\
=& 2(\kappa^C - \kappa^N) + \beta\frac{1-\overline{a}^N}{\overline{a}^N - a}\int_{\widehat{\theta}(\overline{a}^N;\kappa^N)}^{\overline{\theta}} 2(\kappa^C - \kappa^N)dF(\theta) \\
& + \beta\frac{1-\overline{a}^N}{\overline{a}^N - a}\int_{\widehat{\theta}(\overline{a}^N;\kappa^C)}^{\widehat{\theta}(\overline{a}^N;\kappa^N)} 2((1-\beta)\theta + \kappa^C) - (\overline{a}^N + 1)dF(\theta) \\
& > 0
\end{aligned}
$$

The second equality uses the fact that $H^N(\overline{a}^N(\theta,a);\theta,a) = 0$. The third equality comes from the fact that $\widehat{\theta}(a;\kappa) = \frac{\frac{1+a}{2}-\kappa}{1-\beta}$ decreasing with κ and $\kappa^C > \kappa^N$. The inequality comes from $\kappa^C > \kappa^N$ and $2((1-\beta)\theta + \kappa^C) - (\overline{a}^N + 1) > 0$ for all $\theta \geq \widehat{\theta}(\overline{a}^N;\kappa^C)$.

Hence, for all $\kappa^N \in [0,\kappa^C)$, $H(\overline{a}^N;\theta,a) > 0$. Now, using the exact same process as for the case when $\kappa^N > \kappa^C$, but with reversed inequalities, we can show that $V^C(a,1;\kappa^N) > V(a,1)$. Then, using the same reasoning as above, it can be checked that this inequality and the properties of the tolerance threshold imply that $\overline{a}(\theta,a;\kappa^N) \geq \overline{a}(\theta,a)$ with strict inequality whenever $\theta < \widehat{\theta}(a;\kappa^C)$. $\square$

B Proofs for Section 4

Political turnover and executive power

Proof of Proposition 4

Denote $W_J(\theta, a, 1, K)$ the continuation value of politician $J \in \{P_l, P_r\}$ when the state is θ, the maximum of the permissible range is a ($\max \mathcal{R}_t = a$), no previous claim has been overturned, and politician $K \in \{P_l, P_r\}$ is in office (assuming the existence). Let $a^*(\theta, a, 1, K)$ a prescribed equilibrium authority acquisition when the state is θ, $\max \mathcal{R}_t = a$, and $K \in \{P_l, P_r\}$ is in office.

To prove the result, we first suppose that there exists $a \in [0, 1]$ and θ such that the office-holder's equilibrium strategy satisfies $d(a^*(\theta, a, 1, J), \theta, a, 1) = 1$. That is, there exists some authority stock and some state of the world so that the incumbent oversteps her authority so as the court overturns the authority grab and blocks future grab. We show that there exists a profitable deviation whenever π is sufficiently close below to 1/2.

To do so, suppose that for some $t \geq 1$, P_l (the reasoning is parallel for P_r) is in power with authority stock a and the state is θ. If P_l follows her prescribed strategy, her expected payoff is:

$$W_{P_l}(\theta, a, a, P_l) = v(a) + \beta\pi W_{P_l}(\theta, a, a, P_l) + \beta(1 - \pi)W_{P_l}(\theta, a, a, P_r) \tag{B.1}$$

Similarly,

$$W_{P_l}(\theta, a, a, P_r) = -v(a) + \beta\pi W_{P_l}(\theta, a, a, P_r) + \beta(1 - \pi)W_{P_l}(\theta, a, a, P_l) \tag{B.2}$$

Simple computation then yields:

$$W_{P_l}(\theta, a, a, P_l) = v(a) + \beta\frac{(2\pi - 1)}{1 - \beta(2\pi - 1)}v(a) \tag{B.3}$$

Using a similar reasoning as in the proof of Proposition 1, it can be shown that there exists $\overline{a}(\theta, a)$ such that the court upholds the executive action if $a \leq \overline{a}(\theta, a)$.[18] Given the prescribed

[18] Recall that we focus on Markov Perfect Equilibrium. Hence, the court only considers the state variables in its decision—(a) the identity of the current officeholder (which is inconsequential), (b) the authority stock a, and (c) the state θ_t—taking into *future* players' strategies.

equilibrium strategy (the court must overturn P_l's claim), obviously, $\overline{a}(\theta, a) < 1$. Consider the following deviation strategy by P_l. In period t, P_l chooses $\widehat{a}_t = \overline{a}(\theta, a)$. Then, in period $t+k$, $k \geq 1$, for each possible authority stock a_{t+k} and state of the world θ_{t+k}, P_l when in office chooses the same authority grab as P_r would if in power and denote this value $\widehat{a}_{t+k}(\theta_{t+k}, a_{t+k})$. Notice that for this particular deviation, we do not make any prediction about how P_r and the court react to the deviation strategy proposed. The reaction, however, is well defined since we assume that the equilibrium exists and we just look for a necessary condition for its existence.[19]

Denote $\widehat{a}_{t+k}$ the realized authority acquisition in period $t+k$ and noting that it is fully determined by previous states of the world, the expected payoff from the prescribed deviation is:

$$\widehat{W}_{P_l}(\theta, a, 1, P_l) = v(\overline{a}(\theta, a)) + \beta\pi E_{\theta_{t+1}}\big(\widehat{W}_{P_l}(\theta_{t+1}, \overline{a}(\theta, a), 1, P_l)\big) + \beta(1-\pi)E_{\theta_{t+1}}\big(\widehat{W}_{P_l}(\theta_{t+1}, \overline{a}(\theta, a), 1, P_r)\big) \tag{B.4}$$

Note that under the assumed deviation (ignoring arguments whenever possible):

$$\begin{aligned} E_{\theta_{t+1}}\big(\widehat{W}_{P_l}(\theta_{t+1}, \overline{a}(\theta, a), 1, P_l)\big) = E_{\theta_{t+1}}\Big(& v(\widehat{a}(\theta_{t+1}, \overline{a}) + \beta\pi E_{\theta_{t+2}}\big(\widehat{W}_{P_l}(\theta_{t+2}, \widehat{a}_{t+1}, 1, P_l)\big) \\ & + \beta(1-\pi)E_{\theta_{t+2}}\big(\widehat{W}_{P_l}(\theta_{t+2}, \widehat{a}_{t+1}, 1, P_r)\big)\Big) \end{aligned}$$

and

$$\begin{aligned} E_{\theta_{t+1}}\big(W_{P_l}(\theta_{t+1}, \overline{a}(\theta, a), 1, P_r)\big) = E_{\theta_{t+1}}\Big(& -v(\widehat{a}(\theta_{t+1}, \overline{a}) + \beta\pi E_{\theta_{t+2}}\big(\widehat{W}_{P_l}(\theta_{t+2}, \widehat{a}_{t+1}, 1, P_r)\big) \\ & + \beta(1-\pi)E_{\theta_{t+2}}\big(\widehat{W}_{P_l}(\theta_{t+2}, \widehat{a}_{t+1}, 1, P_l)\big)\Big) \end{aligned}$$

Therefore

$$\begin{aligned} & E_{\theta_{t+1}}\big(\widehat{W}_{P_l}(\theta_{t+1}, \overline{a}(\theta, a), 1, P_l) - \widehat{W}_{P_l}(\theta_{t+1}, \overline{a}(\theta, a), 1, P_r)\big) \\ =& E_{\theta_{t+1}}\big(2v(\widehat{a}(\theta_{t+1}, \overline{a})\big) + \beta(2\pi - 1)E_{\theta_{t+1}, \theta_{t+2}}\big(\widehat{W}_{P_l}(\theta_{t+2}, \widehat{a}_{t+1}, 1, P_l) - \widehat{W}_{P_l}(\theta_{t+2}, \widehat{a}_{t+1}, 1, P_r)\big), \end{aligned}$$

[19] Notice that the one-shot deviation principle does not necessarily holds in this setting since the game is not a proper infinitely-repeated game due to the variations in the authority stock a and state of the world θ.

where $E_{\theta_{t+1},\theta_{t+2}}(\cdot)$ denotes iterated expectations.

Using the equation above, we can extend the series to obtain:

$$
\begin{aligned}
&E_{\theta_{t+1}}\big(\widehat{W}_{P_l}(\theta_{t+1},\overline{a}(\theta,a),1,P_l) - \widehat{W}_{P_l}(\theta_{t+1},\overline{a}(\theta,a),1,P_r)\big)\\
=&E_{\theta_{t+1}}\big(2v(\widehat{a}(\theta_{t+1},\overline{a})\big) + 2\sum_{k=2}^{\infty}\beta^k(2\pi-1)^k E_{\theta_{t+1},\cdots,\theta_{t+k}}\big(v(\widehat{a}_{t+k})\big),
\end{aligned}
$$

with $\widehat{a}_{t+k}$ standing for $\widehat{a}_{t+k}(\theta_{t+k},\widehat{a}_{t+k-1})$.

Using the same reasoning as in Lemma A.4, in equilibrium, the continuation value must be unique. So we have:

$$
E_{\theta_{t+1}}\big(\widehat{W}_{P_l}(\theta_{t+1},\overline{a}(\theta,a),1,P_l)\big) = E_{\theta_{t+1}}\big(v(\widehat{a}(\theta_{t+1},\overline{a})\big) + \sum_{k=2}^{\infty}\beta^k(2\pi-1)^k E_{\theta_{t+1},\cdots,\theta_{t+k}}\big(v(\widehat{a}_{t+k})\big) \quad \text{(B.5)}
$$

$$
E_{\theta_{t+1}}\big(\widehat{W}_{P_l}(\theta_{t+1},\overline{a}(\theta,a),1,P_r)\big) = E_{\theta_{t+1}}\big(-v(\widehat{a}(\theta_{t+1},\overline{a})\big) - \sum_{k=2}^{\infty}\beta^k(2\pi-1)^k E_{\theta_{t+1},\cdots,\theta_{t+k}}\big(v(\widehat{a}_{t+k})\big) \quad \text{(B.6)}
$$

Denoting $\widehat{a}_{t+1} = \widehat{a}(\theta_{t+1},\overline{a})$, we thus obtain:

$$
\widehat{W}_{P_l}(\theta,a,1,P_l) = v(\overline{a}(\theta,a)) + \sum_{k=1}^{\infty}\beta^k(2\pi-1)^k E_{\theta_{t+1},\cdots,\theta_{t+k}}\big(v(\widehat{a}_{t+k})\big) \quad \text{(B.7)}
$$

If $\pi \geq 1/2$, it is obvious that $\widehat{W}_{P_l}(\theta,a,1,P_l) > W_{P_l}(\theta,a,a,P_l) = v(a) + \sum_{k=1}^{\infty}\beta^k(2\pi-1)^k v(a)$ since $\widehat{a}_{t+1} > a$ and $\overline{a} > a$. Suppose $\pi < 1/2$, then note that $(2\pi-1)^k$ is negative for k odd and positive for k even. So we have

$$
\widehat{W}_{P_l}(\theta,a,1,P_l) > v(\overline{a}(\theta,a)) + \sum_{k=0}^{\infty}\beta^{2k+1}(2\pi-1)^{2k+1}v(1) + \sum_{k=1}^{\infty}\beta^{2k}(2\pi-1)^{2k}v(a)
$$

Consequently, a necessary condition for the postulated equilibrium to exist is:

$$
v(a) + \sum_{k=1}^{\infty}\beta^k(2\pi-1)^k v(a) \geq v(\overline{a}(\theta,a)) + \sum_{k=0}^{\infty}\beta^{2k+1}(2\pi-1)^{2k+1}v(1) + \sum_{k=1}^{\infty}\beta^{2k}(2\pi-1)^{2k}v(a)
$$

For all θ and a, there exists $\varepsilon(\theta, a) > 0$ such that $v(\overline{a}(\theta, a)) - v(a) > \varepsilon(\theta, a)$. Further, by assumption $\beta < 1$. Hence, there exists $\acute{\pi}(a, \theta) < 1/2$ such that this necessary condition is satisfied only if $\pi \geq \acute{\pi}(a, \theta)$.

Denote $\grave{\pi} = \min_{a \in [0,1), \theta \in [-\overline{\theta}, \overline{\theta}]} \acute{\pi}(a, \theta)$. From the reasoning above, $\grave{\pi} < 1/2$. Since we have only looked at a single possible deviation, there exists $\underline{\pi} \leq \grave{\pi} < 1/2$ such that any equilibrium in which $d(\cdot) = 0$ with positive probability exists only if $\pi \leq \underline{\pi}$. The contrapositive then proves the claim.

Alternative judicial rule

Before proving Proposition 5, it is useful to consider the following modified maximization problem. We study the *court*'s choice of a new authority claim under the constraint that the authority choice each period must satisfy $a_t \geq \max \mathcal{R}_t$ (i.e., this is equivalent to the court choosing when to increase authority, but the incumbent deciding how much authority to use each period). In this amended problem, we use $\breve{\cdot}$ to denote the associated continuation value and equilibrium choices. More specifically, facing with a state θ, the court's equilibrium choice is denoted $\breve{a}(\theta, a, a^R)$ under the conditions of the lemma ($\max \mathcal{R}_t = a$ and $\min \mathcal{W}_t = a^R$).

Lemma B.1. *Suppose* $\max \mathcal{R}_t = a \in [0, 1)$, $\min \mathcal{W}_t = a^R \in (a, 1]$, *and the court decides the increase in authority claim under the constraint* $a_t \geq \max \mathcal{R}_t$. *Then*

(i) the court never imposes additional constraint on itself: $\min \mathcal{W}_{t'} = a^R$ *for all* $t' \geq t$*;*

(ii) there exists a unique $\theta^T(a) < \overline{\theta}$ *such that for all* $\theta_t \leq \theta^T(a)$*, the court keeps authority constant in period* t*:* $\breve{a}(\theta_t, a, a^R) = a$*;*

(iii) there exists a unique $\theta^M(a^R) \in (\theta^T(a), \overline{\theta})$ *such that for all* $\theta_t \geq \theta^M(a^R)$*, the court extends authority to its maximum in period* t*:* $\breve{a}(\theta_t, a, a^R) = a^R$*;*

(iv) For all $\theta_t \in (\theta^T(a), \theta^M(a^R))$*, the court's period* t *authority claim satisfies:* $\breve{a}(\theta_t, a, a^R) = \theta_t - \beta \int_{-\overline{\theta}}^{\theta_t} (\theta_t - \tilde{\theta}) dF(\tilde{\theta})$*.*

Proof. We first look at the court's maximization problem when it does not impose constraint on itself. That is, the court's maximization problem is:

$$\max_{a' \in [a, a^R]} \; - (a' - \kappa^C - \theta)^2 + \breve{V}(a', a^R)$$

We suppose that the court then plays a threshold strategy: pick $\breve{a}(\theta, a, a^R) = a$ if and only if $\theta \leq \theta^T(a)$, for some $\theta^T(a)$, and choose some authority $\breve{a}(\theta, a, a^R) > a$ otherwise. We verify that this is the case below.

Under the prescribed strategy, using a similar reasoning as in the proof of Lemma A.4, the continuation value $\breve{V}(\cdot,\cdot)$ exists, is differentiable, concave, with continuous derivative. Further, it equals, for all a', a^R:

$$\breve{V}(a', a^R) = \int_{-\bar{\theta}}^{\theta^T(a')} -(a'-\kappa^C-\tilde{\theta})^2+\beta\breve{V}(a', a^R)dF(\tilde{\theta})+\int_{\theta^T(a')}^{\bar{\theta}} -(\breve{a}(\tilde{\theta}, a', a^R)-\kappa^C-\tilde{\theta})^2+\beta V(\breve{a}(\tilde{\theta}, a', a^R), a^R)dF(\tilde{\theta}),$$

with $\breve{a}(\theta, a', a^R) = \arg\max_{a''\in[a',a^R]} \; -(a''-\kappa^C-\theta)^2+\beta\breve{V}(a'', a^R)$.

Denote $\breve{\mathcal{V}}(a', \theta, a) = -(a'-\kappa^C-\theta)^2+\beta\breve{V}(a', a^R)$. Denoting partial derivative with respect to the ith argument by the usual subscript, we obtain

$$\breve{\mathcal{V}}_1(a', \theta, a) = -2(a'-\kappa^C-\theta)+\beta\breve{V}_1(a', a^R),$$

with

$$\begin{aligned}\breve{V}_1(a', a^R) = &\int_{-\bar{\theta}}^{\theta^T(a')} -2(a'-\kappa^C-\tilde{\theta})+\beta\breve{V}_1(a', a^R)dF(\tilde{\theta}) \\ &+\frac{\partial\theta^T(a')}{\partial a'}f(\theta^T(a'))\Big(-(a'-\kappa^C-\theta^T(a'))^2+\beta\breve{V}(a', a^R) \\ &-\big(-(\breve{a}(\theta^T(a'), a', a^R)-\kappa^C-\theta^T(a'))^2+\beta\breve{V}(\breve{a}(\theta^T(a'), a', a^R), a^R)\big)\Big)\end{aligned}$$

Given $\breve{a}(\theta^T(a'), a', a^R) = a'$, we then obtain:

$$\breve{V}_1(a', a^R) = \int_{-\bar{\theta}}^{\theta^T(a')} -2(a'-\kappa^C-\tilde{\theta})+\beta\breve{V}_1(a', a^R)dF(\tilde{\theta})$$

Observe that if $\breve{\mathcal{V}}_1(a', \theta, a) < 0$ for all $a' > a$, the court's optimal claim is $\breve{a}(\theta, a, a^R) = a$. The condition is equivalent to

$$(a'-\kappa^C-\theta)+\beta\frac{\int_{-\bar{\theta}}^{\theta^T(a')}(a'-\kappa^C-\tilde{\theta})dF(\tilde{\theta})}{1-\beta F(\theta^T(a'))} > 0$$

After rearranging, we obtain

$$(a' - \kappa^C - \theta) + \beta \int_{-\overline{\theta}}^{\theta^T(a')} (\theta - \tilde{\theta}) dF(\tilde{\theta}) > 0$$

In turn, $\breve{a}(\theta, a, a^R)$ is an interior solution ($a' \in (a, a^R)$), if there exists a solution to $\breve{\mathcal{V}}_1(a', \theta, a) = 0$, or equivalently to

$$a' = \theta + \kappa^C - \beta \int_{-\overline{\theta}}^{\theta^T(a')} (\theta - \tilde{\theta}) dF(\tilde{\theta}) \tag{B.8}$$

Finally, $\breve{a}(\theta, a, a^R) = a^R$ if $\breve{\mathcal{V}}_1(a', \theta, a) \geq 0$ for all $a' \in [a, a^R]$.

We now show that for all $a \in [0, a^R]$, there exists a unique $\theta^T(a)$ such that $\breve{\mathcal{V}}_1(a', \theta, a) < 0$ for all $a' \geq a$ if and only if $\theta \leq \theta^T(a)$. Consider the function $H(\theta, \theta^T) = \theta - \kappa^C - \beta \int_{-\overline{\theta}}^{\theta^T} (\theta - \tilde{\theta}) dF(\tilde{\theta})$. Notice that $H_1(\theta, \theta^T) > 0$ and $H_2(\theta, \theta^T) < 0$. We now show that there exists a unique $\theta^T(a) \in (-\overline{\theta}, \overline{\theta})$ such that for all $a \in [0, 1]$, $H(\theta^T(a), \theta^T(a)) = a$. To do so, consider $h(\theta^T) = H(\theta^T, \theta^T) = \theta^T - \kappa^C - \beta \int_{-\overline{\theta}}^{\theta^T} (\theta^T - \tilde{\theta}) dF(\tilde{\theta})$. The function $h(\cdot)$ has the following properties:

(a) $h'(\theta^T) = 1 - \beta F(\theta^T) > 0$ for all $\theta^T \in [-\overline{\theta}, \overline{\theta}]$;

(b) $h(-\overline{\theta}) = -\overline{\theta} + \kappa^C < 0$ since $\overline{\theta} > 1/(1-\beta) > 1$ and $\kappa^C \leq 1$;

(c) $h(\overline{\theta}) = (1-\beta)\overline{\theta} + \kappa^C > 1$ under the assumption.

Combining the three properties, by the theorem of intermediate values, there exists a unique $\theta^T(a) \in (-\overline{\theta}, \overline{\theta})$ such that for all $a \in [0, 1]$, $h(\theta^T(a)) = a$. Further, $\theta^T(a)$ is strictly increasing with a by the implicit function theorem.

Given that $H(\theta, \theta^T)$ is strictly increasing in its first argument and strictly decreasing in its second argument, this implies that $H(\theta, \theta^T(a)) \leq a$ if and only if $\theta \leq \theta^T(a)$. Further, $a' - H(\theta, \theta^T(a')) > 0$ for all $a' > a$ if and only if $\theta \leq \theta^T(a)$. Consequently, for all $\theta \leq \theta^T(a)$, $\breve{a}(\theta, a, a^R) = a$ as claimed (this proves point (ii) of the lemma).

We now show that there exists $\theta^M(a^R) \in (-\overline{\theta}, \overline{\theta})$ such that $\breve{a}(\theta, a, a^R) = a^R$ for all $\theta \geq \theta^M(a^R)$ (i.e., $\breve{\mathcal{V}}_1(a', \theta, a) \geq 0$ for all $a' \in [a, a^R]$). To see this, recall that for all a, $\theta^T(a)$ is defined as: $a = \theta^T(a) + \kappa^C - \int_{-\overline{\theta}}^{\theta^T(a)} (\theta^T(a) - \tilde{\theta}) dF(\tilde{\theta})$. Hence, for all $\theta \geq \theta^T(a)$, we can rewrite Equation B.8 as

$$\theta^T(a') + \kappa^C - \beta \int_{-\overline{\theta}}^{\theta^T(a')} (\theta^T(a') - \tilde{\theta}) dF(\tilde{\theta}) = \theta + \kappa^C - \beta \int_{-\overline{\theta}}^{\theta^T(a')} (\theta - \tilde{\theta}) dF(\tilde{\theta}),$$

which implies that $\theta = \theta^T(a')$. As a result, the court's equilibrium choice satisfies for all $\theta \geq \theta^T(a)$

$$\breve{a}(\theta, a, a^R) = \min\left\{\theta + \kappa^C - \int_{-\overline{\theta}}^{\theta}(\theta - \tilde{\theta})dF(\tilde{\theta}), a^R\right\} \tag{B.9}$$

Recall that $\theta + \kappa^C - \int_{-\overline{\theta}}^{\theta}(\theta - \tilde{\theta})dF(\tilde{\theta}) = h(\theta)$, $h(\overline{\theta}) > 1$, and $h(\cdot)$ is strictly increasing. Hence, there exists a unique $\theta^M(a^R)$ such that for all $\theta \geq \theta^M(a^R)$, the court picks $\breve{a}(\theta, a, a^R) = a^R$. This proves point (iii). Point (iv) then follows from Equation B.9.

Finally, note that the court would never choose to increase the impermissible set if it decides upon new claim. Indeed, the court can, if it chooses so, constraint herself and never to go over a certain authority claim $\widehat{a^R} < a^R$ without having to increase the impermissible set. Since it chooses not to do with positive probability by the reasoning above, the court must be strictly better off without imposing additional constraint on itself. Hence, the optimal choice of the court under the constraint $a_t \geq \max \mathcal{R}_t$ is as defined in the text of the lemma. □

We now turn to the proof of Proposition 5. Throughout, we assume that continuation values exist since we focus on the properties of equilibria.

Proof of Proposition 5

The proof proceeds in several steps. In step 1, we show the existence of $\widehat{\theta}^{\mathscr{L}}(a, a^R)$. In step 2, we show that $\widehat{\theta}^{\mathscr{L}}(a, a^R)$ is unique. In step 3, we demonstrate that there exists $\overline{a}(\theta, a, a^R) > a$ such that the court upholds all authority claims satisfying $a_t \leq \overline{a}(\theta, a, a^R)$ in all states of the world.

Step 1. From Lemma B.1, we know that when the court chooses the extent of authority extension in period t, there exists $\theta^M(a^R)$ such that for all $\theta_t \geq \theta^M(a^R)$, the court chooses $\breve{a}(\theta_t, a, a^R) = a^R$ (recall that $\breve{\cdot}$ denotes equilibrium choice, continuation values in the modified maximization problem). That is, for all $a' \in [a, a^R)$, we have: $-(a' - \theta_t)^2 + \beta\check{V}(a', a^R) < -(a^R - \theta_t)^2 + \beta\check{V}(a^R, a^R)$. Because in our model the incumbent, not the court, is deciding upon the authority extension, it must be that $\check{V}(a', a^R) \geq V(a', a^R)$. Further, from point (iv) of Lemma B.1, we know that the court never restricts itself. Hence, the court's continuation value is always lower with the incumbent deciding on authority extension than when it chooses the new claim each period. In turn, $\check{V}(a^R, a^R) = V(a^R, a^R) = \frac{E_\theta\left(-(a^R - \theta)^2\right)}{1-\beta}$. Consequently, whenever the court prefers a^R under the amended maximization problem, it also prefers a^R to all other authority claims when the executive is deciding on the extension of authority. That is, for all $\theta_t \geq \theta^M(a^R)$, $d(\theta_t, a_t, a, a^R) = 0$ for all $a_t \in [a, a^R]$. This proves existence of a threshold and concludes step 1.

Step 2. To show uniqueness, notice that the court prefers to uphold a claim a^R rather than overturning it whenever

$$-(a^R - \theta)^2 + \beta V(a^R, a^R) \geq -(a - \theta)^2 + \beta V(a, a^R)$$
$$\Leftrightarrow \quad (a - a^R)(a + a^R - 2\theta) \geq \beta\big(V(a, a^R) - V(a^R, a^R)\big)$$

The function $(a - a^R)(a + a^R - 2\theta)$ is strictly increasing with θ. Hence, if there exists θ^l such that $(a - a^R)(a + a^R - 2\theta^l) \geq \beta\big(V^0(a, a^R) - V^0(a^R, a^R)\big)$, then $(a - a^R)(a + a^R - 2\theta) > \beta\big(V^0(a, a^R) - V^0(a^R, a^R)\big)$ for all $\theta > \theta^l$. Hence, $\widehat{\theta}^{\mathscr{L}}(a, a^R)$ is necessarily unique.

Step 3. We now show that there exists $\overline{\epsilon} > 0$ such that for all $\epsilon \in (0, \overline{\epsilon}]$, defining $a' = a + \epsilon$, $-(a' - \kappa^C - \theta)^2 + \beta V(a', a^R) \geq -(a - \kappa^C - \theta)^2 + \beta V(a, a')$ (i.e., the court upholds any $a' \in (a, a + \overline{\epsilon}]$. This is equivalent to show that $2\epsilon(a + \frac{\epsilon}{2} - \theta - \kappa^C) \leq \beta(V(a + \epsilon, a^R) - V(a, a + \epsilon))$. Now, we can rewrite $V(a + \epsilon, a^R) - V(a, a + \epsilon) = (V(a + \epsilon, a^R) - V(a, a)) - (V(a, a + \epsilon) - V(a, a))$. Using a similar reasoning as in the proof of Proposition 1, given steps 1 and 2, we know that there exist $\widehat{\epsilon} > 0$ such that for all $\epsilon \in (0, \widehat{\epsilon})$, $V(a + \epsilon, a^R) - V(a, a)$ is bounded below away from zero. Further, denote $\theta^*(a) = a - \kappa^C$ and note that $V(a, a + \epsilon) < F(\theta^*(a))\frac{E_\theta(-(a-\theta-\kappa^C)^2|\theta \leq \theta^*(a))}{1-\beta} + (F(\theta^*(a + \epsilon)) - F(\theta^*(a))) \times 0 + (1 - F(\theta^*(a + \epsilon))\frac{E_\theta(-(a+\epsilon-\theta-\kappa^C)^2|\theta \geq \theta^*(a))}{1-\beta}$ (the right-hand side is the court's payoff if it can choose the optimal $a_t \in [a, a + \epsilon]$ for itself each period without any effect on precedent, the inequality is strict since if $a_t = a + \epsilon$ in some period t, $a_{t'}(\theta) = a + \epsilon$ for all θ and all $t' > t$ in any equilibrium). This means that $V(a, a + \epsilon) - V(a, a) < (F(\theta^*(a + \epsilon)) - F(\theta^*(a)))\frac{E_\theta((a-\theta-\kappa^C)^2|\theta \in (\theta^*(a), \theta^*(a+\epsilon)))}{1-\beta} + (1 - F(\theta^*(a + \epsilon))\frac{E_\theta((a-\theta-\kappa^C)^2-(a+\epsilon-\theta-\kappa^C)^2|\theta \geq \theta^*(a))}{1-\beta}$. This (strict) upper bound is continuous in ϵ and converge to 0 as $\epsilon \to 0$. Hence, there exists $\acute{\epsilon} > 0$ such that there exists $\psi > 0$ such that for all $\epsilon \in (0, \acute{\epsilon})$, $(V(a + \epsilon, a^R) - V(a, a)) - (V(a, a + \epsilon) - V(a, a)) \geq \psi$. Given that $2\epsilon(a + \frac{\epsilon}{2} - \theta - \kappa^C)$ is continuous in ϵ and converges to 0 as $\epsilon \to 0$, there exists $\overline{\epsilon} > 0$, such that for all $\epsilon \in (0, \overline{\epsilon}), 2\epsilon(a + \frac{\epsilon}{2} - \theta - \kappa^C) \leq \beta(V(a + \epsilon, a^R) - V(a, a + \epsilon))$. $\square$

C Additional results: Turnover with party-dependent probability of election

As in Subsection 4.1, we assume that at the beginning of each period, before θ_t is realised, Nature determines the identity of the officeholder, which can be either P_l or P_r. Following a long tradition in the literature (e.g., Persson and Svensson, 1989), in this Appendix, the probability of being in office is party-dependent. It is common knowledge that the probability that P_r is selected by Nature is i.i.d. over time and is equal to $\pi \geq 1/2$ each period.

Like in the main text, the utility function of politician $J \in \{P_l, P_r\}$,

$$U_J(y_t) = \begin{cases} v(y_t) & \text{if } J \text{ is in office} \\ -v(y_t) & \text{otherwise} \end{cases}$$

The rest of the model remains unchanged. In particular, we assume that the court cares only about constitutional considerations and the state of the world (i.e., the court's ideal level of authority κ^C does not depend on the officeholder's identity).

As before, the court's problem remains the same as in the baseline model, and ny constraint on authority can only come from change of personnel in office. Our first result shows that electoral competition in itself is not sufficient to curb the growth of executive authority. Whenever the election is well balanced (i.e., P_l's chances of getting into office are not so different than P_r's), in any equilibrium, executive authority grows to it highest feasible level.

Proposition C.1. *There exists $\overline{\pi} > 1/2$ such that if $\pi \in [1/2, \overline{\pi})$, any equilibrium satisfies $\lim_{t\to\infty} \mathcal{R}_t = [0,1]$ with probability 1.*

Before the identity of the officeholder is revealed, P_l would like to commit to curb the authority of the executive office, since her chances of winning are low. Once she assumes office, however, this commitment proves untenable. At that time, after all, P_l trades off the present benefit of having more authority to implement her preferred policy and the future cost of ceding more authority prospectively to her opponent. When the likelihood that P_l remains in power is not too low relative to P_r's, however, the present benefit of increased authority dominates the future cost, and P_l always chooses an authority claim that is upheld by the court.

Proposition C.1 suggests that P_l may choose to constrain the executive if she is electorally disadvantaged but wins office unexpectedly. The next result stipulates this fact formally. When P_r is sufficiently likely to return to office in the next period, at the first possible opportunity P_l will choose to constrain the authority of the executive office by soliciting a court rejection.

Proposition C.2. *If $\beta > 1/2$, there exists $\pi' \geq \overline{\pi}$ such that if $\pi > \pi'$, in equilibrium, an electorally disadvantaged officeholder P_l chooses an action that is overturned by the court whenever possible (formally, chooses an authority claim a_t such that $d_t(a_t, \theta_t, \mathcal{R}_t, \mathcal{W}_t) = 1$ whenever $\theta_t < \widehat{\theta}(a)$).*

The possibility of political turnover can serve as a constraint on the executive when the judiciary itself has no effect. The judicial constraint is only secondary because the court cannot impose limits on executive authority on its own. It needs to be presented with a policy it deems sufficiently unsatisfactory today to overturn it, despite its loss of future flexibility. But with strategic officeholders, this happens only if there is the possibility of turnover.

The possibility of political turnover is necessary, but not sufficient. As we stressed above, limits on executive authority arise in equilibrium only if a highly disadvantaged party or candidate, by chance, rises to power. When electoral competition is well balanced, the officeholder, whatever her identity, increases the scope of authority to do more today. Further, the complexity of the model does not allow us to rule out the possibility that a disadvantaged P_l claims full authority today whenever circumstances permit (i.e., $\theta_t \geq \widehat{\theta}(a)$).[20] Hence, even a highly disadvantaged politician may choose to claim new authority.

Proofs

Proof of Proposition C.1

To prove the proposition, we denote $W_J(\theta, a, 1, K)$ the continuation value of politician $J \in \{P_l, P_r\}$ when the state is θ, the maximum of the permissible range is a ($\max \mathcal{R}_t = a$), no previous claim has

[20] The choice for P_l is then (broadly speaking) between waiting by making no authority claim or obtaining full authority for the office. Since the payoff from waiting is indeterminate absent further assumptions (especially, regarding P_r's strategy), it becomes difficult to judge which of the two choices provides the highest expected payoff.

been overturned, and politician $K \in \{P_l, P_r\}$ is in office (assuming the existence). Let $a^*(\theta, a, 1, K)$ a prescribed equilibrium authority acquisition when the state is θ, $\max \mathcal{R}_t = a$, and $K \in \{P_l, P_r\}$ is in office.

To prove the result, we first suppose that there exists $a \in [0, 1]$ and θ such that P_l's equilibrium strategy satisfies $d(a^*(\theta, a, 1, P_l), \theta, a, 1) = 1$. That is, there exists some authority stock and some state of the world so that the left-wing incumbent oversteps her authority so as the court overturns the authority grab and blocks future grab. We show that there exists a profitable deviation whenever π is sufficiently close to 1/2.

To do so, suppose that for some $t \geq 1$, P_l is in power with authority stock a and the state is θ. If P_l follows her prescribed strategy, her expected payoff is:

$$W_{P_l}(\theta, a, a, P_l) = v(a) - \frac{\beta}{1-\beta}(2\pi - 1)v(a). \tag{C.1}$$

Using a similar reasoning as in the proof of Proposition 1, it can be shown that there exists $\overline{a}(\theta, a)$ such that the court upholds the executive action if $a \leq \overline{a}(\theta, a)$.[21] Given the prescribed equilibrium strategy (the court must overturn P_l's claim), obviously, $\overline{a}(\theta, a) < 1$. Consider the following deviation strategy by P_l. In period t, P_l chooses $\widehat{a}_t = \overline{a}(\theta, a)$. Then, in period $t + k$, $k \geq 1$, for each possible authority stock a_{t+k} and state of the world θ_{t+k}, P_l when in office chooses the same authority grab as P_r would if in power and denote this value $\widehat{a}_{t+k}(\theta_{t+k}, a_{t+k})$. Notice that for this particular deviation, we do not make any prediction about how P_r and the court react to the deviation strategy proposed. The reaction, however, is well defined since we assume that the equilibrium exists and we just look for a necessary condition for its existence.[22]

Denote $\widehat{a}_{t+k}$ the realized authority acquisition in period $t + k$ and noting that it is fully determined

[21] Recall that we focus on Markov Perfect Equilibrium. Hence, the court only considers the state variables in its decision—(a) the identity of the current officeholder (which is inconsequential), (b) the authority stock a, and (c) the state θ_t—taking into *future* players' strategies.

[22] Notice that the one-shot deviation principle does not necessarily holds in this setting since the game is not a proper infinitely-repeated game due to the variations in the authority stock a and state of the world θ.

by previous states of the world, the expected payoff from the prescribed deviation is:

$$\begin{aligned}\widehat{W}_{P_l}(\theta, a, 1, P_l) =& v(\overline{a}(\theta, a)) + \beta E_{\theta_{t+1}}\big(\pi(-v(\widehat{a}_{t+1}(\theta_{t+1}, \widehat{a}_t)) + (1-\pi)v(\widehat{a}_{t+1}(\theta_{t+1}, \widehat{a}_t)))\big) \\ &+ \beta^2 E_{\theta_{t+1},\theta_{t+2}}\big(\pi(-v(\widehat{a}_{t+2}(\theta_{t+2}, \widehat{a}_{t+1})))) + (1-\pi)v(\widehat{a}_{t+2}(\theta_{t+1}, \widehat{a}_{t+1})))\big) + \dots \\ =& v(\overline{a}(\theta, a)) - (2\pi - 1)\sum_{k=1}^{\infty} \beta^k E_{\theta_{t+1},\dots,\theta_{t+k}}\big(v(\widehat{a}_{t+k}(\theta_{t+k}, \widehat{a}_{t+k-1})\big)\end{aligned} \tag{C.2}$$

Notice that P_l's expected payoff from deviating is decreasing with $v(\widehat{a}_{t+k}(\cdot))$ in each subsequent period. Hence, P_l's payoff from deviating satisfies: $\widehat{W}_{P_l}(\theta, a, 1, L) \geq v(\overline{a}(\theta, a)) - (2\pi - 1)\sum_{k=1}^{\infty} \beta^k v(1) = v(\overline{a}(\theta, a)) - (2\pi - 1)\frac{\beta}{1-\beta} v(1)$.

Consequently, a necessary condition for the postulated equilibrium to exist is:

$$v(\overline{a}(\theta, a)) - v(a) - (2\pi - 1)\frac{\beta}{1-\beta}(v(1) - v(a)) \leq 0$$

Denote $\widehat{\pi}(a, \theta) = \frac{1}{2} + \frac{1}{2}\frac{1-\beta}{\beta}\frac{v(\overline{a}(\theta,a))-v(a)}{v(1)-v(a)}$. such that this necessary condition is never satisfied if $\pi < \widehat{\pi}(a, \theta)$. Given $\beta < 1$ and there exists $\varepsilon(a, \theta) > 0$ such that $v(\overline{a}(\theta, a)) - v(a) > \varepsilon(a, \theta)$ (by Proposition 1), $\widehat{\pi}(a, \theta) > \frac{1}{2}$.

Denote $\widehat{\widehat{\pi}}(a, \theta) = \min_{a \in [0,1), \theta \in [-\overline{\theta}, \overline{\theta}]} \widehat{\pi}(a, \theta)$. From the reasoning above, $\widehat{\widehat{\pi}}(a, \theta) > 1/2$. Given that we have only looked at one possible deviation, there exists $\overline{\pi} \geq \widehat{\widehat{\pi}}(a, \theta)$ such that any equilibrium in which $d(\cdot) = 0$ with positive probability exists only if $\pi \geq \overline{\pi}$. The contrapositive then proves the claim. □

Proof of Proposition C.2

Notice that by a similar reasoning as in the proof of Proposition 1, the court upholds $a_t = 1$ if and only if $\theta_t \geq \widehat{\theta}(a)$ or $a = 1$. To prove the result, we thus need to show that for all $\theta_t < \widehat{\theta}(a)$, P_l when in office proposes a_t such that $d_t(a_t, \theta_t, a, 1) = 1$ (existence of such action is guaranteed since $a_t = 1$ is overturned).

Still using $W_J(\theta_t, a, K)$ to denote the continuation value of $J \in \{P_l, P_r\}$ when $K \in \{P_l, P_r\}$ is in office facing state of the world θ_t and permissible set $[0, a]$, this is equivalent to showing that for all $a' \geq a$ such that $d_t(a', \theta_t, a, 1) = 0$:

$$v(a) - \frac{\beta}{1-\beta}(2\pi - 1)v(a) \geq v(a') + \beta\pi E_\theta(W_{P_l}(\theta, a', P_r)) + \beta(1-\pi)E_\theta(W_{P_l}(\theta, a', P_l)) \tag{C.3}$$

We now find an upper bound on P_l's payoff when P_r is in office. To do so, denote $\pi = 1 - \delta$, $\rho(a') = F(\widehat{\theta}(a'))$ (with $\rho(a') \in (0,1)$) and $\overline{W} = \max_{\theta,a} W_{P_l}(\theta, a, P_l)$. Consider $W^{P_r}(\delta)$ the solution to $W = \rho(a')\Big(-v(a') + \beta(1-\delta)W + \beta\delta\overline{W}\Big) + (1-\rho(a'))(-v(1))\Big(1 + \frac{\beta}{1-\beta}(1-2\delta)\Big)$. This is equivalent to assume that when P_r is in power, she makes an authority claim $a_t = 1$ whenever possible or stays put otherwise. In turn, when P_l is in power, she obtains her highest possible continuation value.

After rearranging, we obtain

$$W^{P_r}(\delta) \equiv \frac{1}{1 - \beta\rho(a')(1-\delta)} \left(\rho(a')\Big(-v(a') + \beta\delta\overline{W}\Big) + (1-\rho(a'))\frac{-v(1)(1-\beta 2\delta)}{1-\beta}\right).$$

For δ sufficiently small, a similar reasoning as in the proof of Lemma A.1 yields that P_r chooses $a_t = 1$ whenever possible and weakly grows her authority otherwise. Therefore, $W_{P_l}(\theta, a', P_r) < W^{P_r}(\delta)$. It can easily be checked that, $v(a) - \frac{\beta}{1-\beta}v(a) > v(a') + \beta W^{P_r}(0)$ (since $\beta > 1/2$). Since $W^{P_r}(\cdot)$ is continuous and weakly increasing in δ (since by definition $\overline{W} \geq -v(a')/1-\beta$), we must have that there exists $\overline{\delta} > 0$ such that $v(a) - \frac{\beta}{1-\beta}(1-2\delta)v(a) > v(a') + \beta(1-\delta)W^{P_r}(\delta) + \beta\delta\overline{W}$ for all $\delta < \overline{\delta}$ and all $a' \geq a$ not overturned. Since $v(a') + \beta(1-\delta)W^{P_r}(\delta) + \beta\delta\overline{W}$ is a strict upper bound on P_l's expected payoff from not being overruled, there exists $\underline{\pi} < 1$ such as being overruled whenever $\theta_t < \widehat{\theta}(a)$ is indeed an equilibrium strategy. $\square$