## Disclosure statement

The following statement describes the parallel time line of events related to the publication of the joint work by William G Howell, Kenneth A Shepsle, and Stephane Wolton (henceforth, the authors) titled "Executive Absolutism: The Dynamics of Authority Acquisition in a System of Separated Powers" in the *Quarterly Journal of Political Science* (henceforth, QJPS) and the future editorship of the QJPS. Any correspondence associated with the events described below is available upon request.

On **22 December 2021**, the manuscript of "Executive Absolutism: The Dynamics of Authority Acquisition in a System of Separated Powers" was first submitted to the QJPS by Stephane Wolton on behalf of the authors. At the time, Stephane Wolton was completely uninformed of any possible discussion concerning him about the future editorship of the QJPS.

On 21 February 2022, Stephane Wolton was first approached by Zac Rodnick, the publisher of the QJPS from Now Publishing, to discuss the possibility of becoming editor-in-chief of the journal with Anthony Fowler. As this correspondence was marked as spam, however, Stephane Wolton became aware of Zac Rodnick's email only after an email sent by Anthony Fowler on 28 February 2022.

On 4 March 2022, the authors (William G Howell, Kenneth A Shepsle, and Stephane Wolton) discussed by email the possibility of removing the paper from consideration at the QJPS due to Stephane Wolton being considered as possible future editor-in-chief. However, as the submission was made long before any contact with the publisher, the authors jointly decided to maintain their submission.

On 8 March 2022, the authors were invited to revise and resubmit their manuscript at the QJPS. The resubmission was sent on 14 April 2022.

On **7 April 2022**, Zac Rodnick sent a first version of the editorship contract to Anthony Fowler and Stephane Wolton. The prospective editors-in-chief asked for some modifications to the contract.

On 29 April 2022, the manuscript was accepted for publication at the QJPS.

On 7 June 2022, a new and final version of the contract was sent to Anthony Fowler and Stephane Wolton. The contract was signed by all parties on 8 June 2022.

Stephane Wolton

Saturday 2 July 2022

# Online Appendix

Executive Absolutism: The Dynamics of Authority Acquisition in a System of Separated Powers

## **Table of Contents**

-	A Proofs for the baseline model	2
	A.1 Authority in the limit	. 2
	A.2 The dynamics of authority	. 4
-	B Proofs for extensions and robustness	13
	B.1 Alternative judicial rule	. 13
	B.2 Revisiting precedents	. 17
	B.3 Political turnover and executive power	. 22
	B.4 Authority acquisition in a calm world	. 27
(	C Additional results	31
	C.1 Temporary stays of authority	. 31
	C.2 Multi-dimensional authority claims	. 36
	C.3 Judicial Turnover	. 40
	C.4 Turnover with party-dependent probability of election	. 44

## 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 rejected. 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  $W_t$  is 1.

## A.1 Authority in the limit

#### Proof of Lemma 1

Denote the court's continuation value in period t (i.e., its 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 rejected 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 rejected in a previous period so min  $W_t = a \in [0, 1]$ , the court's continuation value is simply:

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

$$-(a_t - \kappa^C - \theta_t)^2 + \beta V(a_t, 1) \ge -(a - \kappa^C - \theta_t)^2 + \beta V(a, a)$$
(A.2)

If the executive proposes  $a_t = 1$ , the court knows that if it upholds, P 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  $\theta$  if and only if  $-\left(1-\kappa^C-\theta\right)^2 + \beta \frac{E_{\theta'}\left(-(1-\kappa^C-\theta')^2\right)}{1-\beta} \ge -\left(a-\kappa^C-\theta\right)^2 + \beta \frac{E_{\theta'}\left(-(a-\kappa^C-\theta')^2\right)}{1-\beta}$ . Simple but tedious computation reveals that this inequality is satisfied for all  $\theta$  such that  $\theta \ge \frac{\frac{1+a}{2}-\kappa^C}{1-\beta}$  (strictly if the inequality is strict). Note that  $\frac{\frac{1+a}{2}-\kappa^C}{1-\beta} < \frac{1}{1-\overline{\beta}} < \overline{\theta}$ .

**Lemma A.1.** In any equilibrium, the executive never makes an authority claim which is rejected: 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  $\theta, a$ .

Proof. Suppose there exists a  $\theta$  and a such that in equilibrium the executive picks  $a_t(\theta, a, 1)$  and is rejected. P's continuation value is then  $\frac{v(a)}{1-\beta}$ . We now show that there is a profitable deviation upon reaching the state  $\theta$  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  $\hat{\theta}(a') < \bar{\theta}$  such that  $a_t(\theta, a', 1) = 1$  for all  $\theta \in [\hat{\theta}(a'), \bar{\theta}]$ , 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.

#### **Proof of Proposition 1**

Using Lemma A.1, we know that the court never rejects 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.

## A.2 The dynamics of authority

#### Proof of Proposition 2

Recall from the main text that we define P's strategy as  $a_t(\theta_t, a, 1)$  (with  $\theta_t$  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  $a_t$ )  $V(a_t, 1) = E_{\theta} \Big[ \max\{-\left(a_{t+1}(\theta, a_t, 1) - \kappa^C - \theta\right)^2 + \beta V(a_{t+1}(\theta, a_t, 1), 1), -\left(a_t - \kappa^C - \theta\right)^2 + \beta V(a_t, a_t)\} \Big]$ . 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),  $-\left(a_{t+1}(\theta_{t+1}, a_t, 1) - \kappa^C - \theta_{t+1}\right)^2 + \beta V(a_{t+1}(\theta_{t+1}, a_t, 1), 1) > -\left(a_t - \kappa^C - \theta_{t+1}\right)^2 + \beta V(a_t, a_t)$ . Hence, necessarily  $V(a_t, 1) > E_{\theta} \Big[ -\left(a_t - \kappa^C - \theta\right)^2 + \beta V(a_t, a_t) \Big] = V(a_t, a_t)$  for any  $a_t \in [0, 1)$ . Further,  $V(a_t, 1) \geq F(\widehat{\theta}(a_t)) E_t \Big[ -\left(a_t - \kappa^C - \theta\right)^2 + \beta V(a_t, a_t) \Big] \leq \widehat{\theta}(a_t) \Big] + (1 - F(\widehat{\theta}(a_t)) E_t \Big[ -\left(1 - \kappa^C - \theta\right)^2 + \beta V(1, 1) \Big] = V(a_t, a_t) \Big] = V$ 

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

 $\gamma\in(0,\overline{\gamma})\setminus\{\epsilon\}, V(a+\gamma,1)>V(a,a) \text{ and } V(a+\epsilon,1)\leq V(a,a)).^{15} \text{ Recall from the end of the first paragraph that } V(a+\gamma,1)-V(a+\gamma,a+\gamma)\geq (1-a-\gamma)\int_{\widehat{\theta}(a+\gamma)}^{\overline{\theta}}\left(2\theta-\frac{1+a+\gamma-2\kappa^C}{1-\beta}\right)dF(\theta). \text{ Thus, there exists } \widehat{\gamma}\in(0,\overline{\gamma}) \text{ (a well-defined interval since } \overline{\gamma}>0) \text{ such that there exist } \phi>0 \text{ and } \psi>0 \text{ such that for all } \gamma\in(0,\widehat{\gamma}), \ 1-a-\gamma\geq\phi \ (1-a-\gamma>1-a-\widehat{\gamma}>0 \text{ since } \widehat{\gamma}<\overline{\gamma}\leq 1-a) \text{ and } \int_{\widehat{\theta}(a+\gamma)}^{\overline{\theta}}\left(2\theta-\frac{1+a+\gamma-2\kappa^C}{1-\beta}\right)dF(\theta)\geq\psi \text{ (by Lemma 1, recall that } \widehat{\theta}(a)<\overline{\theta} \text{ for all } a\in[0,1]). \text{ Hence, there exists } \chi>0 \text{ (e.g., } \chi=\phi\psi) \text{ such that for all } \gamma\in(0,\widehat{\gamma}), \ V(a+\gamma,1)-V(a+\gamma,a+\gamma)\geq\chi. \text{ Under the assumption that } V(a+\gamma,1)\leq V(a,a) \text{ for all } \gamma\in(0,\widehat{\gamma})\subset(0,\overline{\gamma}), \text{ we then obtain that for all } \gamma\in(0,\widehat{\gamma}), \ |V(a+\gamma,a+\gamma)-V(a,a)|\geq\chi. \text{ This means that for all } \eta\in(0,\chi) \text{ (a well defined interval given } \chi>0), \ |V(a+\gamma,a+\gamma)-V(a,a)|>\chi \text{ for all } \gamma\in(0,\widehat{\gamma}) \text{ violating the finding that } V(a',a') \text{ is continuous in } a'. \text{ Hence, even if } V(a,1) \text{ exhibits a discontinuity at } a, \text{ it must be that there exists } \overline{\gamma}>0 \text{ such that for all } \gamma\in(0,\overline{\gamma}), \ V(a+\gamma,1)>V(a,a).$ 

In turn,  $-2\gamma(a+\gamma/2-\kappa^C-\theta)$  is continuous in  $\gamma$  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 the reasoning above), for all  $\theta$  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 proposition.

We now turn to the maximally admissible equilibrium. In such assessment, the executive claims as much as the court will allow each period and the court, anticipating the executive's future strategy, rules on authority claims accordingly. Before proving Lemma 2, the next technical lemmas prove the existence and uniqueness of continuation values for the court and the executive in this assessment. 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 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 rejecting  $a_{t'}(\cdot)$  otherwise. In period t, the court's continuation value exists and is unique.

<sup>&</sup>lt;sup>15</sup>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.

*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:

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

We can then rewrite V(a,1) as

$$V(a,1) = \int_{-\overline{\theta}}^{\overline{\theta}(a)} -(a_{t}(\theta, a, 1) - \kappa^{C} - \theta)^{2} + \beta V(a_{t}(\theta, a, 1), 1)dF(\theta)$$

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

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

$$+ \int_{\overline{\theta}(a)}^{\overline{\theta}} -(1 - \kappa^{C} - \theta)^{2} + \beta \frac{E(-(1 - \kappa^{C} - \theta)^{2})}{1 - \beta}dF(\theta) \quad \text{(using Equation A.3)}$$

$$= \frac{1}{1 - \beta} \left( -F(\widehat{\theta}(a))(a - \kappa^{C})^{2} - (1 - F(\widehat{\theta}(a)))(1 - \kappa^{C})^{2} - Var(\theta) \right)$$

$$+ \int_{-\overline{\theta}}^{\overline{\theta}(a)} 2(a - \kappa^{C})\theta dF(\theta) + \int_{\overline{\theta}(a)}^{\overline{\theta}} 2(1 - \kappa^{C})\theta dF(\theta) \quad \text{(decomposing and using } E_{\theta}(\theta) = 0)$$

$$= \frac{1}{1 - \beta} \left( -(a - \kappa^{C})^{2} - (1 - F(\widehat{\theta}(a)))(1 - a)(a + 1 - 2\kappa^{C}) - Var(\theta) \right) + \int_{\overline{\theta}(a)}^{\overline{\theta}} 2(1 - a)\theta dF(\theta)$$

$$= \frac{1}{1 - \beta} \left( -(a - \kappa^{C})^{2} - Var(\theta) + (1 - a) \int_{\overline{\theta}(a)}^{\overline{\theta}} 2((1 - \beta)\theta + \kappa^{C}) - (a + 1)dF(\theta) \right) \quad \text{(A.4)}$$

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 reject (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 rejecting  $a_{t'}(\cdot)$  otherwise. Then in period t, for all  $\max R_t = a \in [0,1)$  and all  $\theta_t < \widehat{\theta}(a)$ , 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  $a_t \leq \overline{a}(\theta_t,a)$ .

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

$$-(a - \kappa^{C} - \theta)^{2} - \beta \frac{(a - \kappa^{C})^{2}}{1 - \beta}$$

$$\leq -(a_{t} - \kappa^{C} - \theta)^{2} - \beta \frac{(a_{t} - \kappa^{C})^{2}}{1 - \beta} + \frac{\beta}{1 - \beta} (1 - a_{t}) \int_{\widehat{\theta}(a_{t})}^{\overline{\theta}} 2((1 - \beta)\theta + \kappa^{C}) - (a_{t} + 1)dF(\theta)$$
(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,  $a_t \leq a$ , the court is constrained to uphold. We thus focus on the interval [a, 1]. Denote

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

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

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  $a_t \leq \overline{a}_t(\theta,a)$ .

Having established the continuation value and the strategy of the court, we can now turn to the continuation value of the office-holder.<sup>16</sup>

**Lemma A.4.** Suppose that in all periods  $t' \geq t$ , 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 rejecting  $a_{t'}(\cdot)$  otherwise, in period t, P's continuation value exists and is unique. Further, the continuation value is differentiable and its derivative with respect to a is bounded.

Proof. Denote  $W(\theta, a, 1)$  P's payoff as a function of the circumstances  $\theta_t$  and precedents  $a = \max \mathcal{R}_t$  and (again slightly abusing notation)  $\min \mathcal{W}_t = 1$ . Using Proposition 2, P 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:

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

To show existence, uniqueness, and differentiability, we use the Blackwell's Theorem (Blackwell 1965; Stokey and Lucas 1989). In what follows, we follow and reproduce the steps detailed in the (superbly clear) proof of Lemma 1 in Baker and Mezzetti (2012).

Let **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 **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 **S** into itself as follows:

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

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

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

 $<sup>^{16}</sup>$ 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  $\theta_t$  are realized). For P, we look at the interim continuation value (after  $\theta_t$  is drawn). This difference of approach is to simplify the proof, but has no bearing on the main result.

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  $\omega_l$  the derivative with respect to the variable l). Denote  $a_t^* = \arg\max_{a_t \in [a, \overline{a}_t(\theta_t, a)]} v(a_t) + \beta E_{\theta}(\omega(\theta, a_t))$  assuming uniqueness (the proof is slightly more complicated, but similar otherwise). Using Equation A.9, we obtain:

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

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.

#### Proof of Lemma 2

From Proposition 2, we know that if  $\theta_t \ge \widehat{\theta}(a)$  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 P'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 it 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, P makes a new authority claim satisfying  $a_t(\theta_t, a, 1) = \overline{a}(\theta_t, a)$ .

Fix  $a, \theta_t \in [0, 1) \times [-\overline{\theta}, \widehat{\theta}(a))$ . P prefers  $a_t = \overline{a}(\theta_t, a)$  to any other authority claim if and only if  $v(\overline{a}(\theta_t, a)) + \beta E_{\theta}(W(\theta, \overline{a}(\theta_t, a))) \ge \max_{a' \in [a, \overline{a}(\theta_t, a)]} v(a') + \beta E_{\theta}(W(\theta, a'))$ . Since  $\overline{a}(\theta, a)$  is not monotonic in a (see Lemma 3), we cannot prove that  $W(\theta, a)$  is increasing in a. As a result, we cannot automatically prove that the inequality above is always satisfied. Rather, we proceed by a different route and provide a sufficient condition so that the function  $M(a') = v(a') + \beta E_{\theta}(W(\theta, a'))$  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  $\frac{\partial M(a')}{\partial a'} = v'(a') + \beta E_t (W_a(\theta, a'))$ . We know that  $W_a(\theta, a)$  satisfies  $W_a(\theta, a) \ge -K^W$  for all  $\theta, a \in [-\overline{\theta}, \overline{\theta}] \times [0, 1]$  for some finite  $K^W$  (see Lemma A.4). Hence  $\frac{\partial M(a')}{\partial a'} \ge v'(a') - \beta K^W$ . 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  $\widehat{\beta} = \min_{a' \in [0,1]} \frac{v'(a')}{K^W} > 0$  since  $K^W$  is finite. For all  $\beta \le \widehat{\beta}$ , 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.

#### Proof of Lemma 3

Point (i) follows directly from the proof of Lemma 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  $\theta$  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 Proposition 4**

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  $H_A(a_t; \theta, a) \leq H_B(a_t; \theta, a)$  for all  $a_t$  (since  $H(\cdot)$  is strictly decreasing with  $a_t$ ). This is equivalent to showing that  $\int_{\widehat{\theta}(a_t)}^{\overline{\theta}} 2((1-\beta)\theta + \kappa^C) - (a_t+1)dF_A(\theta) \leq \int_{\widehat{\theta}(a_t)}^{\overline{\theta}} 2((1-\beta)\theta + \kappa^C) - (a_t+1)dF_B(\theta)$ . Notice that (by integrating by parts):

$$\int_{\widehat{\theta}(a_t)}^{\overline{\theta}} 2((1-\beta)\theta + \kappa^C) - (a_t + 1)dF_J(\theta) = (2(1-\beta)\overline{\theta} + \kappa^C) - (a_t + 1))$$

$$- (2(1-\beta)\widehat{\theta}(a_t) + \kappa^C) - (a_t + 1))F_J(\widehat{\theta}(a_t))$$

$$- \int_{\widehat{\theta}(a_t)}^{\overline{\theta}} 2(1-\beta)F_J(\theta)d\theta$$

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  $\widehat{\theta}(a_t) \geq 0$ . Since  $F_B$  is a mean preserving spread of  $F_A$ ,  $\int_{-\overline{\theta}}^{\widehat{\theta}(a_t)} F_A(\theta) d\theta \leq \int_{-\overline{\theta}}^{\widehat{\theta}(a_t)} F_B(\theta) d\theta$  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,  $\int_{\widehat{\theta}(a_t)}^{\overline{\theta}} F_A(\theta) d\theta \geq \int_{\widehat{\theta}(a_t)}^{\overline{\theta}} F_B(\theta) d\theta$ . This directly implies  $\int_{\widehat{\theta}(a_t)}^{\overline{\theta}} 2((1-\beta)\theta + \kappa^C) - (a_t+1)dF_A(\theta) \leq \int_{\widehat{\theta}(a_t)}^{\overline{\theta}} 2((1-\beta)\theta + \kappa^C) - (a_t+1)dF_B(\theta)$ .

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.

## B Proofs for extensions and robustness

## B.1 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  $a_t \ge \max \mathcal{R}_t$  (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  $\check{\cdot}$  to denote the associated continuation value and equilibrium choices. More specifically, facing with a state  $\theta$ , the court's equilibrium choice is denoted  $\check{a}(\theta, a, a^R)$  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:  $\min W_{t'} = a^R$  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:  $\check{a}(\theta_t, a, a^R) = a$ ;
- (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:  $\check{a}(\theta_t, a, a^R) = a^R$ ;
- (iv) For all  $\theta_t \in (\theta^T(a), \theta^M(a^R))$ , the court's period t authority claim satisfies:  $\check{a}(\theta_t, a, a^R) = \theta_t \beta \int_{-\bar{\theta}}^{\theta_t} (\theta_t \tilde{\theta}) dF(\tilde{\theta})$ .

*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  $\check{a}(\theta, a, a^R) = a$  if and only if  $\theta \leq \theta^T(a)$ , for some  $\theta^T(a)$ , and choose some authority  $\check{a}(\theta, a, a^R) > a$  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  $\check{V}(\cdot,\cdot)$  exists, is differentiable, concave, with continuous derivative. Further, it equals, for all  $a', a^R$ :

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

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

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

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

with

Given  $\check{a}(\theta^T(a'), a', a^R) = a'$ , 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  $\check{\mathcal{V}}_1(a',\theta,a) < 0$  for all a' > a, the court's optimal claim is  $\check{a}(\theta,a,a^R) = a$ . The condition is equivalent to

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

After rearranging, we obtain

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

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

$$a' = \theta + \kappa^C - \beta \int_{-\bar{\theta}}^{\theta^T(a')} (\theta - \tilde{\theta}) dF(\tilde{\theta})$$
(B.1)

Finally,  $\check{a}(\theta, a, a^R) = a^R$  if  $\check{\mathcal{V}}_1(a', \theta, a) \ge 0$  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  $\check{\mathcal{V}}_1(a', \theta, a) < 0$  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  $\kappa^C \le 1$ ;
- (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  $\theta \leq \theta^T(a)$ ,  $\check{a}(\theta, a, a^R) = a$  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  $\check{a}(\theta, a, a^R) = a^R$  for all  $\theta \geq \theta^M(a^R)$  (i.e.,  $\check{V}_1(a', \theta, a) \geq 0$  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.1 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  $\theta \ge \theta^T(a)$ 

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  $\theta \ge \theta^M(a^R)$ , the court picks  $\check{a}(\theta, a, a^R) = a^R$ . This proves point (iii). Point (iv) then follows from Equation B.2.

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 itself 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  $a_t \ge \max \mathcal{R}_t$  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  $\check{a}(\theta_t, a, a^R) = a^R$  (recall that  $\check{\cdot}$  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 rejecting

it whenever

$$-(a^R - \theta)^2 + \beta V(a^R, a^R) \ge -(a - \theta)^2 + \beta V(a, a^R)$$
  

$$\Leftrightarrow (a - a^R)(a + a^R - 2\theta) \ge \beta (V(a, a^R) - V(a^R, a^R))$$

The function  $(a-a^R)(a+a^R-2\theta)$  is strictly increasing with  $\theta$ . Hence, if there exists  $\theta^l$  such that  $(a-a^R)(a+a^R-2\theta^l) \geq \beta \big( V^0(a,a^R) - V^0(a^R,a^R) \big), \text{ then } (a-a^R)(a+a^R-2\theta) > \beta \big( V^0(a,a^R) - V^0(a^R,a^R) \big)$  $V^0(a^R, a^R)$ ) for all  $\theta > \theta^l$ . Hence,  $\widehat{\theta}^{\mathscr{L}}(a, a^R)$  is necessarily unique. Step 3. We now show that there exists  $\bar{\epsilon} > 0$  such that for all  $\epsilon \in (0, \bar{\epsilon}]$ , defining  $a' = a + \epsilon$ ,  $-(a'-\kappa^C-\theta)^2+\beta V(a',a^R)\geq -(a-\kappa^C-\theta)^2+\beta V(a,a') \text{ (i.e., the court upholds any } a'\in(a,a+\overline{\epsilon}].$ 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 2, given steps 1 and 2, we know that there exist  $\hat{\epsilon} > 0$  such that for all  $\epsilon \in (0, \hat{\epsilon})$ ,  $V(a + \epsilon, a^R) - V(a, a)$  is bounded below away from zero. Further, denote  $\theta^*(a) = a - \kappa^C$  and note that  $V(a, a + \epsilon) < F(\theta^*(a)) \frac{E_{\theta}(-(a - \theta - \kappa^C)^2 | \theta \le \theta^*(a))}{1 - \beta} + (F(\theta^*(a + \theta + \kappa^C)^2 | \theta \le \theta^*(a)))$  $\epsilon$ ))  $-F(\theta^*(a))) \times 0 + (1 - F(\theta^*(a+\epsilon)) \frac{E_{\theta}(-(a+\epsilon-\theta-\kappa^C)^2|\theta \ge \theta^*(a))}{1-\beta}$  (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  $\theta$ and all t'>t in any equilibrium). This means that  $V(a,a+\epsilon)-V(a,a)<(F(\theta^*(a+\epsilon))-(B(a,a)))$  $F(\theta^*(a))) \frac{E_{\theta}((a-\theta-\kappa^C)^2|\theta\in(\theta^*(a),\theta^*(a+\epsilon)))}{1-\beta} + (1-F(\theta^*(a+\epsilon)) \frac{E_{\theta}((a-\theta-\kappa^C)^2-(a+\epsilon-\theta-\kappa^C)^2|\theta\geq\theta^*(a))}{1-\beta}. \text{ This (strict)}$ upper bound is continuous in  $\epsilon$  and converge to 0 as  $\epsilon \to 0$ . Hence, there exists  $\epsilon > 0$  such that there exists  $\psi > 0$  such that for all  $\epsilon \in (0, \epsilon)$ ,  $(V(a + \epsilon, a^R) - V(a, a)) - (V(a, a + \epsilon) - V(a, a)) \ge \psi$ . Given that  $2\epsilon(a + \frac{\epsilon}{2} - \theta - \kappa^C)$  is continuous in  $\epsilon$  and converges to 0 as  $\epsilon \to 0$ , there exists  $\bar{\epsilon} > 0$ , such that for all  $\epsilon \in (0, \overline{\epsilon}), 2\epsilon(a + \frac{\epsilon}{2} - \theta - \kappa^C) \leq \beta(V(a + \epsilon, a^R) - V(a, a + \epsilon)).$ 

## B.2 Revisiting precedents

To prove Propositions 6 and 7, we first introduce or re-introduce some notation. Let V(a, a') be the continuation of the court at the beginning of a period before the state of the world is realized and Nature determines the court's ability to revisit precedents. Since we consider our original

baseline judicial rule, note that  $a' \in \{a, 1\}$ . As noted above, with probability  $\lambda$ , the court has an opportunity to revisit precedents. We denote  $V^C$  the continuation of the court in this case. That is,

$$V^{C} = E_{\theta} \left( \max_{a \in [0,1]} \left\{ -(a - (\theta + \kappa^{C}))^{2} + \beta V(a,1) \right\} \right)$$

The next lemma provides an equivalent result to Lemma 1 in this setting.

**Lemma B.2.** Define  $\max \mathcal{R}_t = a$  and denote  $\widehat{\theta}(a) = \frac{\frac{1+a}{2} - \kappa^C}{1-\beta(1-\lambda)}$ . In any equilibrium, the court upholds a full authority claim,  $d_t(\theta_t, 1, a, 1) = 0$ , if and only if  $\theta_t \geq \widehat{\theta}(a)$ .

*Proof.* If the court rejects a claim of  $a_t = 1$ , then its continuation value is:

$$V(a,a) = (1 - \lambda)E_{\theta}\left(-(a - (\theta + \kappa^{C}))^{2} + \beta V(a,a)\right) + \lambda V^{C}$$

With probability  $1 - \lambda$ , the court cannot revisit precedents, it obtains a period payoff of  $-(a - (\theta + \kappa^C))^2$  for each realization of the state (hence, the expectation) and start next period with the same continuation value. With probability  $\lambda$ , the court has an opportunity to revisit precedent and its continuation value is  $V^C$ . Rearranging, this yields

$$V(a,a) = \frac{(1-\lambda)E_{\theta}(-(a-(\theta+\kappa^{C}))^{2})}{1-\beta(1-\lambda)} + \frac{\lambda V^{C}}{1-\beta(1-\lambda)}$$
(B.3)

In turn, if the court upholds the claim, its continuation value is, by the same reasoning:

$$V(1,1) = (1 - \lambda)E_{\theta}(-(1 - (\theta + \kappa^{C}))^{2} + \beta V(1,1)) + \lambda V^{C}$$

Rearranging, this yields

$$V(1,1) = \frac{(1-\lambda)E_{\theta}(-(1-(\theta+\kappa^{C}))^{2})}{1-\beta(1-\lambda)} + \frac{\lambda V^{C}}{1-\beta(1-\lambda)}$$
(B.4)

The court upholds an authority claim of  $a_1 = 1$  in state  $\theta_t$  if and only if:

$$-(a - (\theta_t + \kappa^C))^2 + \beta V(a, a) \le -(1 - (\theta_t + \kappa^C))^2 + \beta V(1, 1)$$

Proceeding just like in the proof of Lemma 1 finishes the proof of the lemma.

#### **Proof of Proposition 6**

The proof is very similar to the proof of Proposition 2. The key step is to show that the court always prefers the continuation value  $V(a_t, 1)$  to  $V(a_t, a_t)$ .

Keeping P's strategy as  $a_t(\theta_t, a, 1)$  (with  $\theta_t$  the state in period t and  $a = \max \mathcal{R}_t$ , and  $1 = \min \mathcal{W}_t$ ). In any equilibrium, the continuation value when no claim has been rejected is (ignoring arguments in  $a_t$ )  $V(a_t, 1) = (1 - \lambda)E_{\theta} \Big[ \max\{-\left(a_{t+1}(\theta, a_t, 1) - \kappa^C - \theta\right)^2 + \beta V(a_{t+1}(\theta, a_t, 1), 1), -\left(a_t - \kappa^C - \theta\right)^2 + \beta V(a_t, a_t)\} \Big] + \lambda V^C$ . By Lemma B.2, 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),  $-\left(a_{t+1}(\theta_{t+1}, a_t, 1) - \kappa^C - \theta_{t+1}\right)^2 + \beta V(a_{t+1}(\theta_{t+1}, a_t, 1), 1) > -\left(a_t - \kappa^C - \theta_{t+1}\right)^2 + \beta V(a_t, a_t)$ . Hence, necessarily  $V(a_t, 1) > (1 - \lambda)E_{\theta} \Big[ -\left(a_t - \kappa^C - \theta\right)^2 + \beta V(a_t, a_t) \Big] + \lambda V^C = V(a_t, a_t)$  for any  $a_t \in [0, 1)$ . In addition, following the same reasoning as in Proposition 2,  $V(a_t, 1) - V(a_t, a_t) \geq (1 - \lambda)(1 - a_t) \int_{\widehat{\theta}(a_t)}^{\overline{\theta}} \Big( 2\theta - \frac{1 + a_t - 2\kappa^C}{1 - \beta} \Big) dF(\theta)$ .

As we recover a similar inequality as in the proof of Proposition 2 (the only difference being the probability  $(1 - \lambda) > 0$ ), we can then apply the same steps to prove the result.

We now turn to the case of the maximally admissible equilibrium. Existence follows very much along the same steps as for the proof of Lemma 2. In particular, the court's tolerance threshold is now the unique solution to the following equation for all  $\theta_t \leq \widehat{\theta}_t(a)$ , with  $\widehat{\theta}_t(a)$  defined in Lemma B.2 (details available upon request).

$$2(\kappa^{C} + (1 - \beta(1 - \lambda))\theta) - (a + a_{t}) + \beta(1 - \lambda)\frac{1 - a_{t}}{a_{t} - a} \int_{\widehat{\theta}(a_{t})}^{\overline{\theta}} 2((1 - \beta(1 - \lambda))\theta + \kappa^{C}) - (a_{t} + 1)dF(\theta) = 0$$
 (B.5)

The possibility of the court revisiting precedents is, thus, equivalent to a decrease in the discount factor the court (compare Equation B.5 and Equation A.7). As we have discussed in the main text, the comparative statics on  $\beta$  is unclear and we cannot conclude whether the possibility of revisiting

precedents increase or decrease the court's tolerance threshold. We can, however, prove that the court increases on its own the authority of the executive when  $\theta_t$  is sufficiently large.

## **Proof of Proposition 7**

Under the specified strategy, in all period t such that  $\max \mathcal{R}_t = a \in [0, 1)$  and  $\theta_t < \widehat{\theta}(a) = \frac{\frac{1+a}{2} - \kappa^C}{1-\beta(1-\alpha)}$ ,  $a_t(\theta_t, a, 1)$  satisfies:

$$-(a_t(\theta, a, 1) - \kappa^C - \theta)^2 + \beta V(a_t(\theta, a, 1), 1) = -(a - \kappa^C - \theta)^2 + \beta V(a, a)$$
(B.6)

We can then rewrite V(a, 1) as

$$V(a,1) = (1-\lambda) \left[ \int_{-\overline{\theta}}^{\widehat{\theta}(a)} -(a_t(\theta, a, 1) - \kappa^C - \theta)^2 + \beta V(a_t(\theta, a, 1), 1) dF(\theta) \right]$$

$$+ \int_{\widehat{\theta}(a)}^{\overline{\theta}} -(1 - \kappa^C - \theta)^2 + \beta V(1, 1) dF(\theta) \right] + \lambda V^C$$

$$= (1-\lambda) \left[ \int_{-\overline{\theta}}^{\widehat{\theta}(a)} -(a - \kappa^C - \theta)^2 + \beta V(a, a) dF(\theta) \right]$$

$$+ \int_{\widehat{\theta}(a)}^{\overline{\theta}} -(1 - \kappa^C - \theta)^2 + \beta V(1, 1) dF(\theta) \right] + \lambda V^C \quad \text{(using Equation B.6)}$$

$$= (1-\lambda) \left[ \int_{-\overline{\theta}}^{\widehat{\theta}(a)} -(a - \kappa^C - \theta)^2 + \frac{\beta (1-\lambda) E_{\theta} \left( -(a - (\theta + \kappa^C))^2 \right)}{1 - \beta (1 - \lambda)} dF(\theta) \right]$$

$$+ \int_{\widehat{\theta}(a)}^{\overline{\theta}} -(1 - \kappa^C - \theta)^2 + \frac{\beta (1 - \lambda) E_{\theta} \left( -(1 - (\theta + \kappa^C))^2 \right)}{1 - \beta (1 - \lambda)} dF(\theta) \right]$$

$$+ \frac{(1-\lambda)\beta\lambda V^C}{1 - \beta (1 - \lambda)} + \lambda V^C \quad \text{(using Equation B.3) and Equation B.4)}$$

Decomposing and using  $E_{\theta}(\theta) = 0$ , we then obtain:

$$V(a,1) = \frac{1-\lambda}{1-\beta(1-\lambda)} \left( -F(\widehat{\theta}(a))(a-\kappa^C)^2 - (1-F(\widehat{\theta}(a)))(1-\kappa^C)^2 - Var(\theta) \right)$$

$$+ (1-\lambda) \left[ \int_{-\overline{\theta}}^{\widehat{\theta}(a)} 2(a-\kappa^C)\theta dF(\theta) + \int_{\widehat{\theta}(a)}^{\overline{\theta}} 2(1-\kappa^C)\theta dF(\theta) \right] + \frac{\lambda V^C}{1-\beta(1-\lambda)}$$

$$= \frac{1-\lambda}{1-\beta(1-\lambda)} \left( -(a-\kappa^C)^2 - (1-F(\widehat{\theta}(a)))(1-a)(a+1-2\kappa^C) - Var(\theta) \right)$$

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

$$= \frac{1-\lambda}{1-\beta(1-\lambda)} \left( -(a-\kappa^C)^2 - Var(\theta) + (1-a) \int_{\widehat{\theta}(a)}^{\overline{\theta}} 2((1-\beta(1-\lambda))\theta + \kappa^C) - (a+1)dF(\theta) \right)$$

$$+ \frac{\lambda V^C}{1-\beta(1-\lambda)}$$
(B.7)

Equation B.7 directly shows (i) the continuation value exists, (ii) it is unique, and (iii) it is continuous and differentiable in a.

With this, we can rewrite the court's maximization problem for a realization of the state of the world  $\theta_t$  as

$$\max_{a_t \in [0,1]} - (a_t - \theta_t - \kappa^C)^2 + \beta V(a_t, 1)$$

The first derivative of the objective function is:

$$-2(a_t - \theta_t - \kappa^C) + \frac{\beta(1-\lambda)}{1-\beta(1-\lambda)} \left( -2(a_t - \kappa^C) - \int_{\widehat{\theta}(a_t)}^{\overline{\theta}} 2((1-\beta(1-\lambda))\theta + \kappa^C) - (a_t + 1)dF(\theta) - (1-a_t) \int_{\widehat{\theta}(a_t)}^{\overline{\theta}} dF(\theta) \right)$$

The second derivative is

$$-2 + \frac{\beta(1-\lambda)}{1-\beta(1-\lambda)} \Big( -2 + 2 \int_{\widehat{\theta}(a_t)}^{\overline{\theta}} dF(\theta) + (1-a_t) \frac{\partial \widehat{\theta}(a_t)}{\partial a_t} f(\widehat{\theta}(a_t)) \Big)$$

$$= -2 + \frac{\beta(1-\lambda)}{1-\beta(1-\lambda)} \Big( -2F(\widehat{\theta}(a_t)) + (1-a_t) \frac{\partial \widehat{\theta}(a_t)}{\partial a_t} f(\widehat{\theta}(a_t)) \Big)$$

Since  $\frac{\partial \widehat{\theta}(a_t)}{\partial a_t} = \frac{1}{2(1-\beta(1-\lambda))}$  and, by assumption  $\frac{f(\widehat{\theta}(a_t))}{F(\widehat{\theta}(a_t))} \leq 4(1-\beta(1-\lambda))$ , the second derivative is strictly negative so the court's maximization problem is strictly concave.

Now consider the unconstrained problem (without the court's choice being constrained in the

interval [0, 1]), it is easy to observe that the solution the unconstrained problem satisfies:

$$-2(a_{t} - \theta_{t} - \kappa^{C}) + \frac{\beta(1 - \lambda)}{1 - \beta(1 - \lambda)} \left( -2(a_{t} - \kappa^{C}) - \int_{\widehat{\theta}(a_{t})}^{\overline{\theta}} 2((1 - \beta(1 - \lambda))\theta + \kappa^{C}) - (a_{t} + 1)dF(\theta) - (1 - a_{t}) \int_{\widehat{\theta}(a_{t})}^{\overline{\theta}} dF(\theta) \right) = 0$$

and it is continuous and increasing in  $\theta_t$ . Hence, to prove the claim we just need to show that the solution to the unconstrained problem is strictly greater than 1 for some  $\theta_t \in [-\overline{\theta}, \overline{\theta}]$ . This is equivalent to show that there exists  $\theta^C \in [-\overline{\theta}, \overline{\theta}]$  such that for all  $\theta_t \geq \theta^C$ :

$$-2(1 - \theta_t - \kappa^C) + \frac{\beta(1 - \lambda)}{1 - \beta(1 - \lambda)} \left( -2(1 - \kappa^C) - \int_{\widehat{\theta}(1)}^{\overline{\theta}} 2((1 - \beta(1 - \lambda))\theta + \kappa^C) - (1 + 1)dF(\theta) \right) \ge 0$$

The threshold  $\theta^C$  assumes the following value:

$$\theta^{C} = \frac{1 - \kappa^{C}}{1 - \beta(1 - \lambda)} + \beta(1 - \lambda) \int_{\widehat{\theta}(1)}^{\overline{\theta}} \theta - \frac{1 - \kappa^{C}}{1 - \beta(1 - \lambda)} dF(\theta)$$

Noticing that  $\widehat{\theta}(1) = \frac{1-\kappa^C}{1-\beta(1-\lambda)}$ , we have:

$$\theta^{C} = \widehat{\theta}(1) + \beta(1 - \lambda) \int_{\widehat{\theta}(1)}^{\overline{\theta}} \theta - \widehat{\theta}(1) dF(\theta)$$

Now notice that  $\int_{\widehat{\theta}(1)}^{\overline{\theta}} \theta - \widehat{\theta}(1) dF(\theta) < (1 - F(\widehat{\theta}(1))(\overline{\theta} - \widehat{\theta}(1)) \text{ so } \widehat{\theta}(1) + \beta(1 - \lambda) \int_{\widehat{\theta}(1)}^{\overline{\theta}} \theta - \widehat{\theta}(1) dF(\theta) < (1 - \beta(1 - \lambda))(1 - F(\widehat{\theta}(1)))\widehat{\theta}(1) + \beta(1 - \lambda)(1 - F(\widehat{\theta}(1)))\overline{\theta} < \overline{\theta}$ . Hence,  $\theta^C < \overline{\theta}$ . Using the continuity of the court's choice in  $\theta$ , there exists  $\underline{\theta}(a)$  such that if  $\max \mathcal{R}_t = a$ , the court's choice of new precedent  $a^*(\theta_t)$  satisfies  $a^*(\theta_t) > a$  for all  $\theta_t > \underline{\theta}(a)$ .

## B.3 Political turnover and executive power

## **Proof of Proposition 8**

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

rium authority acquisition when the state is  $\theta$ , 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  $\theta$  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 rejects the authority claim and blocks future claims. We show that there exists a profitable deviation whenever  $\pi$  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  $\theta$ . If  $P_l$  follows her prescribed strategy, her expected payoff is:

$$W_{P_l}(\theta, a, a, P_l) = v(a) + \beta \pi W_{P_l}(\theta, a, a, P_l) + \beta (1 - \pi) W_{P_l}(\theta, a, a, P_r)$$
(B.8)

Similarly,

$$W_{P_l}(\theta, a, a, P_r) = -v(a) + \beta \pi W_{P_l}(\theta, a, a, P_r) + \beta (1 - \pi) W_{P_l}(\theta, a, a, P_l)$$
(B.9)

Simple computation then yields:

$$W_{P_l}(\theta, a, a, P_l) = v(a) + \beta \frac{(2\pi - 1)}{1 - \beta(2\pi - 1)} v(a)$$
(B.10)

Using a similar reasoning as in the proof of Proposition 2, it can be shown that there exists  $\overline{a}(\theta, a)$  such that the court upholds the executive action if  $a \leq \overline{a}(\theta, a)$ .<sup>17</sup> Given the prescribed equilibrium strategy (the court must reject  $P_l$ '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  $\theta_{t+k}$ ,  $P_l$  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

<sup>&</sup>lt;sup>17</sup>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  $\theta_t$ —taking into future players' strategies.

we just look for a necessary condition for its existence. 18

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:

$$\widehat{W}_{P_l}(\theta, a, 1, P_l) = v(\overline{a}(\theta, a)) + \beta \pi E_{\theta_{t+1}} \left( \widehat{W}_{P_l}(\theta_{t+1}, \overline{a}(\theta, a), 1, P_l) \right) + \beta (1 - \pi) E_{\theta_{t+1}} \left( \widehat{W}_{P_l}(\theta_{t+1}, \overline{a}(\theta, a), 1, P_r) \right)$$
(B.11)

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

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

and

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

Therefore

$$E_{\theta_{t+1}}(\widehat{W}_{P_l}(\theta_{t+1}, \overline{a}(\theta, a), 1, P_l) - \widehat{W}_{P_l}(\theta_{t+1}, \overline{a}(\theta, a), 1, P_r))$$

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

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

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

$$E_{\theta_{t+1}}(\widehat{W}_{P_l}(\theta_{t+1}, \overline{a}(\theta, a), 1, P_l) - \widehat{W}_{P_l}(\theta_{t+1}, \overline{a}(\theta, a), 1, P_r))$$

$$= E_{\theta_{t+1}}(2v(\widehat{a}(\theta_{t+1}, \overline{a})) + 2\sum_{k=2}^{\infty} \beta^k (2\pi - 1)^k E_{\theta_{t+1}, \dots, \theta_{t+k}}(v(\widehat{a}_{t+k})),$$

<sup>&</sup>lt;sup>18</sup>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  $\theta$ .

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:

$$E_{\theta_{t+1}}(\widehat{W}_{P_l}(\theta_{t+1}, \overline{a}(\theta, a), 1, P_l)) = E_{\theta_{t+1}}(v(\widehat{a}(\theta_{t+1}, \overline{a})) + \sum_{k=2}^{\infty} \beta^k (2\pi - 1)^k E_{\theta_{t+1}, \dots, \theta_{t+k}}(v(\widehat{a}_{t+k}))$$
(B.12)  
$$E_{\theta_{t+1}}(\widehat{W}_{P_l}(\theta_{t+1}, \overline{a}(\theta, a), 1, P_r)) = E_{\theta_{t+1}}(-v(\widehat{a}(\theta_{t+1}, \overline{a})) - \sum_{k=2}^{\infty} \beta^k (2\pi - 1)^k E_{\theta_{t+1}, \dots, \theta_{t+k}}(v(\widehat{a}_{t+k}))$$
(B.13)

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

$$\widehat{W}_{P_l}(\theta, a, 1, P_l) = v(\overline{a}(\theta, a)) + \sum_{k=1}^{\infty} \beta^k (2\pi - 1)^k E_{\theta_{t+1}, \dots, \theta_{t+k}} \left( v(\widehat{a}_{t+k}) \right)$$
(B.14)

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:

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

For all  $\theta$  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  $\dot{\pi}(a, \theta) < 1/2$  such that this necessary condition is satisfied only if  $\pi \geq \dot{\pi}(a, \theta)$ .

Denote  $\dot{\pi} = \min_{a \in [0,1), \theta \in [-\overline{\theta}, \overline{\theta}]} \dot{\pi}(a, \theta)$ . From the reasoning above,  $\dot{\pi} < 1/2$ . Since we have only looked at a single possible deviation, there exists  $\underline{\pi} \leq \dot{\pi} < 1/2$  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.

#### Proof of Remark 2

The proof is by contradiction. Suppose there exists an equilibrium in which there exists a permissible set  $[0, a] \subset [0, a]$  such that if  $\mathcal{R}_t = [0, a]$  with  $\mathcal{W}_t = \emptyset$ , the incumbent prefers to remain forever with this permissible set rather than seeing any extension of authority (i.e.,  $\mathcal{R}_{t+1} = [0, a]$  with probability one). Note that because once in office, both politicians face the same problem than if  $P_l$  prefers to remain with  $\mathcal{R}_t = [0, a]$  so does  $P_r$ . We show that the office-holder has a profitable deviation in some state and such equilibrium cannot exist assuming throughout that  $W_t = \emptyset$ . Suppose we are in such equilibrium with  $\mathcal{R}_t = [0, a]$  and the state  $\theta_t$  satisfying  $\theta_t \ge \widehat{\theta}(a)$  (the time subscript is for expositional convenience, as we use MPE as solution concept, the relevant variable is the permissible set [0, a] and the realization of the shock). We now show that the office-holder, say  $P_l$ , prefers to claim full authority over the domain  $a_t(\theta) = 1$  rather than maintaining  $\mathcal{R}$ . Suppose  $P_l$  makes no new claim. Her payoff is  $W(a) = v(a) + \beta \left(\pi E_{\theta_{t+1}}(W_{P_l}(\theta_{t+1}, a, 1, P_l)) + (1 - e^{-t})\right)$  $\pi E_{\theta_{t+1}}(W_{P_t}(\theta_{t+1}, a, 1, P_r))$  (where, under our prescribed strategy, both politicians make authority claim a forever). We further have  $W_{P_l}(\theta_{t+1}, a, 1, P_l) = v(a) + \beta (\pi E_{\theta_{t+1}}(W_{P_l}(\theta_{t+1}, a, 1, P_l)) + (1 - e^{-\beta_{t+1}}(W_{P_l}(\theta_{t+1}, a, 1, P_l))) + (1 - e^{-\beta_{t+1}}(W_{P_l}(\theta_{t+1}, a, 1, P_l)))$  $\pi)E_{\theta_{t+1}}(W_{P_l}(\theta_{t+1},a,1,P_r))\big) \text{ for all } \theta_{t+1} \text{ and } W_{P_l}(\theta_{t+1},a,1,P_r) = -v(a) + \beta\big((1-\pi)E_{\theta_{t+1}}(W_{P_l}(\theta_{t+1},a,1,P_l)) + \beta\big((1-\pi)E_{\theta_{t+1$  $\pi E_{\theta_{t+1}}(W_{P_l}(\theta_{t+1}, a, 1, P_r))$  for all  $\theta_{t+1}$ . This implies that  $E_{\theta_{t+1}}(W_{P_l}(\theta_{t+1}, a, 1, P_l)) = \frac{v(a)}{1+\beta(1-2\pi)}$  and  $E_{\theta_{t+1}}(W_{P_t}(\theta_{t+1}, a, 1, P_r)) = -\frac{v(a)}{1+\beta(1-2\pi)}$ . So  $W(a) = v(a) - \beta(1-2\pi)\frac{v(a)}{1+\beta(1-2\pi)} = \frac{v(a)}{1+\beta(1-2\pi)}$ . If instead,  $P_l$  deviates and makes a full authority claim, then  $\hat{W}(1) = v(1) + \pi E_{\theta_{t+1}}(W_{P_l}(\theta_{t+1}, 1, 1, P_l)) +$  $(1-\pi)E_{\theta_{t+1}}(W_{P_l}(\theta_{t+1},1,1,P_r))$ . By a similar reasoning,  $\hat{W}(1) = \frac{v(1)}{1+\beta(1-2\pi)} > W(a)$ . Hence, we have found a profitable deviation.

We have, thus, excluded the existence of an equilibrium in which there exists a permissible set  $[0, a] \subset [0, 1]$  such that if  $\mathcal{R}_t = [0, a]$  then  $\mathcal{R}_{t+1} = [0, a]$  for all  $\theta_t$  (recall that since we study MPE, this means authority never increases above [0, a]). This leaves two cases. First, the equilibrium is such that such [0, a] exists, but it is never reached on the equilibrium path. This case is excluded in the text of the Lemma by assuming  $\mathcal{R}_t = [0, a]$ . But then for all permissible sets reached in equilibrium, authority will increase with positive probability as stated in the text of the Remark. Second, there is no such permissible set, and this yields the Remark directly.

## B.4 Authority acquisition in a calm world

#### **Proof of Proposition 9**

The proof follows directly from the proof of Proposition 2. Indeed, the key step of the proof of Proposition 2 is to show that the continuation values satisfy  $V(a,1) > V(a,a_t)$ . And this inequality holds whenever the interval  $(\widehat{\theta}(a), \overline{\theta}]$  is not empty, which is guaranteed by  $a < a^f$ .

#### **Proof of Proposition 10**

For any  $\max \mathcal{R}_t = a > a^f$ , we claim that the upper bound on authority, denoted  $a^{max}(a)$  is the solution to  $-(a - \overline{\theta} - \kappa^C)^2 + \beta V(a, a) = -(a^{max}(a) - \overline{\theta} - \kappa^C)^2 + \beta V(a^{max}(a), a^{max}(a))$  if  $a^{max}(a) > a$  or satisfies  $a^{max} = a$  otherwise. Observe that the solution of the equation above is  $a^{max}(a) = 2(1 - \beta)\overline{\theta} + 2\kappa^C - a$  so  $a^{max}(a) = \max\{2(1 - \beta)\overline{\theta} + 2\kappa^C - a, a\}$ .

To prove the claim, we show that for all  $\max \mathcal{R}_t \geq (1-\beta)\overline{\theta} + \kappa^C$ , the court rejects any additional authority claim. That is, for all  $\max \mathcal{R}_t = a \geq (1-\beta)\overline{\theta} + \kappa^C$ , the court's expected payoff from rejecting a claim a' > a is strictly greater than the expected payoff from upholding:  $-(a-\theta-\kappa^C)^2 + \beta V(a,a) < -(a'-\theta-\kappa^C)^2 + \beta V(a',1)$ . Fixing a and a', we know that the inequality is most likely not to hold when  $\theta = -\overline{\theta}$  so our goal is to show that  $-(a-\overline{\theta}-\kappa^C)^2 + \beta V(a,a) < -(a'-\overline{\theta}-\kappa^C)^2 + \beta V(a',1)$ .

Suppose first that after upholding a'>a, the court rejects all additional authority claims for all a'>a. Then V(a',1)=V(a',a'). Given the assumption a  $(a\geq (1-\beta)\overline{\theta}+\kappa^C)$  and a' (a'>a), we then directly have  $-(a-\overline{\theta}-\kappa^C)^2+\beta V(a,a)>-(a'-\overline{\theta}-\kappa^C)^2+\beta V(a',1)$  then.

We now prove by contradiction that there is no equilibrium in which when  $\max \mathcal{R} = a' > a \ge (1-\beta)\overline{\theta} + \kappa^C$ , the court upholds some new authority claims in some states. Suppose such equilibrium exists and denote then  $\check{a}(\theta, a')$  the equilibrium authority claim of the executive in state  $\theta$  when the permissible set is [0, a']. Note that we must have  $\check{a}(\theta, a') > a'$  for some  $\theta$  (otherwise, V(a', 1) = V(a', a'), contradicting that our assumption on the features of the equilibrium). Therefore, we can write the court's payoff from upholding  $(V(d = 0; a_t, \theta, \max \mathcal{R}_t))$  as:

$$V(0; \check{a}(\theta, a'), \theta, a') = -(\check{a}(\theta, a') - \theta - \kappa^C)^2 + \beta V(\check{a}(\theta, a'), 1)$$

Suppose that there is no expansion of authority after  $\check{a}(\theta,a') > a'$  (i.e., the court rejects all new claims) so  $V(\check{a}(\theta,a'),1) = V(\check{a}(\theta,a'),\check{a}(\theta,a'))$ . Then, using the same reasoning as above, we have  $V(0;\check{a}(\theta,a'),\theta,a') < -(a'-\theta-\kappa^C) + \beta V(a',a') = V(d=1;\check{a}(\theta,a'),\theta,a')$  and the court would reject the claim. Hence, it must be that authority continuously grows with strictly positive probability on the equilibrium path for V(a',1) > V(a',a'). If authority growth were to stop, inequalities would unravel by using the reasoning above.

We now show that authority cannot continuously grow. Suppose it does. Given that the authority space is compact, it has to be that the maximum of the permissible set converges in the limit to a certain value. Denote  $\lim_{t\to\infty} \max \mathcal{R}_t = a^\infty \le 1$ . Further, we can always find a T sufficiently high so that  $\max \mathcal{R}_T = a$  is arbitrarily close to  $a^\infty$ . This implies that for all  $a' \in (a, a^\infty)$ ,  $^{19}V(0; a', \theta, a)$  is approximately close to  $-(a^\infty - \theta - \kappa^C) + \beta V(a^\infty, a^\infty)$ , with  $V(1; a^\infty, \theta, a^\infty) = -(a^\infty - \theta - \kappa^C) + \beta V(a^\infty, a^\infty)$ , with  $V(1; a^\infty, \theta, a^\infty) = -(a^\infty - \theta - \kappa^C) + \beta V(a^\infty, a^\infty)$  for all  $\theta$ . Thus, authority cannot grow continuously. In turn, proceeding backward in time from T, this means that  $V(a', a') \ge V(a', 1)$  and so  $V(1; a', \theta, a) = -(a - \overline{\theta} - \kappa^C)^2 + \beta V(a, a) > -(a' - \overline{\theta} - \kappa^C)^2 + \beta V(a', 1) = V(0; a', \theta, a)$ . To show the last claim more formally, denote  $a' = a + \epsilon$  and  $a^\infty = a' + \delta$  for some a arbitrarily close to  $a^\infty$ , and  $\epsilon > 0$  and  $\delta > 0$  arbitrarily close to 0. Denote  $\theta^L(a') = a' - \kappa^C$  and  $\theta^T(a') = a^\infty - \kappa^C$  and note that  $(1 - \beta)V(a', 1) < F(\theta^L(a'))E(-(a' - \theta - \kappa^C)^2|\theta \le \theta^L(a')) + (F(\theta^T(a')) - F(\theta^L(a'))) \times 0 + (1 - F(\theta^T(a'))E(-(a^\infty - \theta - \kappa^C)^2|\theta \ge \theta^T(a')) := (1 - \beta)\overline{V}(a', 1)$  (that is, the court gets a' when the state is below  $\theta^L(a')$ , its preferred claim when the state is between  $\theta^L(a')$  and  $\theta^T(a')$ , and  $a^\infty$  when the state is above  $\theta^T(a')$  like in a world without precedent). We can then rewrite as

$$(1 - \beta)\overline{V}(a', 1) = -E(-(a' - \theta - \kappa^C)^2) - \int_{\theta^L(a')}^{\theta^T(a')} -(a' - \theta - \kappa^C)^2 dF(\theta) + \int_{\theta^T(a')}^{\overline{\theta}} ((a' - \theta - \kappa^C)^2 - (a^\infty - \theta - \kappa^C)^2) dF(\theta)$$

<sup>&</sup>lt;sup>19</sup>Note that max  $\mathcal{R}_t$  can never equal  $a^{\infty}$  in finite time since we have already noted that authority must continuously grow.

Using the definitions of  $\theta^L(a')$  and  $\theta^T(a')$ , we have:

$$(1 - \beta)\overline{V}(a', 1) \leq -E(-(a' - \theta - \kappa^C)^2) + (\theta^T(a') + \kappa^C - a')^2 \int_{\theta^L(a')}^{\theta^T(a')} dF(\theta)$$

$$+ \int_{\theta^T(a')}^{\overline{\theta}} (a^{\infty} - a')(2(\theta + \kappa^C) - (a^{\infty} + a'))dF(\theta)$$

$$= E(-(a' - \theta - \kappa^C)^2) + (a^{\infty} - a')^2 (F(\theta^T(a')) - F(\theta^T(a')))$$

$$+ \delta \int_{\theta^T(a')}^{\overline{\theta}} (2(\theta + \kappa^C) - (a^{\infty} + a'))dF(\theta)$$

$$= -E(-(a' - \theta - \kappa^C)^2) + \delta \int_{\theta^T(a')}^{\overline{\theta}} (2(\theta + \kappa^C) - (a^{\infty} + a'))dF(\theta)$$

Where the last equality comes from the fact that we assume that a is arbitrarily close to  $a^{\infty}$  so terms with  $\delta^2$  are negligible.

Using this, we can compare the court's expected utility between rejecting a and upholding a' when  $\theta = \overline{\theta}$  (the best possible circumstance for new claim). We obtain:

$$\left(-(a-\overline{\theta}-\kappa^C)^2+\beta V(a,a)\right)-\left(-(a'-\theta-\kappa^C)^2+\beta V(a',1)\right) >\left(-(a-\overline{\theta}-\kappa^C)^2+\beta V(a,a)\right)-\left(-(a'-\theta-\kappa^C)^2+\beta \overline{V}(a',1)\right) \geq \left(-(a-\overline{\theta}-\kappa^C)^2+\beta \frac{E_{\theta}(-(a-\theta-\kappa^C)^2)}{1-\beta}\right) -\left(-(a'-\theta-\kappa^C)^2+\beta \frac{E_{\theta}(-(a'-\theta-\kappa^C)^2)}{1-\beta}+\frac{\beta \delta}{1-\beta}\int_{\theta^T(a')}^{\overline{\theta}}(2(\theta+\kappa^C)-(a^\infty+a'))dF(\theta)\right) := \Delta$$

After rearranging,

$$(1-\beta)\Delta = (a'-a)(a+a'-2(1-\beta)\overline{\theta}-2\kappa^C) - \delta \int_{\theta^T(a')}^{\overline{\theta}} (2(\theta+\kappa^C) - (a^\infty + a'))dF(\theta)$$
$$= \epsilon (2a+\epsilon - 2(1-\beta)\overline{\theta} - 2\kappa^C) - \delta \int_{a+\epsilon+\delta}^{\overline{\theta}} (2(\theta+\kappa^C) - (2a+2\epsilon+\delta))dF(\theta)$$

Denote  $\underline{\delta}(\epsilon, a)$  the smallest solution to  $\Delta = 0$  for a given  $\epsilon$  and a. Note that (i)  $\underline{\delta}(\epsilon, a) > 0$  and  $\Delta \leq 0$  for all  $\delta \leq \underline{\delta}(\epsilon, a)$ , implying the court would reject a claim  $a' = a + \epsilon$  then. Now, for any  $\epsilon > 0$ , we can always pick a so that  $a^{\infty} - (a + \epsilon) < \underline{\delta}(\epsilon, a)$ . Hence, for a arbitrarily close to  $a^{\infty}$ , we have that the court would reject all claims, contradicting the equilibrium feature that the authority

grows continuously.

As we have now proven that authority cannot grow continuously, we know that for all  $\max \mathcal{R}_t \geq (1-\beta)\overline{\theta} + \kappa^C$ ,  $a^{max}(a) = a$  as the court rejects any additional authority claim. Further, when  $\max \mathcal{R}_t = a < (1-\beta)\overline{\theta} + \kappa^C$  the court making a decision on claim  $a' \geq (1-\beta)\overline{\theta} + \kappa^C$  knows that its utility if it upholds the claim is  $-(a' - \theta - \kappa^C) + \beta V(a', a')$ . So it upholds if and only if  $a' \leq 2(1-\beta)\theta + \kappa^C - a$ . Notice that this is decreasing in a (and increasing in  $\theta$ ). Hence, when  $\max \mathcal{R}_t = a < (1-\beta)\overline{\theta} + \kappa^C$ , the highest bound the permissible set can reach is  $2(1-\beta)\overline{\theta} + \kappa^C - a$  as claimed.

### Details for Figure 4

For all  $\max \mathcal{R}_t = a \geq a^f$ , in the maximally admissible equilibrium, the court upholds if and only if it is indifferent between the claim and remaining with the status quo a. Using the same reasoning as in Lemma A.2, the continuation value of the court, anticipating that the executive will extend as much as is admissible in the future, is then:

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

Hence, the court upholds a claim  $a_t$ , if and only if  $a_t$  satisfies:

$$-(a - \theta_t - \kappa^C)^2 + \beta \frac{E_{\theta}(-(a - \theta - \kappa^C)^2)}{1 - \beta} \le -(a_t - \theta_t - \kappa^C)^2 + \beta \frac{E_{\theta}(-(a_t - \theta - \kappa^C)^2)}{1 - \beta}$$

From this, we can easily determine the tolerance threshold and, thus, the executive claim. Moving backward, in term of permissible set, it is then easy to check that for all  $\max \mathcal{R}_t < a^f$ , we can apply the reasoning of Lemmas A.2 and A.3. Indeed, if a claim was below 1, we assumed then that  $V(a_t, 1) = V(a_t, a_t)$  just like we did above (see Equation A.4). So, for all  $a < a^f$ , the maximally admissible claim is unaffected by the assumption that  $a^f < 1$ .

## C Additional results

## C.1 Temporary stays of authority

In this section, we consider the case when the court has the opportunity to grant temporary stays of authority. At the beginning of each period t, Nature exogenously determines whether the authority claim that period will set a new precedent or is only temporary for this particular period. We denote  $\tau_t = 0$  the state when the court's decision sets a new precedent in period t and t = 1 the state when the court's decision is for one period only and we assume that the i.i.d. probability that Nature picks the state t = 1 is t = 0, (0,1) (the baseline model has t = 0).

We assume that when  $\tau_t = 1$ , the court is still constrained by precedents (in the sense that she cannot reject a claim in the permissible set or uphold a claim in the impermissible set), but her decision this period has no implication for the future.<sup>20</sup> For any  $a_t \notin \mathcal{R}_t \cup \mathcal{W}_t$ , any rejection yields  $y_t(1) = \max \mathcal{R}_t$  and any upheld authority claim  $a_t$  yields  $y_t(0) = a_t$ , but  $\max \mathcal{R}_t = \max \mathcal{R}_{t+1}$  and  $\mathcal{W}_t = \mathcal{W}_{t+1} = \emptyset$  for all  $d_t \in \{0, 1\}$  when  $\tau_t = 1$ . The rest of the baseline model remains unchanged.

In this amended set-up, we recover our main results Propositions 1 and Proposition 2 as the next result shows.

#### Proposition C.1. In any equilibrium,

- (i)  $\lim_{t\to\infty} \mathcal{R}_t = [0,1]$  with probability 1.
- (ii) for all  $\theta_t \in [-\overline{\theta}, \overline{\theta}]$  and all  $\max \mathcal{R}_t = a \in [0, 1)$ , when  $\tau_t = 0$ , there exists  $\overline{a}(\theta_t, a, 0) > a$  such that C upholds P's authority claim  $a_t$ ,  $d_t(\theta_t, a_t, a, 1, 0) = 0$ , if  $a_t \in [a, \overline{a_t}(\theta_t, a, 0)]$ .

We can also look at bit more closely at the dynamics of authority acquisition by focusing once more on the maximally admissible equilibrium (assuming existence, which can be proved along the same lines as the proof of Lemma 2). For our next result, recall that the court's tolerance threshold as a function of the state of the world  $\theta_t$ , the set of precedents max  $\mathcal{R}_t = a$ , and in circumstances when the court sets new precedent  $(\tau_t = 0)$  is  $\overline{a}(\theta_t, a, 0)$ . The next proposition states that the

<sup>&</sup>lt;sup>20</sup>We could instead assume that the court is not constrained by precedent when she makes temporary stay of authority. The model then would very much look like the case of revisiting precedent with the only difference that the decision would be temporary rather than permanent. We have already established there that our result holds, so they would also in this alternative version of our set-up with temporary stays of authority.

possibility of temporary stays leads to greater per-period authority acquisition in times when the court sets new precedents.

**Proposition C.2.** When  $\tau_t = 0$  so the court's decision sets a new precedent, for all  $\max \mathcal{R}_t = a \in [0,1]$  and for all  $\theta_t < \widehat{\theta}(a)$ , the court's tolerance threshold  $\overline{a}(\theta_t, a, 0)$  is strictly increasing in  $\lambda \in [0,1)$ .

For the court, the cost of rejecting is unaffected by the possibility of temporary stays: it is stuck at the previous precedents  $\max \mathcal{R}_t = a$  forever after. The benefit of upholding a claim is higher when temporary stays are possible. With probability  $\lambda$ , the court can adjust authority to present circumstances without suffering the consequences of its decision in the future (in Lemma C.2, we show that the court is better off when the state is  $\tau_t = 1$  than  $\tau_t = 0$ ). However, the court does not get to benefit from this when it is forced to set precedents. Indeed, anticipating this, the officeholder takes advantage of the added flexibility for the court to claim more authority whenever possible. The gains for the court are seized by the executive in the form of greater authority.

In this amended set-up, we assumed that Nature determines whether a court decision is temporary or sets a new decision. In practice, the court often decides whether to grant permanent or temporary stays of authority. While studying the court's strategic decision is beyond the scope of this extension, our results above may help explain why the judiciary may restrict its use of time-limited grants of authority. Temporary stays benefit the court (since with some probability it has flexibility), but this benefit is limited. When new precedents are set, all the rewards of added flexibility are reaped by the officeholder in the form of greater authority acquisition. If the court is worried about the growth of the executive per se, it may choose to limit its use of temporary stays. We leave a more detailed analysis of this problem to future research.

#### **Proofs**

#### Proof of Proposition C.1

Point (i) follows from a similar reasoning as the proof of Proposition 1. Lemma A.1 still holds in this context. Further, under the assumption of the set-up, when faced with a claim  $a_t = 1$  in state  $\tau_t = 0$  (so the decision sets precedent), the court is faced by the same trade-off as in the proof of

#### Proposition 1.

For point (ii), denote the continuation value of the court when the maximum of the permissible set is a, the minimum of the impermissible set is 1 and the state is  $\tau \in \{0,1\}$  as  $V(a,1,\tau)$  (since V(a,a,1) = V(a,a,0) for all  $a \in [0,1]$ , we simply use the notation V(a,a) then). Adapting the notation from the main text, we define P's strategy as  $a_t(\theta_t, a, 1, \tau_t)$ . We can write (ignoring arguments in  $a_t$ ):

(a) 
$$V(a_t, 1, 1) = E_t \Big[ \max\{-(a_{t+1}(\theta, a_t, 1, 1) - \kappa^C - \theta)^2, -(a_t - \kappa^C - \theta)^2\} \Big] + \beta (\lambda V(a_t, 1, 1) + (1 - \lambda)V(a_t, 1, 0))$$
 and

(b) 
$$V(a_t, 1, 0) = E_{\theta} \Big[ \max\{-(a_{t+1}(\theta, a_t, 1) - \kappa^C - \theta)^2 + \beta (\lambda V(a_{t+1}(\theta, a_t, 1), 1, 1) + (1 - \lambda)V(a_{t+1}(\theta, a_t, 1), 1, 0)), -(a_t - \kappa^C - \theta)^2 + \beta V(a_t, a_t)\} \Big].$$

By the usual reasoning, for all  $\theta_t \geq \widehat{\theta}(a_t) = \frac{\frac{1+a_t}{2} - \kappa^C}{1-\beta}$ , 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),  $-(a_{t+1}(\theta_{t+1}, a_t, 1) - \kappa^C - \theta_{t+1})^2 + \beta V(a_{t+1}(\theta_{t+1}, a_t, 1), 1) > -(a_t - \kappa^C - \theta_{t+1})^2 + \beta V(a_t, a_t)$ . Hence, necessarily  $V(a_t, 1, 0) > E_{\theta} \left[ -(a_t - \kappa^C - \theta)^2 + \beta V(a_t, a_t) \right] = V(a_t, a_t)$  for any  $a_t \in [0, 1)$ . This implies quite immediately from point (a) that  $V(a_t, 1, 1) > V(a_t, a_t)$  as well.

We can then apply the reasoning from Proposition 2 to prove the result.  $\Box$ 

We now focus on the maximally admissible equilibrium. Recall that we denote  $V(a, 1, \tau)$  the continuation value of the court for a maximum of the permissible set equal to a, the impermissible set is empty, and the state is  $\tau$ . We use again the notation  $a_t(\theta, a, 1, \tau)$  to define P's strategy. We first start with two preliminary lemmas.

**Lemma C.1.** For all  $\max \mathcal{R}_t = a \in [0, 1)$ , V(a, 1, 0) is independent of  $\lambda$ .

*Proof.* Under the specified strategy, in all period t such that  $\max \mathcal{R}_t = a \in [0, 1)$  and  $\theta_t < \widehat{\theta}(a) = \frac{\frac{1+a}{2} - \kappa^C}{1-\beta}$ ,  $a_t(\theta_t, a, 1, 0)$  satisfies:

$$-(a_t(\theta, a, 1, 0) - \kappa^C - \theta)^2 + \beta \left(\lambda V(a_t(\theta, a, 1, 0), 1, 1) + (1 - \lambda)V(a_t(\theta, a, 1, 0), 1, 0)\right) = -(a - \kappa^C - \theta)^2 + \beta V(a, a)$$
(C.1)

We can then rewrite V(a, 1, 0) as

$$V(a,1,0) = \int_{-\overline{\theta}}^{\widehat{\theta}(a)} -(a_t(\theta, a, 1) - \kappa^C - \theta)^2 + \beta \left(\lambda V(a_t(\theta, a, 1, 0), 1, 1) + (1 - \lambda)V(a_t(\theta, a, 1, 0), 1, 1)\right) dF(\theta)$$

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

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

$$+ \int_{\widehat{\theta}(a)}^{\overline{\theta}} -(1 - \kappa^C - \theta)^2 + \beta V(1, 1) dF(\theta) \quad \text{(using Equation C.1)}$$

Hence, V(a, 1, 0) does not depend on  $\lambda$ .

**Lemma C.2.** For all  $\max \mathcal{R}_t = a \in [0,1)$ , V(a,1,1) > V(a,1,0). Further, V(a,1,1) is strictly increasing with  $\lambda$ .

Proof. When  $\tau = 1$ , the officeholder's strategy is exactly the same as for state-dependent precedent since the present has no impact on the future. Hence, P claims  $a_t = a$  if  $\theta_t \leq a - \kappa^C$ ,  $a_t = 1$  if  $\theta_t \geq \frac{1+a}{2} - \kappa^C$ , and  $a_t$  such that  $-(a - \kappa^C - \theta_t)^2 = -(a_t - \kappa^C - \theta_t)^2$  otherwise. Hence, the court's continuation value assumes the following form denoting  $\theta^s(a) = \frac{1+a}{2} - \kappa^C$ :

$$V(a, 1, 1) = \int_{-\overline{\theta}}^{\theta^{s}(a)} -(a - \kappa^{C} - \theta)^{2} dF(\theta) + \int_{\theta^{s}(a)}^{\overline{\theta}} -(1 - \kappa^{C} - \theta)^{2} dF(\theta) + \beta \left( \lambda V(a, 1, 1) + (1 - \lambda) V(a, 1, 0) \right)$$

From this, we have

$$V(a, 1, 1) - V(a, 1, 0) = \int_{-\overline{\theta}}^{\theta^{s}(a)} -(a - \kappa^{C} - \theta)^{2} dF(\theta) + \int_{\theta^{s}(a)}^{\overline{\theta}} -(1 - \kappa^{C} - \theta)^{2} dF(\theta) + \beta \left(\lambda V(a, 1, 1) + (1 - \lambda)V(a, 1, 0)\right) - V(a, 1, 0)$$

$$\Leftrightarrow (1 - \beta\lambda)(V(a, 1, 1) - V(a, 1, 0)) = \int_{-\overline{\theta}}^{\theta^{s}(a)} -(a - \kappa^{C} - \theta)^{2} dF(\theta) + \int_{\theta^{s}(a)}^{\overline{\theta}} -(1 - \kappa^{C} - \theta)^{2} dF(\theta) - (1 - \beta)V(a, 1, 0)$$

Using Lemma C.1,

$$V(a,1,0) = \int_{-\overline{\theta}}^{\widehat{\theta}(a)} -(a - \kappa^C - \theta)^2 dF(\theta) + \int_{\widehat{\theta}(a)}^{\overline{\theta}} -(1 - \kappa^C - \theta)^2 dF(\theta) + \beta F(\widehat{\theta}(a)) \frac{E_{\theta} \left(-(a - \kappa^C - \theta)^2\right)}{1 - \beta} + \beta (1 - F(\widehat{\theta}(a))) \frac{E_{\theta} \left(-(1 - \kappa^C - \theta)^2\right)}{1 - \beta}$$

Hence,

$$(1-\beta\lambda)(V(a,1,1)-V(a,1,0)) = (1-\beta)\Big(\int_{-\overline{\theta}}^{\theta^s(a)} -(a-\kappa^C-\theta)^2 dF(\theta) + \int_{\theta^s(a)}^{\theta} -(1-\kappa^C-\theta)^2 dF(\theta)\Big)$$

$$-\int_{-\overline{\theta}}^{\widehat{\theta}(a)} -(a-\kappa^C-\theta)^2 dF(\theta) - \int_{\widehat{\theta}(a)}^{\overline{\theta}} -(1-\kappa^C-\theta)^2 dF(\theta)\Big)$$

$$+\beta\Big(\int_{-\overline{\theta}}^{\theta^s(a)} -(a-\kappa^C-\theta)^2 dF(\theta) + \int_{\theta^s(a)}^{\overline{\theta}} -(1-\kappa^C-\theta)^2 dF(\theta)\Big)$$

$$-F(\widehat{\theta}(a))E_{\theta}\Big(-(a-\kappa^C-\theta)^2\Big) - (1-F(\widehat{\theta}(a)))E_{\theta}\Big(-(1-\kappa^C-\theta)^2\Big)\Big)$$

$$= (1-\beta)\int_{\theta^s(a)}^{\widehat{\theta}(a)} (a-\kappa^S-\theta)^2 - (1-\kappa^S-\theta)^2 dF(\theta)$$

$$+\beta F(\widehat{\theta}(a))\int_{\theta^s(a)}^{\overline{\theta}} (a-\kappa^S-\theta)^2 - (1-\kappa^S-\theta)^2 dF(\theta)$$

$$+\beta (1-F(\widehat{\theta}(a)))\int_{-\overline{\theta}}^{\theta^s(a)} (1-\kappa^S-\theta)^2 - (a-\kappa^S-\theta)^2 dF(\theta)$$

Since the court's per-period losses are lower with  $a_t = 1$  than  $a_t = a$  for  $\theta \ge \theta^s(a)$  and vice versa (i.e.,  $-(1 - \kappa^C - \theta)^2 \ge -(a - \kappa^C - \theta)^2 \Leftrightarrow \theta \ge \theta^s(a)$ , with strict inequality when  $\theta > \theta^s(a)$ ), we directly obtain that V(a, 1, 1) > V(a, 1, 0).

For the comparative statics on  $\lambda$ , using our last equality, note that

$$V(a, 1, 1) = V(a, 1, 0) + \frac{1}{1 - \beta \lambda} \left( (1 - \beta) \int_{\theta^{s}(a)}^{\widehat{\theta}(a)} (a - \kappa^{S} - \theta)^{2} - (1 - \kappa^{S} - \theta)^{2} dF(\theta) + \beta F(\widehat{\theta}(a)) \int_{\theta^{s}(a)}^{\overline{\theta}} (a - \kappa^{S} - \theta)^{2} - (1 - \kappa^{S} - \theta)^{2} dF(\theta) + (1 - \beta)(1 - F(\widehat{\theta}(a))) \int_{-\overline{\theta}}^{\theta^{s}(a)} (1 - \kappa^{S} - \theta)^{2} - (a - \kappa^{S} - \theta)^{2} dF(\theta) \right)$$

Since V(a, 1, 0),  $\widehat{\theta}(a)$ , and  $\theta^s(a)$  do not depend on  $\lambda$ , we directly obtain the result.

#### Proof of Proposition C.2

Under the specified strategy, recall that P's strategy  $a_t(\theta_t, a, 1, 0)$  satisfies:

$$-(a_t(\theta, a, 1, 0) - \kappa^C - \theta)^2 + \beta \left(\lambda V(a_t(\theta, a, 1, 0), 1, 1) + (1 - \lambda)V(a_t(\theta, a, 1, 0), 1, 0)\right) = -(a - \kappa^C - \theta)^2 + \beta V(a, a)$$
(C.2)

Denote  $G(a_t; \lambda) = -(a_t - \kappa^C - \theta)^2 + \beta \left(\lambda V(a_t, 1, 1) + (1 - \lambda)V(a_t, 1, 0)\right)$ . In the maximally admissible equilibrium, using subscript to define partial derivative with respect to their relevant argument, it must be that  $G_1(a_t(\theta, a, 1, 0), \lambda) < 0$  (otherwise, the executive could increase her claim and still have it upheld by the court, contradicting that  $a_t(\theta, a, 1, 0)$  is the maximally admissible claim). Further,  $G_2(a_t, \lambda) = V(a_t, 1, 1) - V(a_t, 1, 0) + \beta \lambda \frac{\partial V(a, 1, 1)}{\partial \lambda}$ . Using Lemma C.2,  $G_2(a_t, \lambda) > 0$ . Therefore, by the Implicit Function Theorem (which can apply as all functions are continuous), noting that  $-(a - \kappa^C - \theta)^2 + \beta V(a, a)$  does not depend on  $\lambda$ , we obtain  $\frac{\partial a_t(\theta, a, 1, 0)}{\partial \lambda} > 0$ .

## C.2 Multi-dimensional authority claims

In this subsection, we assume that an authority claim has  $n \geq 1$  dimensions (our baseline model has n = 1). We denote an authority claim in period t by  $\vec{a}_t = (a_t^1, a_t^2, \dots, a_t^n) \in [0, 1]^n$ . Each dimension j is related to its own particular context, denoted  $\theta^j$ , which is drawn at the beginning of each period according to the cumulative distribution function  $F^j(\cdot)$  over the interval  $[-\overline{\theta}^j, \overline{\theta}^j]$  with  $\overline{\theta}^j > \frac{1-\kappa^C}{1-\overline{\beta}}$ , with  $\kappa^C$  the identical amount of optimal authority from the court's perspective on all dimensions (to reduce the notational burden). For simplicity, we assume that the draws across all dimensions are independent and i.i.d. over time (this is mostly to reduce notation, our results hold if the draws are correlated across dimensions within each period). The vector of states realization is denoted by  $\theta_t$ .

The dimensions are linked via the court's decision. When the court upholds a claim  $\vec{a}_t = (a_t^1, \dots, a_t^n)$ , then the authority acquired in period t on each dimension j is  $y_t^j(0) = a_t^j$  and the permissible set on the same dimension becomes  $\max \mathcal{R}_{t+1}^j = a_t^j$ . The permissible set across all dimension is  $\vec{\mathcal{R}}_t$ . We slightly abuse notation and denote  $\max \vec{\mathcal{R}}_t = (\max \mathcal{R}_t^1, \dots, \max \mathcal{R}_t^n)$ .

For the court and the executive, the dimensions are additively separable so for an outcome  $\vec{y}_t = (y_t^1, \dots, y_t^n)$ , the executive period-t's utility is  $\sum_{j=1}^n v(y_t^j)$  and the court's payoff is  $\sum_{j=1}^n -(y_t^j - \kappa^C - \theta_t^j)^2$ .

We compare two situations. In the first, the court can rule on any dimension separately. That is, the court could accept the officeholder's claim in dimensions 2 to n and overturn the claim in dimension 1, which would only have consequences for future authority acquisition in the first dimension (i.e., the court makes as many decisions as there are dimensions,  $d_t^j \in \{0,1\}$ , and if  $d_t^j = 1$ , then  $y_t^j(1) = \max \mathcal{R}_t^j = a^j$  and  $\mathcal{W}_{t+1}^j = [0,1] \setminus R_t^j$  for dimension j only). We label this situation 'dimension-free precedent' since all dimensions can be treated separately. The second situation consists of the case when overturning a claim shuts down authority acquisition on all dimensions (i.e., the court makes a single decision  $d_t \in \{0,1\}$  and if  $d_t = 1$ , then  $y_t^j(1) = \max \mathcal{R}_t^j = a^j$  and  $\mathcal{W}_{t+1}^j = [0,1] \setminus R_t^j$  for all  $j \in \{1,\ldots,n\}$ ). We label this situation 'dimension-linked precedent.'

The next remark states that any upheld series of authority claims under dimension-free precedent is also upheld under dimension-linked precedent. In other words, linking dimensions can only increase the set of authority claims which are feasible (as the proof of the remark illustrates). This implies that if we select the best equilibrium for the executive under each situation, then the officeholder is necessarily weakly better off with dimension-linked precedent.

Remark C.1. Denote  $\{\{\vec{a^{df}}_t(\vec{\theta_t}, \vec{a}, 1)\}_{\{\vec{\theta_t} \in [-\overline{\theta}, \overline{\theta}]^n, \max \vec{\mathcal{R}}_t = \vec{a}, \vec{\mathcal{W}}_t = \{\emptyset\}^n\}}\}_{t \in \{1, \dots\}}$  a n-dimensional series of upheld authority claims under dimension-free precedent for all possible permissible sets and realization of the n-dimensional state vector. Under dimension-linked precedent, for any  $\max \vec{\mathcal{R}}_t = \vec{a}$ , any realization  $\vec{\theta_t}$ , the court upholds  $\vec{a_t}(\vec{\theta_t}, \vec{a}, 1) = \vec{a^{df}}_t(\theta_t, \vec{a}, 1)$  if it anticipates future claims to satisfy  $\{\{\vec{a^{df}}_{t'}(\vec{\theta_{t'}}, \vec{a}, 1)\}_{\{\vec{\theta_{t'}} \in [-\overline{\theta}, \overline{\theta}]^n, \max \mathcal{R}_{t'} = \vec{a}, \vec{\mathcal{W}}_{t'} = \{\emptyset\}^n\}}\}_{t' \in \{t+1, \dots\}}$ .

It proves difficult to say more since the executive may choose different mixes of authority claim across dimensions under different equilibria. The executive may choose not to claim full authority in one dimension, even if the court would uphold it, to maximize her authority growth on other dimensions when precedents link all dimensions together. To say a bit more, we focus on the case when the number of dimension is two (n = 2) and the executive plays a maximally admissible strategy on each dimension—that is, the officeholder never picks a little bit less on one dimension to increase her reach on the other dimension—assuming this is an equilibrium strategy (the proof of

existence would require more than the proof of Lemma 2 so existence is not guaranteed by previous results). Our second remark states that when the realization of the state is sufficiently high on one dimension  $(\theta^j > \widehat{\theta}(a^j)) = \frac{1+a^j}{1-\beta} - \kappa^C}{1-\beta}$ , the executive grabs more authority in this period in the other dimension with dimension-linked precedent than with dimension-free precedent. To state our result, denote  $\overline{a}^j(\theta_t^j, a^j; df)$  and  $\overline{a}^j(\theta_t^j, a^j; dl)$  the court's tolerance threshold in dimension j with dimension-free precedent (df) and dimension-linked precedent (dl), respectively, as a function of the realisation of the state and the maximum of the permissible state in this dimension.

Remark C.2. In the maximally admissible equilibrium (assuming it exists), when  $\theta_t^j > \widehat{\theta}(a^j)$  and  $\theta_t^k < \widehat{\theta}(a^k)$  for  $k \neq j$ , then  $\overline{a}(\theta_t^j, a^j; df) = \overline{a}(\theta_t^j, a^j; dl) = 1$  and  $\overline{a}(\theta_t^k, a^k; df) < \overline{a}(\theta_t^k, a^k; dl)$ , where  $\max \mathcal{R}_t^k = a^k < 1$ .

When  $\theta_t^j > \widehat{\theta}(a^j)$ , the court strictly prefers full authority in dimension j to being stuck forever with the precedent  $a^j$ . With dimension-free precedent, the politician cannot take advantage of this since the court's decision in the two dimensions are independent from each other. With dimension-linked precedent, the executive uses this strict preference of the judiciary for full authority on dimension j to her advantage by claiming more authority in dimension k.

### **Proofs**

#### Proofs of Remark C.1

A series of claim is upheld with dimension-free precedent if on each dimension j for each period t, realization of the state  $\theta_t^j$  and each permissible set characterized by  $\max \mathcal{R}_t^j = a^j$ , the following inequality holds:

$$-(a_t^j - \kappa^C - \theta_t^j)^2 + \beta V^j(a_t^j, 1) \ge -(a^j - \kappa^C - \theta_t^j)^2 + \beta V^j(a^j, a^j), \tag{C.3}$$

where  $V^{j}(\cdot,\cdot)$  is the continuation value on dimension j with dimension-free precedent.

Now, consider dimension-linked precedent. For each period t, each realization of the vector of states  $\vec{\theta}_t$  and each permissible set characterized by  $\max \vec{\mathcal{R}}_t^j = \vec{a}$ , the n-dimensional claim  $\vec{a}_t$  must satisfy:

$$\sum_{j}^{n} -(a_{t}^{j} - \kappa^{C} - \theta_{t}^{j})^{2} + \beta V^{j}(\vec{a}_{t}, \vec{1}) \ge \sum_{j=1}^{b} -(a^{j} - \kappa^{C} - \theta_{t}^{j})^{2} + \beta V^{j}(\vec{a}, \vec{a})$$
 (C.4)

Fixing the set of precedents,  $V^j(\vec{a}, \vec{a}) = V^j(a^j, a^j)$ . Further, fixing the series of authority claims,  $V^j(\vec{a}_t, \vec{1}) = V^j(a^j, 1)$  since the claims are independent across dimensions by definition of dimension-free precedent. Hence, when the first set of n-equalities is satisfied (condition (C.3)), the second unique inequality (condition (C.4)) also necessarily holds. Hence, any feasible series of claims under dimension-free precedent is also feasible under dimension-linked precedent.

Obviously, the reverse is not necessarily true. We cannot guarantee that satisfying condition (C.4) implies the n conditions implied by (C.3) hold. Indeed, there can be series of claimed where for some realization of the states and some sets of precedents, condition (C.4) holds while satisfying some of the constraints in (C.3) strictly and violating some of the others. As it is well-known, a single constraint helps compared to n separate constraints.

#### Proof of Remark C.2

Using the proof of Remark C.1, with dimension-free precedent, the court's tolerance threshold on dimension k must satisfy (ignoring all arguments but the type of precedents df):

$$-(\overline{a}_t^k(df) - \kappa^C - \theta_t^k)^2 + \beta V^k(\overline{a}_t^k(df), 1) = -(a^k - \kappa^C - \theta_t^k)^2 + \beta V^k(a^k, a^k), \tag{C.5}$$

with  $\overline{a}_t^k(df) < 1$  given our assumption on  $\theta_t^k$ .

With dimension-linked precedent, the court's tolerance threshold on dimension k is either full authority (in which case  $\overline{a}_t^k(df) < \overline{a}_t^k(dl)$ ) or must satisfy:

$$- (\overline{a}_{t}^{k}(dl) - \kappa^{C} - \theta_{t}^{k})^{2} + \beta V^{k} (\overline{a}_{t}^{k}(dl), 1) - (1 - \kappa^{C} - \theta_{t}^{j})^{2} + \beta V^{j} (1, 1)$$

$$= -(a^{k} - \kappa^{C} - \theta_{t}^{k})^{2} + \beta V^{k} (a^{k}, a^{k}) - (a^{j} - \kappa^{C} - \theta_{t}^{k})^{2} + \beta V^{j} (a^{j}, a^{j})$$

$$\Leftrightarrow - (\overline{a}_{t}^{k}(dl) - \kappa^{C} - \theta_{t}^{k})^{2} + \beta V^{k} (\overline{a}_{t}^{k}(dl), 1)$$

$$= -(a^{k} - \kappa^{C} - \theta_{t}^{k})^{2} + \beta V^{k} (a^{k}, a^{k}) + \left( (1 - \kappa^{C} - \theta_{t}^{j})^{2} - \beta V^{j} (1, 1) - (a^{j} - \kappa^{C} - \theta_{t}^{k})^{2} + \beta V^{j} (a^{j}, a^{j}) \right)$$
(C.6)

We can write the function  $V^k(\cdot,\cdot)$  as a function of authority claim in dimension k only since once full authority has been acquired on dimension j, dimension k becomes the only dimension in which the court's decision matters. Notice that the function  $G(a_t^k) = -(a_t^k(dl) - \kappa^C - \theta_t^k)^2 + \beta V^k(a_t^k(dl), 1)$  must satisfy  $G'(\overline{a}_t^k(df)) < 0$  and  $G'(\overline{a}_t^k(dl)) < 0$ , otherwise the politician could increase her claim and the court would still uphold it, contradicting the assumption that she makes a maximally admissible claim. Further, the term in parenthesis in Equation C.6 is strictly negative. Combining both, we obtain that  $\overline{a}_t^k(df) < \overline{a}_t^k(dl)$ .<sup>21</sup>

## C.3 Judicial Turnover

In this appendix, we evaluate the effects of judicial appointments, albeit in a very reduced form. For problems mentioned in the main text (the difficulty to pin down behaviours without a defining the equilibrium being played), we restrict attention to the maximally feasible equilibrium. 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  $\kappa^C$ ), 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  $\kappa^C$  learns he is to be replaced next period by a judge with ideal point  $\kappa^N$  (where N stands for new judge). Denote  $\bar{a}(\theta, a; \kappa^N)$  the incumbent judge's tolerance threshold after he learns that he will be permanently replaced in the next period by a judge with ideal point  $\kappa^N$ . The following result shows that, compared to the case when he is not replaced, the incumbent judge is more stringent if he is to be replaced by someone who is more favorable to the executive, and more lenient otherwise.

<sup>&</sup>lt;sup>21</sup>In fact, because dimension k becomes the only dimension for which authority can grow, we then have that the continuation values for dimension free and dimension linked precedent are identical fixing the permissible set (this is not true until full authority is acquired on dimension j). Hence, we know that  $G'(a_t) < 0$  for all  $a_t > \overline{a}_t^k(df)$  by the usual reasoning from the baseline model (Lemma A.3).

**Proposition C.3.** 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  $\overline{a}(\theta, a; \kappa^N) \ge \overline{a}(\theta, a)$  with strict inequality if and only if  $\theta < \widehat{\theta}(a)$ .

This finding identifies an inter-temporal tradeoff associated with judicial appointments. On the one hand, packing the court with a constitutionally like-minded judge 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.

#### Proof of Proposition C.3

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  $\kappa^C$  when a judge with ideal point  $\kappa^N$  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  $\kappa$ :  $\widehat{\theta}(a;\kappa) \equiv \frac{1+a}{2} - \kappa = \frac{1+a}{1-\beta}$ .

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  $\kappa^N$ , When the court is not changing hands, the tolerance threshold is defined by:

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

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:

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

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  $V(1,1)=V^C(1,1;\kappa^N)=\frac{E_{\theta}\left(-(1-\theta-\kappa^C)^2\right)}{1-\beta}$ . 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  $\kappa^C$  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:  $\hat{V}(a,1) = \int_{-\overline{\theta}}^{\widehat{\theta}(a;\kappa^N)} \left(-(\overline{a}^N(\theta,a)-\kappa^C-\theta)^2+\beta V(\overline{a}^N(\theta,a),1)\right)dF(\theta)+\int_{\widehat{\theta}(a;\kappa^N)}^{\overline{\theta}} \left(-(1-\theta-\kappa^C)^2+\beta V(1,1)\right)dF(\theta)$ . 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:

$$\begin{split} V(a,1) > \hat{V}(a,1) > \int_{-\overline{\theta}}^{\widehat{\theta}(a;\kappa^N)} \Biggl( - (\overline{a}^N(\theta,a) - \kappa^C - \theta)^2 \\ + \beta \Biggl( \int_{-\overline{\theta}}^{\widehat{\theta}(\overline{a}^N(\theta,a);\kappa^N)} \Bigl( - (\overline{a}^N(\widetilde{\theta},\overline{a}^N(\theta;a)) - \kappa^C - \widetilde{t})^2 + \beta V(\overline{a}^N(\widetilde{\theta},\overline{a}^N(\theta;a)); 1) dF(\widetilde{\theta}) \\ + \int_{\widehat{\theta}(\overline{a}^N(\theta,a);\kappa^N)} \Bigl( - (1 - \widetilde{\theta} - \kappa^C)^2 + \beta V(1,1) \Bigr) dF(\widetilde{\theta}) \Biggr) \Biggr) dF(\theta) \\ + \int_{\widehat{\theta}(a;\kappa^N)} \Biggl( - (1 - \theta - \kappa^C)^2 + \beta V(1,1) \Bigr) dF(\theta) \end{split}$$

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  $\kappa^N$  and the incumbent plays a maximum grab strategy, before a judge with ideal point  $\kappa^C$  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  $\beta$ ), 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  $\kappa^N$ . 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.  $\overline{a}^N = \overline{a}^N(\theta,a)$ ):

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

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  $\kappa$  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  $\theta \ge \widehat{\theta}(\overline{a}^N; \kappa^C)$ .

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  $\theta < \widehat{\theta}(a; \kappa^C)$ .

# C.4 Turnover with party-dependent probability of election

As in Subsection 6.3, we assume that at the beginning of each period, before  $\theta_t$  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  $\kappa^C$  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 its highest feasible level.

**Proposition C.4.** 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.4 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.5.** 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 rejected 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 reject 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.,  $\theta_t \geq \hat{\theta}(a)$ ).<sup>22</sup> Hence, even a highly disadvantaged politician may choose to claim new authority.

## **Proofs**

#### Proof of Proposition C.4

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  $\theta$ , the maximum of the permissible range is a (max  $\mathcal{R}_t = a$ ), no previous claim has

<sup>&</sup>lt;sup>22</sup>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 rejected, 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  $\theta$ , 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  $\theta$  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 rejects the authority grab and blocks future grab. We show that there exists a profitable deviation whenever  $\pi$  is sufficiently close to 1/2.

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

$$W_{P_l}(\theta, a, a, P_l) = v(a) - \frac{\beta}{1 - \beta} (2\pi - 1)v(a)$$
 (C.7)

Using a similar reasoning as in the proof of Proposition 2, it can be shown that there exists  $\overline{a}(\theta, a)$  such that the court upholds the executive action if  $a \leq \overline{a}(\theta, a)$ . Given the prescribed equilibrium strategy (the court must reject  $P_l$ '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  $\theta_{t+k}$ ,  $P_l$  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.<sup>24</sup>

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

<sup>&</sup>lt;sup>23</sup>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  $\theta_t$ —taking into future players' strategies.

<sup>&</sup>lt;sup>24</sup>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  $\theta$ .

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

$$\widehat{W}_{P_{l}}(\theta, a, 1, P_{l}) = v(\overline{a}(\theta, a)) + \beta E_{\theta_{t+1}} \left( \pi \left( -v(\widehat{a}_{t+1}(\theta_{t+1}, \widehat{a}_{t})) + (1 - \pi)v(\widehat{a}_{t+1}(\theta_{t+1}, \widehat{a}_{t})) \right) \right) \\
+ \beta^{2} E_{\theta_{t+1}, \theta_{t+2}} \left( \pi \left( -v(\widehat{a}_{t+2}(\theta_{t+2}, \widehat{a}_{t+1}))) + (1 - \pi)v(\widehat{a}_{t+2}(\theta_{t+1}, \widehat{a}_{t+1})) \right) \right) + \dots \\
= v(\overline{a}(\theta, a)) - (2\pi - 1) \sum_{k=1}^{\infty} \beta^{k} E_{\theta_{t+1}, \dots, \theta_{t+k}} \left( v(\widehat{a}_{t+k}(\theta_{t+k}, \widehat{a}_{t+k-1})) \right) \tag{C.8}$$

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:

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

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 2),  $\widehat{\pi}(a,\theta) > \frac{1}{2}$ .

Denote  $\widehat{\overline{\pi}}(a,\theta) = \min_{a \in [0,1), \theta \in [-\overline{\theta},\overline{\theta}]} \widehat{\pi}(a,\theta)$ . From the reasoning above,  $\widehat{\overline{\pi}}(a,\theta) > 1/2$ . Given that we have only looked at one possible deviation, there exists  $\overline{\pi} \geq \widehat{\overline{\pi}}(a,\theta)$  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.5**

Notice that by a similar reasoning as in the proof of Proposition 2, 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  $\theta_t < \widehat{\theta}(a)$ ,  $P_t$  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 rejected).

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  $\theta_t$  and permissible set [0, a], this is equivalent to showing that for

all  $a' \ge a$  such that  $d_t(a', \theta_t, a, 1) = 0$ :

$$v(a) - \frac{\beta}{1-\beta}(2\pi - 1)v(a) \ge v(a') + \beta\pi E_{\theta}(W_{P_l}(\theta, a', P_r)) + \beta(1-\pi)E_{\theta}(W_{P_l}(\theta, a', P_l))$$
 (C.9)

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

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

For  $\delta$  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,  $W_{P_t}(\theta, a', P_r) < W^{P_r}(\delta)$ . 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  $\delta$  (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 rejected. 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.