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Article

Accessing the state: Executive constraints and credible commitment in dictatorship

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Abstract

When do executive constraints provide credible commitment power in dictatorships, and under what conditions do leaders establish such constraints? This article argues that institutions successfully constrain autocrats only when elites are given real access to state power, such as appointments to key governmental positions. I present a game theoretic model in which an autocratic leader decides whether to establish binding constraints at the start of her rule. Doing so shifts the future distribution of power in favor of elites, alleviating commitment problems in bargaining. I show that leaders are likely to place constraints on their own authority when they enter power especially weak, and these initial decisions shape the rest of their rule. Even if a leader enters power in a uniquely weak position vis-á-vis other elites, and is on average, quite strong, the need to alleviate commitment problems in the first period swamps expectations about the future distribution of power. I illustrate the model's findings through case studies of Cameroon and Côte d'Ivoire.

Keywords

Africa; authoritarian regimes; credible commitment; executive constraints; formal theory

1. Introduction

> Montesquieu observed that, at the birth of new polities, leaders mold institutions, whereas afterwards institutions mold leaders. (Putnam, 1993:. 26)

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A central finding from recent research on authoritarian regimes is that nominally democratic institutions, such as parties or legislatures, are a key source of authoritarian stability. Parties help dictators to facilitate cooperation within the ruling coalition by solving commitment and monitoring problems (Boix and Svolik, 2013; Brownlee, 2007; Gehlbach and Keefer, 2011; Magaloni, 2008; Reuter, 2017; Svolik, 2012) and channel benefits of state power to elites (Greene, 2007, 2010; Slater, 2010). Legislatures and elections serve leaders' strategic interests by providing controlled outlets for bargaining, cooptation, and dissent (Blaydes, 2010; Gandhi, 2008; Gandhi and Lust-Okar, 2009 ; Gandhi and Przeworski, 2007; Lust-Okar, 2006; Malesky and Schuler, 2010; Truex, 2016; Wright, 2008). Constitutions create publicly observable signals that help solve elite coordination problems in dictatorships (Albertus and Menaldo, 2012; Ginsburg and Simpser, 2013).

The appearance of these formal institutions, however, often obscures the true lack of constraints on the executive. In fact, nominally democratic institutions are found in the vast majority of dictatorships in the post-World War II era. From 1946 to 2008, autocratic leaders maintained a ruling party 87 percent of the time. During that same period, authoritarian regimes had legislatures 85 percent of the time (Cheibub et al., 2010) and constitutions 93 percent of the time (Elkins et al., 2008).

Despite the wide inclusion of institutions that are theorized to provide authoritarian stability, many dictatorships have remained unstable. From 1946 to 2008, 44 percent of all leadership transitions did not occur peacefully (Goemans et al., 2009). From 1950 to 2014, a total of 471 coup attempts were carried out, of which, 50 percent were successful in deposing the leader (Powell and Thyne, 2011). Given that regime instability has persisted in dictatorships, even despite the wide adoption of nominally democratic institutions, the existence of formal institutions cannot adequately explain variation in autocratic stability.

Furthermore, most ruling parties are actually quite weak and likely incapable of solving autocrats' commitment problems. In fact, 61 percent of all ruling parties that were in power from 1946 to 2010 failed to outlive the death or departure of the founding leader (Meng (forthcoming)).[1] This suggests that most ruling parties rely heavily on the influence of a single leader and are not truly autonomous organizations that are capable of enforcing inter-temporal commitments. In fact, many empirical studies have found weak or no evidence of a systematic relationship between ruling parties and regime durability (Gandhi, 2008; Lucardi, 2017; Smith, 2005).

If nominally democratic institutions do not constitute real constraints on regime executives, what types of constraints provide credible commitment power in dictatorships? This article addresses a fundamental question in the study of political economy and authoritarian rule: When do leaders adopt institutions that share power with elites, and how do these institutions become self-enforcing?

I argue that effective institutional constraints on regime executives derive from providing elites with access to state resources. This access can take the form of appointments to key government positions, such as the Vice President, Minister of Defense, or Minister of Finance. Credible executive constraints can also be established through the creation of rules that regularize and codify elite access to government offices, such as meritocratic promotion rules or constitutional provisions regulating leadership succession.

I argue that institutions credibly constrain leaders *only when they change the underlying distribution of power* between leaders and elites. When elites are appointed to high-level positions within government, they gain access to material resources, power, and prestige, allowing them to consolidate their own bases of support. Over time, state access allows these elites to become viable challengers to the incumbent, shifting the distribution of power away from the leader. Institutions that *empower* specific challengers create credible threats of rebellion, which sustains long-term power sharing. This mechanism demonstrates how institutions can become self-enforcing in dictatorships.

I formalize the argument in a game theoretic model in which an autocrat decides whether to extend access to the state to a representative elite at the start of a two-period bargaining game. In the model, the extension of state access shifts the future distribution of power away from the leader, alleviating commitment problems in bargaining by enhancing the elite's *de facto* ability to overthrow the leader in the second period.

A main finding from the model is that autocratic leaders are likely to place constraints on their own authority when they *enter power weak* and are susceptible to being deposed early on in their tenure. Because per-period transfers are insufficient to buy quiescence from exceptionally strong elites, initially weak leaders remain in power by enhancing the *de facto* power of elites, therefore credibly guaranteeing future rent distribution. Even if the leader enters power in a uniquely weak position vis-a-vis other elites, and expects to be strong in the future, the need to alleviate commitment problems in the first period swamps future expectations about the distribution of power, the need to alleviate commitment problems in the first period swamps future expectations about the distribution of power. As Montesquieu observed, leaders make decisions about institutions at the start of their tenure, and these institutional decisions shape the rest of their rule.

This article illuminates a counter-intuitive argument for power sharing. The model shows how initially weak autocrats can better secure their hold on power by giving it away to the very elites who are most capable of unseating them. By building institutions that empower potential challengers, the leader hands the (figurative) sword to someone else while pointing it at herself.

The theory underscores the point that the existence of a democratic façade is not of primary importance. Rather, institutions constrain when they change the underlying distribution of power within the ruling coalition. This helps to explain why the presence of nominally democratic institutions cannot necessarily explain why some regimes are institutionalized systems while others remain personalist dictatorships. Institutions matter, not because they establish *de jure* rules, but when they affect de facto political power.

2. Institutions as commitment devices

2.1. The fundamental problem of autocratic rule

Autocratic regimes are plagued by a fundamental paradox: extremely powerful governments cannot credibly commit to share power or distribute rents with elites, opposition groups, or larger segments of society. This is the challenge that Svolik (2012) refers to as the 'problem of authoritarian power-sharing.' This credibility problem affects many dimensions of leaders' rule, and existing scholarship has explored the various ways in which commitment problems arise.

Commitment problems stemming from absolute power hamper autocrats' abilities to stave off threats that emerge from outside the regime. Scholars have noted that commitment problems make it difficult for leaders to credibly promise opposition parties or non-regime elites that they will receive a steady stream of rents into the future (Blaydes, 2010; Gandhi, 2008; Gandhi and Przeworski, 2007; Lust-Okar, 2006). Commitment problems also prevent leaders from convincing the masses that they will receive future redistribution when the threat of revolution is transitory (Acemoglu and Robinson, 2001, 2006).

However, existing research shows that the most critical threats leaders face generally come from their own inner circle. It is well established that the majority of autocratic leaders lose power through elite coups, rather than revolutions. From 1946–2008, 68 percent of non-constitutional exits from office of autocrats resulted from coups, compared with only 11 percent that resulted from popular uprisings (Svolik, 2012). For dictators to survive they must maintain support from their closest allies. My account therefore focuses on how leaders maintain support from their own regime elites.

Credibility problems affect autocrats' abilities to maintain support from inside of the regime (Cox, 2016; Gehlbach and Keefer, 2011; Haber et al., 2003; Magaloni, 2008; North and Weingast, 1989; Stasavage, 2003). As Magaloni notes, dictators need to commit to 'not abuse their "loyal friends," [but] this commitment is hard to establish' (Magaloni, 2008: 2). Studies that focus on intra-elite commitment problems argue that power sharing between leaders and elites is sustained only when elites have mechanisms that allow them to check predation from leaders. In order for elites to be able to effectively hold leaders accountable, they must be able to coordinate a viable threat of rebellion (Boix and Svolik, 2013; Myerson, 2008). Yet, a viable threat of rebellion from elites is often far from guaranteed in an autocratic setting.

Most existing accounts of the commitment problem within the leader's inner circle argue that a lack of information hinders elite collective action (Albertus and Menaldo, 2012; Boix and Svolik, 2013; Gehlbach and Keefer, 2011; Myerson, 2008). These studies argue that secrecy within authoritarian governments prevents elites from being able to coordinate and communicate with each other. The lack of transparency also hinders elites' abilities to monitor leader compliance. Furthermore, in regimes where rules and norms are not clearly established, it is difficult for elites to agree on what exact actions constitute a transgression. In sum, these studies argue that information problems form the key barrier for elite collective action, therefore preventing them from effectively checking the despot's absolute power.

2.2. Institutional solutions

To address commitment problems stemming from asymmetric information, existing scholarship has generally focused on the creation of nominally democratic institutions that can serve as ‘forums’ for elite coordination. These studies argue that parties and legislatures promote transparency and allow elites to interact, fostering coordination among them (Boix and Svolik, 2013; Myerson, 2008). Constitutions establish bright lines about what constitutes rule breaking, therefore eliminating ambiguity that might prevent elites from knowing when to coordinate on a rebellion (Albertus and Menaldo, 2012).

Yet, if parties, legislatures, and constitutions do indeed solve intra-elite commitment problems, then the introduction of these institutions should be strongly correlated with regime durability. However, as I argue in the introduction of this article, nominally democratic institutions are extremely prevalent—even in unstable dictatorships—and therefore this cannot fully explain variation in regime durability. A number of existing studies also show that the presence of ruling parties is not strongly correlated with regime durability, and the majority of these parties do not last beyond the tenure of a single leader. These findings cast doubt on the claim that intra-elite commitment problems stem primarily from information problems and that these problems can be solved through the creation of nominally democratic institutions.

By contrast, I argue that intra-elite commitment problems arise due to *dynamic power shifts* between leaders and their allies.[2] Elites rebel when they predict that power will shift adversely in the future, so that they will become weaker if they wait to act. As Albertus and Menaldo (2012) note, regime elites tend to be at the ‘apex’ of their power at the start of the regime when are well-organized. When leaders are in a state of vulnerability, elites would prefer to depose the dictator in the current period when they have the advantage, rather than wait for the distribution of power to shift against them in the future.

My characterization of the commitment problem as a result of *dynamic* power shifts contrasts with existing models of authoritarian politics which assume that elites cannot coordinate due to *static* information problems. Instead, my approach is related to a broad class of formal models that examine shifting power as a cause of international war (Fearon, 1995; Powell, 2006) and models of democratization that result from commitment problems (Acemoglu and Robinson, 2006). However, these existing models do not propose solutions for leaders to *relinquish* or undercut their power in order to prevent conflict from occurring in equilibrium.[3]

If autocratic leaders face intra-elite commitment problems that result from shifting power, what types of institutional solutions can they implement to stabilize their rule? I propose a mechanism where leaders take actions to *endogenously* shift the future distribution of power by arming elites with access to state resources. Such access can take the form of presidential cabinet appointments, such as to the office of the Vice President or Minister of Defense. Credible executive constraints can also take the form of formal rules that codify this delegation of power, such as procedures regarding promotion or leadership succession. Credible executive constraints emerge when elites are given real access to power within the state.

Appointing elites to key cabinet positions, especially over ministries that control valuable resources, endows them with the ability to shape policy and target material resources to their supporters and constituents. This access allows elites to consolidate their own independent power base, thus shifting the distribution of power away from the leader.[4] The appointment of elites to powerful positions within government thus provides them with *de facto power* necessary to sustain long-run promises about rent distribution. These measures change the future distribution of power, countering commitment problems that would have otherwise arisen if power had been allowed to shift, unchecked.

A few existing studies of inter-state conflict also model leader decisions to endogenously change the distribution of power (Debs and Monteiro, 2014; Powell, 2013). However, these models focus on leaders who take actions to *strengthen* or consolidate their power by investing in military capabilities, rather than *weaken* themselves by binding their hands. By contrast, I stress a mechanism in which leaders voluntarily weaken themselves to counter changes in the future distribution of power that could trigger conflict.

Finally, I also build on studies in comparative political economy that consider how domestic institutions can 'tie the leaders's hands' and provide credible commitment. A number of studies argue that the English Crown was able to credibly commitment to not alter property rights only after transferring control over taxation to parliament (Cox, 2016; North and Weingast, 1989). Similarly, in his examination of public debt in early modern Europe, Stasavage notes that it was common for rulers to "delegate authority with the express intent of improving their credibility. So for example, a ruler might give a group of officials the right to manage public revenues so as to ensure full debt repayment" (Stasavage, 2003: 3). Haber et al. (2003) demonstrate that a similar solution was used to achieve economic growth in revolutionary Mexico by granting key economic actors direct access to decision-making inside the state. However, these studies do not focus on the *conditions* under which leaders undertake these institutional choices. Building on these ideas, I specify when autocratic leaders voluntarily tie their hands in order to provide credible commitment power.

To sum, this article claims that commitment problems arise when elites lack the *de facto* ability to counter future shifts in power. Only after leaders provide elites with direct access to key government offices, can credible commitments be sustained and self-enforcing. This mechanism explains why simply creating a focal point by establishing constitutional rules or allowing elites to communicate within a ruling party are insufficient in solving intra-elite commitment problems that arise due to shifting power.

3. A theoretical model

In the next section, I formalize my argument and identify conditions under which autocratic leaders will create such constraints. I first present a baseline model where the leader's type is common knowledge. I show that leaders who enter power weak are more likely to create constraints in order to remain in power. I then present a model extension that introduces uncertainty about the future distribution of power and show that conflict is possible in equilibrium when there is imperfect information about the leader's type in the future.

3.1. Model setup

Formally, imagine a two player, two-period bargaining game in which an Autocrat (A) and a regime Elite (E) divide a set of benefits or 'pies' normalized to size 1.[5] I will refer to the Autocrat using a female pronoun and the Elite using a male pronoun.

In the first period, A offers x_1 to E, who can accept the division or reject it. If E accepts A's offer in that period, then A and E receive payoffs of $1 - x_1$ and x_1, respectively, and A remains in power. The game continues onto the second period, and A makes a new offer.

If E rejects A's offer in the first period, then conflict occurs. Elite defections are known to be one of the primary drivers of authoritarian breakdown, and the removal of support can be extremely dangerous for incumbents (Haggard and Kaufman, 1995; Reuter and Gandhi, 2011). Research on military coups has shown that they rarely succeed without substantial civilian support. Militaries often oust governments during periods of crisis when citizens express discontent with the civilian leader's incompetence or mismanagement of the economy (Geddes, 2009).

If conflict occurs, A will be deposed with probability p_t. We assume that $p_1 > p_2$ so that power shifts against elites in the second period. Conflict ends strategic decision-making in the game, and the winner receives all future benefits. If fighting occurs in period 1, then the winner consumes the pie for *both* periods. If fighting occurs in period 2, then the winner consumes the pie for the final period. However, fighting is costly and destroys a fraction of the pie. If conflict occurs, then only a fraction $\sigma \in (0, 1)$ of the pie remains.

At the start of the game, A decides whether to establish executive constraints. Since credible executive constraints provide elites with access to the state, we model it as a shift in the future distribution of power away from the leader. Executive constraints are represented by the parameter $g \in [0, 1 - p_2]$ (Note: g is bounded above by $1 - p_2$ because A can shift the future distribution of power, at most, to 1.). If A selects $g > 0$, then the second period distribution of power will be $p_2 + g$. Any positive value of g will shift the entire distribution of power away from A in the second period. A's offer in period 2 is affected by the institutional decision she makes at the start of the game.[6]

This setup reflects the fact that most leaders establish constraints near the start of their tenure. Leaders frequently draft new constitutions after taking power, and in the case of post-independence regimes, many amend existing constitutions adopted from the colonial period at the onset of their rule Meng (2019); Albertus and Menaldo, 2012; Zolberg, 1969). For instance, if we examine constitutional succession rules that were established by autocrats in Sub-Saharan Africa from 1960–1990, 49 percent of these rules were created in the first year of the leader's tenure. The vast majority of these rules were created by the fourth year of the leader's tenure (Meng (2019)).

I also assume that credible executive constraints do not exist at the start of the game and that leaders can only establish constraints, rather than remove or weaken constraints on executive power. I relax these assumptions in an extension of the model that is presented in Appendix A. In the modified version of the game I allow for leaders to set *negative* values of g, which essentially allows them to remove existing constraints. However, since this article focuses primarily on the creation of constrained autocratic rule, the baseline model focuses our attention to positive levels of g.

The game proceeds as follows:

1. At the start of the game, A selects $g \in [0, 1 - p_2]$ and E observes this choice.
2. A offers $x_1 \in [0, 1]$.
3. E accepts or rejects the offer of x_1.
   (a) If E rejects the offer, conflict occurs. If conflict occurs, A is deposed with probability p_1 and remains in power with probability $1 - p_1$. Fighting is costly and only a fraction σ of the pie remains after fighting. The winner of the fight consumes the remainder of the pie for both periods, and the loser gets nothing for both periods.
   (b) If E accepts the offer, then E receives x_1 and A receives $1 - x_1$.
4. If conflict did not occur in period 1, the game moves on to period 2. A offers $x_2 \in [0, 1]$.
5. E accepts or rejects the offer of x_2.
   (a) If E rejects the offer then conflict occurs. If conflict occurs, A is deposed with probability $p_2 + g$ and remains in power with probability $1 - p_2 - g$. Fighting is costly and only a fraction σ of the pie remains after fighting. The winner of the fight consumes the remainder of the pie for the second period, and the loser gets nothing for the second period.
   (b) If E accepts the offer, then E receives x_2 and A receives $1 - x_2$. The game ends.

Figure 1 presents the game tree.

4. Solving the baseline model

In the following section we first establish the conditions under which A will not establish executive constraints. We then derive equilibrium levels of constraints and show that A will prefer to establish constraints when faced with a commitment problem in period 1. The equilibrium solution concept is subgame perfect Nash equilibrium. The full proofs for the baseline model are presented in Appendix B.

4.1. Unconstrained rule

When will the leader decide *not* to establish constraints? In this subsection, we show that an autocrat who initially enters power strong will not face a commitment problem in period 1. She therefore does not need to establish constraints in order to make an offer that is acceptable to the elite.

Assume that a commitment problem never exists. If that is the case, then A can always make an offer x_t that can always be accepted in both periods. In period 1, A

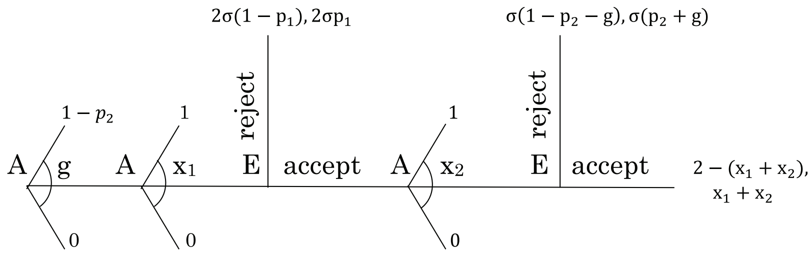

Figure 1. Game tree.

makes E indifferent between accepting and rejecting an offer by satisfying the following condition:

$$\begin{aligned} EU_E(reject) &\leq EU_E(accept) \\ 2\sigma p_1 &\leq x_1 + V_E \end{aligned} \tag{1}$$

V_E denotes the continuation value of accepting the offer and moving onto period 2 for E. In the second period, A will hold E down to his reservation price by offering the expected utility of rejecting (since there are no future offers to condition on). V_E is therefore equal to E's period 2 expected utility of fighting. Plugging V_E into equation (1) allows us to solve for x_1^*. Formally, A will make the following offer in period 1:

$$x_1^* = max\{0, 2\sigma p_1 - \sigma p_2\} \tag{2}$$

Whether A will always be able to make this offer depends on her relative strength in period 1. The largest possible per period offer A can make is equal to the entire size of the pie, which is normalized to 1.[7] Since A cannot commit to future offers, each per period offer cannot exceed 1.

Proposition 4.1. *When $p_1 \leq \frac{1}{2\sigma} + \frac{p_2}{2} \equiv \hat{p}$, then A can always make an offer x_1 that can induce an acceptance by E. For all $p_1 \in [0, \hat{p}]$, there exists an $x_t \leq 1$ such that $E[U_E(reject)] \leq E[U_E(accept)]$.*

Proposition 4.1 tells us that if A is strong when she first enters power, she will not create constraints. Recall that p_1 is the probability that A will be *deposed*, therefore when p_1 is sufficiently low, A enters power in a position of strength. Because the probability that E can successfully depose A is very low, A will be able to make an offer that will match E's expected utility of rejecting, and commitment problems will not occur. In this scenario, A will not create constraints in equilibrium because she does not need to in order to sustain peaceful bargaining.

How does the threshold of peaceful bargaining without constraints, denoted by $\hat{p}$, change relative to the future distribution of power?

Proposition 4.2. *As A's period 2 strength decreases, the range for peaceful bargaining without constraints increases. Formally, $\frac{\partial \hat{p}}{\partial p_2} > 0$.*

Put together, Propositions 4.1 and 4.2 produce some interesting counterintuitive results. When A *enters* power strong, she will not establish constraints because she can make an offer that will satisfy E. In this case, peaceful bargaining can be sustained through unconstrained rule, where E has no guarantees over future rent distribution. However, keeping A's initial strength constant, as p_2 increases, E's continuation value also increases. When E can rely on future *de facto* power, this puts less pressure on the period 1 offer. In this case, peaceful bargaining can also be sustained through unconstrained rule, yet E does have guarantees over future rent distribution due to increasing *de facto* power.

4.2. Constrained rule

Now let's assume that $p_1 > \hat{p}$. An offer x_1 large enough to induce an acceptance from E cannot be made without the creation of some constraints $g > 0$.

4.2.1 Finding the equilibrium level of constraints. In period 1, E will accept an offer only if the following condition is satisfied:

$$\begin{gathered} EU_E(reject) \leq EU_E(accept) \\ 2\sigma p_1 \leq x_1 + V_E \end{gathered} \tag{3}$$

Lemma 4.1. *If $p_1 > \hat{p}$, A will always offer $x_1 = 1$.*

If peaceful bargaining cannot be sustained without the establishment of constraints, A will always prefer to set x_1 as large as possible in order to take pressure off of g. Not only is x_1 a per-period offer with no lasting consequences for the second period of the game, g is also a less efficient mechanism for increasing E's continuation value, compared with x_1.

To find the equilibrium level of constraints, g^*, we first observe that E's continuation value is, once again, equal to his expected utility of rejecting the offer in period

2. V_E is therefore equal to $\sigma(p_2 + g)$. Plugging V_E into equation (3) allows us to solve for the equilibrium level of constraints:

$$g^* = 2p_1 - p_2 - \frac{1}{\sigma} \tag{4}$$

As long as A sets $g = g^*$, she will be able to make an offer $x_1 = 1$ that will satisfy E in period 1.[8] In Appendix B we show that A will always be able to set $g = g^*$.[9]

4.2.2. Comparative statics. We take comparative statics of g^* with respect to key parameters of interest.

Proposition 4.3. *As A's period 1 level of strength increases, the equilibrium level of constraints increases. Formally, $\frac{\partial g^*}{\partial p_1} > 0$.*

As p_1 increases, A faces a more intense commitment problem in period 1, which increases the need for constraints. Interestingly, however, we find the *opposite* relationship between the equilibrium level of constraints and the future distribution of power, p_2.

Proposition 4.4. *As A's period 2 level of strength increases, the equilibrium level of constraints decreases. Formally,* $\frac{\partial g^*}{\partial p_2} < 0$.

If A is weaker in period 2 this means E has higher levels of *de facto* power in the future. This expected high draw of p_2 alleviates the need for institutions to ensure peaceful bargaining.

Finally, we can also consider how the the equilibrium level of constraints g^* changes with respect to the cost of fighting, σ.

Proposition 4.5. *As the cost of fighting decreases, the equilibrium level of constraints increases. Formally,* $\frac{\partial g^*}{\partial \sigma} > 0$.

Recall that σ is the portion of the pie that remains after a period of conflict. Increasing levels of σ suggests that conflict is getting *less* costly. As conflict gets less destructive, the period 1 payoff of rejecting an offer increases because a larger portion of the pie is preserved in the case of conflict. Under these circumstances, it becomes harder to buy E off, therefore requiring higher levels of constraints.

4.2.3. Determining A's equilibrium behavior. We have derived the equilibrium level of constraints, g^* required for peaceful bargaining—but will A always prefer to implement $g = g^*$? We consider the tradeoffs A faces when she decides whether to establish constraints.

Proposition 4.6 (benefits of constrained rule). *If A sets* $g = g^*$, *then conflict does not occur in equilibrium.*

Proposition 4.7 (costs of constrained rule). A's second period consumption is decreasing in g. Formally, $\frac{\partial(1-x_2)}{\partial g} < 0$.

Constrained rule comes with costs and benefits for A. On the one hand, if A sets $g = g^*$ then conflict will not occur in either period of the game. A is therefore able to pocket the surplus saved from not fighting in her period 2 consumption.[10] On the other hand, as g increases, A's second period consumption decreases. This is because g shifts the second period distribution of power in favor of E. The higher g is, the larger x_2 must be in order to induce an acceptance from E.

In Appendix B, we demonstrate that A's expected utility from establishing constraints is larger than her expected utility of fighting in period 1. In other words, $EU_A(g = g^*) \geqslant EU_A(g = 0)$. When faced with a commitment problem, A will always prefer to establish constrained rule.

Proposition 4.8. *The equilibria of the game can be characterized as following*:

1. ***Unconstrained rule***: *If* $p_1 \leq \hat{p}$, *A will set* $g = 0$. *In period 1, A will offer* $x_1 = x_1^*$, *and in period 2, A will offer* $x_2 = \sigma p_2$. *In each round, E will accept each offer if* $EU_E(accept) \geqslant EU_E(reject)$ *and reject otherwise.*

2. ***Constrained rule***:*If* $p_1 > \hat{p}$, *A will set* $g = g^*$. *In period 1, A will offer* $x_1^* = max\{0, x_1^*\}$, *and in period 2, A will offer* $x_2^* = \sigma p_2$. *In each round, E will accept each offer if* $EU_E(accept) \geqslant EU_E(reject)$ *and reject otherwise.*

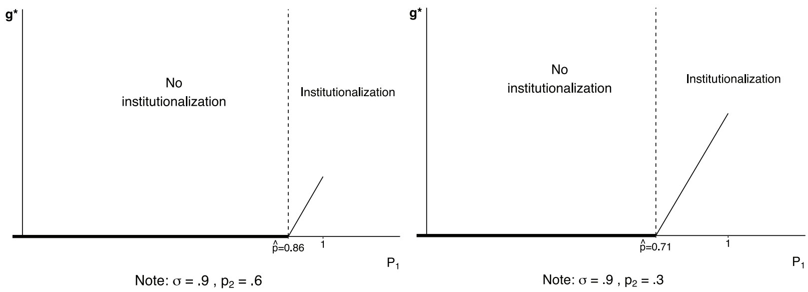

Figure 2. Graphing equilibrium results.

Figure 2 presents the equilibrium results graphically. The graphs show that constrained rule occurs only when the autocrat enters power weak. Leaders do not establish executive constraints when the probability of being deposed in the first period is sufficiently low. Figure 2 also illustrates that dictatorships become more constrained as the probability of deposing the leader in period 1 increases.

4.3. Discussion

The model makes a number of important predictions, which we summarize in this subsection. First, the model shows that there are *two different types of autocratic rule*, which differ based on the leader's relative strength when she first comes into office. Leaders who enter office initially strong are never incentivized to establish constraints because their initial likelihood of being deposed is very low. Such leaders prefer not to empower elites by providing them access to the state because they are always able to make a per-period transfer that elites will accept. As a result, peaceful bargaining can be sustained in an unconstrained rule equilibrium where initially strong autocrats remain in power but *do not* provide elites with access to the state.

On the other hand, leaders who enter office initially weak are incentivized to establish constraints because they cannot sustain peaceful bargaining without shifting the future distribution of power in favor of elites. Empowering elites in the second period relaxes demands on the first period transfer by raising the elite continuation value, which allows initially weak autocrats to make credible future promises to elites. Although doing so weakens the leader in the future, she is willing to establish constraints in order to remain in power for both periods of the game. In this case, peaceful bargaining can also be sustained in a constrained rule equilibrium where initially weak autocrats remain in power *only by* providing elites with access to the state.

These two different types of autocratic rule have one very important feature in common: initially strong leaders *and* initially weak leaders who establish constraints remain in power for both periods of the game. In other words, conditional on the weak type establishing constrained rule, the leader will be able to remain in power for the same length of time as the initially strong type.

This feature highlights an important empirical point: scholars should *not* assume that regimes that are long-lived have strong institutions. Leader tenure does not serve as a useful proxy for the quality of institutions due to the strategic nature of institutionalization. Initially weak leaders are incentivized to institutionalize in order to remain in power because they would otherwise face commitment problems in bargaining and risk being deposed by elites. When *weak* leaders institutionalize, they can indeed remain in power for longer periods of time.

Initially strong leaders, on the other hand, can remain in power regardless of whether they have strong institutions or not, because they do not face commitment problems in bargaining. In fact, as the model shows, leaders who enter power strong do not establish constraints, yet are able to remain in power for both periods of the game. We should therefore expect to see a systematic relationship between leader tenure and institutional strength only when we condition on initial leader strength. This may help to explain why existing empirical studies, which do *not* condition on leader strength have found inconsistent relationships between the presence of strong institutions and leader tenure (e.g., see Gandhi, 2008; Lucardi, 2017; Smith, 2005).

These results provide some interesting contrasts with findings from existing models. In the Acemoglu and Robinson (2006) model, a main finding is that democratization is most likely to occur if the poor poses a credible threat of rebellion *infrequently* (loosely speaking, when the leader is frequently strong). By contrast, in our model, constrained rule is most likely to occur when the leader enters power weak.[11] What accounts for this difference? In the Acemoglu and Robinson model, the poor can stage a revolution only when Nature draws a low cost of rebellion (in the language of the Acemoglu and Robinson model, when $\mu = \mu_H$). Furthermore, if the poor stages a revolution, it is guaranteed to succeed. In other words, when the poor choose to rebel, they are *guaranteed* a post-revolutionary income of $1 - \mu$ in every future period. Because of this, in a world where the poor are very unlikely to hold a credible threat of rebellion (in the language of the Acemoglu and Robinson model, when q is low), that makes periods where they *can* stage a rebellion extremely valuable. Therefore, when the poor pose a credible threat of rebellion infrequently, they would prefer to revolt whenever they can because the probability of being able to do so is very low in the future.

By contrast, in our model, elites can *always* remove support of the autocrat—they are not, by assumption, constrained to rebel only in periods where the autocrat is weak. Furthermore, when elites initiate conflict, they are not guaranteed to win. Therefore an elite who has a temporarily good draw of p_t does not feel compelled to rebel against the autocrat *as long as* the autocrat can make an offer x_t that can satisfy the elite.[12]

5. Model extension: Imperfect information

In the baseline model, the distribution of power is common knowledge. Both players observe p_1 and p_2 at the start of the game. I now relax this assumption and introduce uncertainty about the future distribution of power, p_2. I show that,

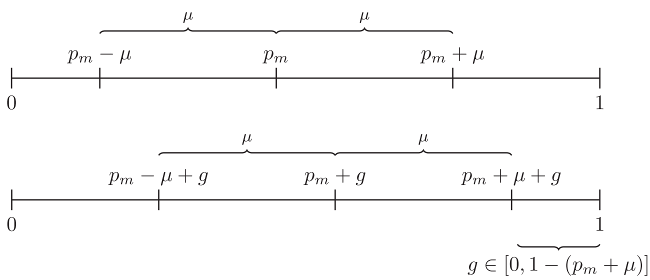

Figure 3. Distribution of p_2.

consistent with the baseline model, leaders will establish constraints when they enter power initially weak. However, in the modified version of the game, conflict is possible in equilibrium when leaders cannot establish a high enough level of constrained rule in order to satisfy elites.

At the start of the modified game, p_1 is common knowledge but p_2 is not observed by either player. Both players know the distribution from which p_2 will be drawn, but neither knows what the precise value of p_2 will be. If the game moves onto the second period, Nature selects p_2 and both players observe this draw before bargaining occurs. p_2 is uniformly distributed on $[p_m - \mu, p_m + \mu]$, so that p_m represents the mean draw of p_2.[13] At the start of the game, A decides whether to establish binding constraints in light of uncertainty surrounding what the future distribution of power will be.

While it is reasonable to expect that leaders and elites have accurate information about their relative strength in the current period, uncertainty surrounding the future distribution of power can easily arise in dictatorships. Positive or negative economic shocks, changes in foreign aid, or shifts in international norms can shift the distribution of power in favor of or against the leader in future periods. Thus, leader strength can be affected by external shocks that are difficult to predict when they first take power.

At the start of the modified game, A decides whether to establish constraints. This decision is represented by the parameter $g \in [0, 1 - (p_m + \mu)]$. If A selects $g > 0$, then p_2 will be drawn from a modified uniform distribution of $[p_m - \mu + g, p_m + \mu + g]$. Any positive value of g will shift the entire distribution of power away from A in the second period. If A sets $g = 0$, then p_2 will be drawn from the original uniform distribution, $p_2 \in [p_m - \mu, p_m + \mu]$.

Figure 3 illustrates how g shifts the future distribution of power.

The modified game proceeds as follows:

1. At the start of the game, A selects $g \in [0, 1 - (p_m + \mu)]$ and E observes this choice.
2. A offers $x_1 \in [0, 1]$.
3. E accepts or rejects the offer of x_1.

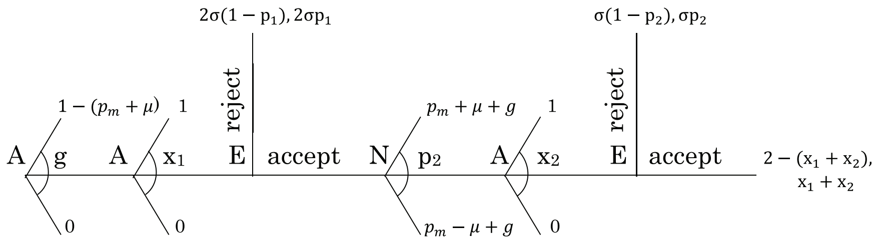

Figure 4. Game tree of the modified game.

   (a) If E rejects the offer then conflict occurs. If conflict occurs, A is deposed with probability p_1 and remains in power with probability $1 - p_1$. Fighting is costly and only a fraction σ of the pie remains after fighting. The winner of the fight consumes the remainder of the pie for both periods, and the loser gets nothing for both periods.
   (b) If E accepts the offer, then E receives x_1 and A receives $1 - x_1$.
4. If conflict did not occur in period 1, the game moves on to period 2. Nature selects $p_2 \in [p_m - \mu + g, p_m + \mu + g]$. Both players observe this draw.
5. A offers $x_2 \in [0, 1]$.
6. E accepts or rejects the offer of x_2.
   (a) If E rejects the offer then conflict occurs. If conflict occurs, A is deposed with probability p_2 and remains in power with probability $1 - p_2$. Fighting is costly and only a fraction σ of the pie remains after fighting. The winner of the fight consumes the remainder of the pie for the second period, and the loser gets nothing for the second period.
   (b) If E accepts the offer, then E receives x_2 and A receives $1 - x_2$. The game ends.

Figure 4 presents the game tree of the modified game.

When we introduce uncertainty about the future distribution of power, one important difference emergences: conflict is possible in equilibrium. In the baseline model, autocrats are able to implement equilibrium levels of constraints in order to ensure peaceful bargaining. As we demonstrated, weak autocrats will always establish constraints when faced with a commitment problem, therefore conflict never occurs in equilibrium.

We now demonstrate that when the players face uncertainty about the future distribution of power, p_2, A will not always be able to establish sufficiently high levels of constraints to ensure peaceful bargaining. As a result, fighting can occur in period 1. The full proofs for the modified game are presented in Appendix C.

Similar to the baseline model, when p_1 is sufficiently low, A will not establish constraints because she is always able to make an offer x_1 that E will accept. However, when A enters power weak, a commitment problem will arise in period 1 if $g = 0$. We can establish that there exists some $g^* > 0$ that would allow A to make an offer $x_1 = 1$ that can satisfy E in period 1. For this game, $g^* = 2p_1 - p_m - \frac{1}{\sigma}$.

Will A always be able to set $g = g^*$? In the modified version of the game, g is bounded above by $1 - (p_m + \mu)$. Therefore g^* is feasible only if $g^* \leq 1 - (p_m + \mu)$.

Proposition 5.1. *As long as p_1 is sufficiently small, A will be able to set $g = g^*$ in order to allow a peaceful bargain to go through in period 1. Formally, as long as $p_1 \leq \frac{1}{2} + \frac{1}{2\sigma} - \frac{\mu}{2} \equiv \bar{p}$, there exists a $g^* \in [0, 1 - (p_m + \mu)]$ such that $E[U_E(reject)] \leq E[U_E(accept)]$.*

A key implication of Proposition 5.1 is that conflict *will* occur in equilibrium if p_1 is not sufficiently small. When $p_1 > \bar{p}$, even if A were to set g to the highest possible level, she still cannot prevent conflict from occurring in period 1 because the level of constraints (g^*) necessary to allow all bargains to go through peacefully is larger than the maximum possible value of g. We establish in Appendix C that *A* still always prefers to establish constrained rule when faced with a commitment problem, however, now she cannot always do so.

Proposition 5.2. *The equilibria of the modified game can be characterized as following*:

1. ***Unconstrained rule*: If $p_1 \leq \hat{p}$, A will set $g = 0$. In period 1, A will offer $x_1 = x_1^*$, and in period 2, A will offer $x_2 = \sigma p_2$. In each round, E will accept each offer if $EU_E(accept) \geqslant EU_E(reject)$ and reject otherwise.**
2. ***Constrained rule*: If $p_1 > \hat{p}$ and $p_1 \leq \bar{p}$, A will set $g = g^*$. In period 1, A will offer $x_1^* = max\{0, x_1^*\}$, and in period 2, A will offer $x_2^* = \sigma p_2$. In each round, E will accept each offer if $EU_E(accept) \geqslant EU_E(reject)$ and reject otherwise.**
3. ***Conflict*: If $p_1 > \hat{p}$ and $p_1 > \bar{p}$, A will set g to any $g \in [0, 1 - (p_m + \mu)]$. In period 1, A will offer any $x_1 \in [0, 1]$, and in period 2, A will offer $x_2^* = \sigma p_2$. In each round, E will accept each offer if $EU_E(accept) \geqslant EU_E(reject)$ and reject otherwise.**

The introduction of imperfect information regarding the future distribution of power produces an important prediction: conflict is possible in equilibrium. If *A* is unable to implement a high enough level of constraints, then *E* will always reject the period 1 offer, and *A* will be unable to prevent fighting from occurring in equilibrium. Unlike the baseline model, where strong and weak leaders can remain in power for similar lengths of time, the modified version of the game predicts that some dictatorships will be short-lived.

6. Illustrative case studies: Cameroon and Côte d'Ivoire

The penultimate section of this article presents two illustrative case studies of Cameroon and Côte d'Ivoire. We will use the case studies to highlight two key insights from the model. First, that institutions constrain when they empower elites by providing them with access to the state. Second, that leaders who initially enter power weak are incentivized to share power in order to maintain support from regime elites. The ways in which leaders enter power therefore have path dependent consequences on the strategies of rule that they must pursue in order to secure their rule. Cameroon and Côte d'Ivoire are useful case studies due to the comparability of the countries. They share similar histories, economies, geography, and populations. Both cases are former French colonies[14] located in West Africa and were granted independence in the same year.

We first present the case of Cameroon, which is an example of a regime with high levels of constraints under the founding president, Ahmadou Ahidjo. We show how Ahidjo, who was an initially weak leader, used institutional bargains in order to maintain support from other elites—therefore establishing a rule-based system. Unlike other founding leaders, such as Léopold Sédar Senghor of Senegal or Félix Houphouët-Boigny of Côte d'Ivoire, Ahidjo was not a renowned, charismatic, popular independence leader. He was initially encouraged to run for office by the French colonial authorities and was perceived to be a part of the colonial machine. When independence was granted, Ahidjo ascended to the presidency as a highly unpopular leader. To compensate for this initial lack of support, Ahidjo distributed important cabinet positions to other elites, including appointing Paul Biya to the position of Prime Minister—the designated constitutional successor to the president.

We juxtapose the case of Cameroon against Côte d'Ivoire under the rule of the founding president, Félix Houphouët-Boigny, which is an example of a regime with low levels of constraints. Houphouët-Boigny was a renowned independence leader, who lobbied for the right to self-governance throughout French West Africa. Upon taking power, Houphouët-Boigny was extremely powerful and influential and faced very few credible challenges to his authority. Throughout his tenure, Houphouët-Boigny centralized power within his cabinet, leaving key ministerial positions, such as the vice presidency, vacant.

6.1. Cameroon: Constrained rule

The case of Cameroon under the presidency of Amadou Ahidjo from 1960 to 1982 is an example of a regime with binding executive constraints in place. Cameroon has had formal succession policies written into the constitution since the country gained independence, and term limits were added to the constitution in 1996. Key cabinet ministerial positions were consistently filled and remained quite stable under Ahidjo. The fact that Cameroon, especially in the first decades after independence, had high levels of regime institutionalization may come as a surprise. The existing scholarship on colonial legacies generally claims that former British colonies had stronger institutions that kept rulers in check as well as more robust legal traditions (Hayek, 1960; Landes, 1998; La Porta et al., 1998). Cameroon was mostly a French colony prior to independence, yet institutional checks on executive power have always been quite robust, and these constraints were established early on during Ahidjo's rule.

Ahmadou Ahidjo entered office weak and vulnerable to being deposed. Unlike other founding presidents in newly independent African countries, Ahidjo was not a national independence hero. On the contrary, he was a long standing civil servant within the colonial administration and largely inherited his position of power from the colonial government. In fact, it was the French authorities who encouraged Ahidjo to run for office in the first place. They referred to him as the 'Ahidjo option': given that independence seemed to be increasingly inevitable, the colonial authorities preferred to have Ahidjo as head of state since they believed he would remain a close ally of France throughout his tenure. When Ahidjo first took office as the founding president of a newly independent Cameroon, he was deeply unpopular and (accurately) perceived to be a collaborator of the French colonial authorities (Joseph, 1978).

Upon entering office, Ahidjo needed to create official structures that would allow him to buy the support of key elites. He systematically used cabinet positions in order to secure support from other elites. Ministerial appointments provided "a major opportunity for Ahidjo to reward influential people in society – or even to build influence for individuals – and to tie them to him" (DeLancey, 1989: 59). From 1960 to 1965, for instance, Charles Assale, who was the leader of a regional party in East Cameroon (the *Mouvement d'Action Nationale*) was offered the position of Prime Minister of East Cameroon in exchange for his support of the regime. Elites who opposed Ahidjo's policies or central authority 'found themselves without office' in the state bureaucracy (DeLancey, 1989: 54). Buying support, however, came at a cost: Ahidjo's own ethnic and regional elites did not control the majority of cabinet ministries—in fact, they were often *under-represented* in the cabinet. Power-sharing under the Ahidjo regime required that the leader relinquish control of the state. In 1975, Ahidjo appointed Paul Biya to be his Prime Minister—the constitutionally designated successor to the president. Ahidjo kept Biya in this position for seven years and voluntarily retired in 1982. Upon Ahidjo's retirement, Biya became the President of Cameroon and remains in office today.

6.2. Côte d'Ivoire: Unconstrained rule

Côte d'Ivoire under the founding presidency of Félix Houphouët-Boigny from 1960 to 1993 is an example of a personalist regime. Under Houphouët-Boigny, the constitution did not include term limits. While the constitution did specify succession procedures, this provision was frequently changed so that the designated successor wavered between the vice president and the president of the National Assembly. Moreover, Houphouët-Boigny kept key positions in the presidential cabinet vacant—including the vice presidency and the minister of defense—so that in practice, there was no appointed successor. Houphouët-Boigny remained in power for three decades, and died while in office in 1993. The regime fell apart soon after Houphouët-Boigny's death, reflecting the absence of institutionalized power-sharing within the ruling coalition.

Félix Houphouët-Boigny was already the single most powerful political actor in Côte d'Ivoire even before he even became president upon independence in 1960. He was born into a family of hereditary chiefs of the Baoulé group and became chief of the Akoué tribe through hereditary succession at a very young age. In

1944, Houphouët-Boigny organized one of the earliest independence organizations in the country, the *Syndicat Agricole Africain* (SAA), a political organization aimed to protect the rights of Ivorian farmers. By the time Houphouët-Boigny emerged as the leader of the SAA, he was also one of the richest African farmers in the entire country, allowing him to self-finance his political campaigns. As Houphouët-Boigny continued his involvement in politics in the years leading up to independence, he cemented his popularity and influence. In 1946 he established the *Parti Démocratique de la Côte d'Ivoire*, an independence party in Côte d'Ivoire, as well as the *Rassemblement Démocratique Africain*, a regional alliance composed of countries in French West Africa that lobbied for decolonization.

Moreover, Houphouët-Boigny, who was a member of the French National Assembly, proposed a bill that would abolish forced labor in Overseas Africa. Overnight, Houphouët-Boigny 'became a mythical hero who had imposed his will upon the French...The gratitude he earned from his countrymen has remained a foremost element in his political power and it has prevailed over the hesitations of many followers who questioned his later policies'[15] (Zolberg, 1969: 74–75). When Houphouët-Boigny finally took office as the founding president of Côte d'Ivoire in 1960, he was the single most influential politician in the country and there were 'few other national important politicians' of his stature (Jackson and Rosberg, 1982: 149).

Houphouët-Boigny relied on his charisma, influence, and personal power to dominate politics as president of Côte d'Ivoire.[16] Rather than sharing power with other political elites through cabinet appointments, Houphouët-Boigny relied extensively on French bureaucrats to run the state. The appointment of French technocrats within the state enabled Houphouët-Boigny to monopolize political power. In fact, he took great pains to shut members of his own ruling coalition out of important government positions. According to Jackson and Rosberg, 'The cabinet is *less* a collegial body of *powerful and independent incumbents* and more a technical advisory body to the ruler' (Jackson and Rosberg, 1982: 147–148, emphasis added) . Houphouët-Boigny ensured that all major ethnic groups were represented on the cabinet, but *not* by their most prominent politicians.[17] For the majority of the time he was in office, Houphouët-Boigny did not have a vice president and avoided designating a successor. Through this personalist strategy of rule, Houphouët-Boigny stayed in power for three decades, though the regime did not persist for long after his death. His successor, Henri Konan Bédié[18], was deposed in a military coup six years after taking office.

7. Conclusion

This article sought to understand why we see differences in the organizational capacity of authoritarian regimes by examining the creation of constraints limiting executive power. Constraints bind only when they provide elites with access to important government positions, empowering them to hold the incumbent accountable to promises about rent distribution. Through a formal model I demonstrated that strong autocrats who enter power with a low probability of being deposed are less likely to create binding constraints. Initially weak autocrats without such guarantees of stability are more likely to pursue a strategy of constrained rule in order to maintain support from elites. Importantly, rather than assuming that institutions constrain leaders, I show *how* institutions can provide credible commitment power by shifting the future distribution of power in favor of elites. Through the model and case studies of Cameroon and Côte d'Ivoire I demonstrate how the ways in which leaders enter power have lasting impacts on the strategies they must pursue to stay in office.

This article makes an important contribution to theories of authoritarian stability by advancing our knowledge about the origins of strong rule-based regimes. In contrast with the general finding that dominant-party regimes tend to be the strongest regime type, I show that the most durable institutional arrangements actually emerge out of autocrat weakness. Furthermore, the argument suggests that the initial period of an incumbent's tenure constitutes a critical juncture: whether the incumbent has already consolidated power when they enter office shapes the extent to which they invest in building strong institutions.

An important avenue for future work is to consider the conditions under which leaders can successfully remove or weaken constraints. While most research has focused on the emergence of rules that limit executive power, little attention has so far been devoted to explaining how leaders can eliminate rules that bind their hands. African autocrats, especially in recent years, have increasingly adopted a broad range of strategies in which to counter existing constraints, including coopting judiciaries or building parallel governments. Most of these strategies are pursued through institutional channels, with the veneer of being legal or even democratic. Further research on how leaders evade or weaken executive constraints will be especially relevant for understanding the causes and consequences of democratic erosion.

Appendix A

Model extension: Removal of constraints

In the baseline model, we assumed that executive constraints are not present at the start of the game. The autocrat's decision is whether to establish constraints, and g is limited to positive values. Now we relax the assumption that the regime has no constraints when the autocrat first comes into power.

In this extension of the model we allow for A to remove constraints by allowing A to set negative levels of g. Negative levels of g shifts power *in favor* of A in the second period. In other words, A can remove existing constraints by setting *negative* levels of g and decreasing her average probability of being deposed in the second period. In the modified version of the game, A can select g from a distribution of $g \in [-p_2, 1 - p_2]$, and everything else remains the same as the baseline model.

First, we establish that A will not choose to remove constraints unless $p_1 < \hat{p}$. Recall from the baseline model that if $p_1 > \hat{p}$, she will need to establish constraints in order to maintain peaceful bargaining. We therefore restrict our attention to cases where $p_1 < \hat{p}$. In period 1, A needs to make sure the following condition holds:

$$\begin{aligned} EU_E(reject) &\leq EU_E(accept) \\ 2\sigma p_1 &\leq x_1 + V_E \end{aligned} \tag{33}$$

When $p_1 = \bar{p}$, then A can set $x_1 = 1$ and $g = 0$. However, if $p_1 < \bar{p}$, then the left-hand side (LHS) of equation (33) will be strictly less than the right-hand side (RHS) of the equation. In that case, then A can offer $x_1 < 1$ or set $g < 0$. Observe that A will prefer to offer $x_1 < 1$ over removing institutions, since g is weighted by σ. In other words, A will prefer to keep scaling down x_1, rather than setting $g < 0$ because it is more efficient. However, if A sets $x_1 = 0$ and the LHS of the equation is *still* strictly less than the RHS of the equation, then A will want to remove institutions by setting negative levels of g. When plug $x_1 = 0$ into equation (33), we see that $g^* = 2p_1 - p_2$.

Finally, we note that, unlike in the baseline model, *incomplete* removal can occur in equilibrium. Recall that in the baseline model where $g > 0$, *A had to* set $g = g^*$ when $p > \hat{p}$, otherwise E would reject the period 1 offer and conflict will occur in equilibrium. However, when A sets $g < 0$, E no longer has veto power. In fact, A is removing constraints precisely because she can satisfy equation (33)*even when* $x_1 = 0$. Recall that g is bounded below by $-p_2$, since it is drawn from the distribution $g \in [-p_2, 1 - p_2]$. In cases where negative levels of g^* are actually more negative than $min(g) = -p_2$, A cannot remove constraints as much as she wants to. However, unlike in the case of $g > 0$, incomplete removal will not trigger conflict. Therefore if $g^* < 0$, then A will set $g = min\{-p_2, g^*\}$.

Appendix B

Proofs: Baseline model

Proof of Proposition 4.1. A must make an offer $x_1^* = max\{0, 2\sigma p_1 - \sigma p_2\}$ in order to induce an acceptance from E. However, A faces a budget constraint of 1 – the size of the entire pie. Under what conditions does the optimal offer required not exceed the size of the entire pie?

$$\begin{aligned} x_1^* &\leq 1 \\ 2\sigma p_1 - \sigma p_2 &\leq 1 \\ p_1 &\leq \tfrac{1}{2\sigma} + \tfrac{p_2}{2} \equiv \hat{p} \end{aligned} \tag{5}$$

As long as the first draw of p_1 is sufficiently small, A will always be able to make an offer x_1^* that can induce an acceptance from E. □

Proof of Proposition 4.2. It is easy to see that as $\hat{p}$ increases, p_2 also increases:

$$\frac{\partial \hat{p}}{\partial p_2} = \frac{1}{2} > 0 \tag{6}$$

Proof of Lemma 4.1. A must choose values of x_1 and g such that the following equation is satisfied:

$$2\sigma p_1 \leq x_1 + V_E \tag{7}$$

What is V_E? We know that one of two things must happen in period 2. It is possible A cannot make an offer that satisfies E, and E decides to reject the offer. If this happens, then E's continuation value is equal to his expected utility of fighting. The only other possible outcome is that A can make an offer that satisfies E in period 2. However, A will always try to make the cheapest possible offer to E, which is exactly his expected utility of fighting. Therefore we know that V_E is simply equal to E's expected utility of fighting in period 2. Plugging in E's expected utility of fighting into the equation produces the following inequality:

$$\begin{gathered} 2\sigma p_1 \leq x_1 + \sigma EV(p_2) \\ 2\sigma p_1 \leq x_1 + \sigma(p_2 + g) \\ 2\sigma p_1 - \sigma p_2 \leq x_1 + \sigma g \end{gathered} \tag{8}$$

Since each unit of g is weighted by σ, it is more efficient to increase x_1 in order to satisfy the inequality, rather than g. □

To solve for g^*, we first observe that A must ensure that V_E is large enough in order to satisfy the following equation:

$$2\sigma p_1 \leq 1 + V_E \tag{9}$$

To determine the continuation value, note that if the game moves peacefully onto the second period, there will never be fighting. Even if $p_2 = 1$ and $\sigma = 1$, A can always offer $x_2 = 1$. Therefore we know that V_E is simply equal to E's expected utility of rejecting in period 2, since A will always try to make the cheapest possible offer to E.

$$\begin{aligned} V_E &= EU_E(reject) \\ &= \sigma EV(p_2) \\ &= \sigma(p_2 + g) \end{aligned} \tag{10}$$

We now plug E's continuation value into the equation and solve for g

$$\begin{aligned} 2\sigma p_1 - 1 &\leq V_E \\ 2\sigma p_1 - 1 &\leq \sigma(p_2 + g) \\ g^* &= 2p_1 - p_2 - \frac{1}{\sigma} \end{aligned} \tag{11}$$

We can establish that changing the functional form of g does not alter the results substantively. Instead of assuming that $w(g) = g$, let us assume that institutions are extremely efficient, such that $h(\tilde{g}) > \tilde{g}$ (in other words, $h(\cdot)$ is concave). How would $\tilde{g}^*$ compare with g^*? We know that $g^* = 2p_1 - p_2 - \frac{1}{\sigma} = h(\tilde{g}^*) > \tilde{g}^*$.

Therefore, $g^* > \tilde{g}^*$. Unsurprisingly, when institutions are efficient, lower levels of constraints are required to sustain peaceful bargaining.

Interestingly, however, this does not change the threshold, $\hat{p}$ of constrained rule, nor does it make A more or less willing to establish constraints, compared with when $w(g) = g$. First, note that g does not affect the calculation of the threshold, $\hat{p}$. Second, recall that A does not value g inherently. She does not consume g, it *only* affects the extent to which the distribution of p_2 shifts. In other words, A only cares about the *results* of g, rather than the inherent level of g. Therefore, even if g was inefficient, say if $f(\hat{g}) < \hat{g}$, A will still always be willing to establish constraints.

Proof. We show that A will always be able to set $g = g^*$. Recall that g is bounded above by $1 - p_2$, therefore A can establish the equilibrium level of constraints if $g^* \leq 1 - p_2$.

$$\begin{gathered} g^* \leq 1 - p_2 \\ 2p_1 - p_2 - \tfrac{1}{\sigma} \leq 1 - p_2 \\ p_1 \leq \tfrac{1}{2} + \tfrac{1}{2\sigma} \end{gathered} \tag{12}$$

Since $\sigma \in [0, 1]$, equation (12) is always true. □

Proof of Proposition 4.3. It is easy to see that as p_1 increases, g also increases:

$$\frac{\partial g^*}{\partial p_1} = 2 > 0 \tag{13}$$

□

Proof of Proposition 4.4. It is easy to see that as p_2 increases, g decreases:

$$\frac{\partial g^*}{\partial p_2} = -1 < 0 \tag{14}$$

□

Proof of Proposition 4.4. It is easy to see that g^* increases as σ increases:

$$\frac{\partial g^*}{\partial \sigma} = \frac{1}{\sigma^2} > 0 \tag{15}$$

□

Proof of Proposition 4.6. This proof follows directly from the construction of g^*, which is the minimal level of g that guarantees that the following condition is true: $EU_E(\text{reject}) \leq EU_E(\text{accept})$. If $g \geqslant g^*$, then E will always accept in period 1. If the game makes it to period 2, then conflict will never occur because $p_2 < 1$ by assumption, therefore A will always be able to make an offer x_2 that can induce an acceptance by E. □

Proof of Proposition 4.7. A's second period consumption is simply $1 - x_2$, since she can always make an offer x_2 that can induce an acceptance by E. It is easy to see that $1 - \mathrm{x}_2$ is decreasing in g:

$$\frac{\partial(1 - x_2)}{\partial g} = -\sigma < 0 \tag{16}$$

□

Proof. We show that A will therefore always prefer to institutionalize if $p_1 > \hat{p}$. First we observe that A will set $g = g^*$ in equilibrium only if the following condition holds:

$$EU_A(g = g^*) \geqslant EU_A(g = 0) \tag{17}$$

The expected utility of A not establishing constraints is equal to the expected utility of E rejecting the offer x_1. This can be expressed as follows:

$$\begin{aligned} EU_A(g = 0) &= EU_A(E\_rejects) \\ &= 2\sigma(1 - p_1) \end{aligned} \tag{18}$$

If A chooses to institutionalize, she will set $g = g^*$ and $x_1 = 1$. As long as A sets $g = g^*$, E will accept the period 1 offer.

$$\begin{aligned} EU_A(g = g^*) &= EU_A(E\_accepts) \\ &= (1 - x_1) + V_A \\ &= 0 + V_A \end{aligned} \tag{19}$$

A gets to pocket the portion of the pie that she does not offer to E, therefore her continuation value is the size of the pie minus the expected value of the period 2 offer, x_2.

$$V_A = 1 - EV(x_2) \tag{20}$$

In period 2, A will make the cheapest possible offer to E, so in expectation, x_2 will be equal to the expected value of fighting for E.

$$EV(x_2) \quad = \sigma(p_2 + g^*) \tag{21}$$

Plugging g^* into equation (21) produces the following:

$$EV(x_2) = 2\sigma p_1 - 1 \tag{22}$$

We plug this back into A's continuation value:

$$\begin{aligned} V_A &= 1 - EV(x_2) \\ &= 2 - 2\sigma p_1 \end{aligned} \tag{23}$$

To verify that A will always prefer constrained rule, we check whether A's expected utility of setting $g = g^*$ is larger than A's expected utility of setting $g = 0$:

$$\begin{aligned} EU_A(g = g^*) &\geqslant EU_A(g = 0) \\ 2 - 2\sigma p_1 &\geqslant 2\sigma(1 - p_1) \\ 1 &\geqslant \sigma \end{aligned} \tag{24}$$

Equation (24) is always true by assumption. A will therefore always prefer to institutionalize if $p_1 > \hat{p}$. □

Proof of Proposition 4.8. We break the proof of Proposition 4.8 into two parts. First we establish the Unconstrained Rule equilibrium.

Proposition 4.1 has already established that if $p_1 \leq \hat{p}$ then A can always make an offer x_1 that can induce an acceptance from E in period 1. Therefore in the Unconstrained Rule equilibrium, A's best response is to set $g = 0$.

In the second period of the game, A's strict best response is to offer $x_2 = \sigma p_2$ because doing so allows her to pocket the surplus saved from not fighting while offering the smallest possible amount that will induce an acceptance from E. E's best response is to accept an offer that is at least as good as his expected utility of fighting in the second period.

Moving to the first period of the game, A will always choose to set $x_1 = x_1^*$ to ensure peaceful bargaining, rather than choosing to fight because her expected utility from fighting is strictly less.

A's expected utility from peaceful bargaining is equal to $2 - (x_1^* + x_2^*) = 2 - 2\sigma p_1$. A's expected utility from fighting in period 1 is equal to $2\sigma(1 - p_1)$. We can show that A's expected utility from peaceful bargaining is higher than her expected utility from fighting in period 1:

$$\begin{aligned} EU_A(x_1 < x_1^*) &< EU_A(x_1 = x_1^*) \\ 2\sigma(1 - p_1) &< 2 - 2\sigma p_1 \\ \sigma &< 1 \end{aligned} \tag{25}$$

Since $\sigma \leq 1$ by assumption, equation (25) is always true. Therefore A's strict best response is to offer $x_1 = x_1^*$ in period 1. Once again, E's best response is to accept x_1^* because it is, by construction, the smallest possible offer that can induce an acceptance by E in period 1. We have therefore established a unique equilibrium when $p_1 \leq \hat{p}$.

Now we establish the Constrained Rule equilibria. Here, we assume that $p_1 > \hat{p}$ (otherwise we would be in Unconstrained Rule equilibrium) and that a peaceful offer cannot be made in period 1 without setting $g = g^*$.

If the game reaches a second period of bargaining, then A can always make an offer that will satisfy E. A's strict best response in period 2 is to offer $x_2 = \sigma p_2$ because doing so allows her to pocket the surplus saved from not fighting while offering the smallest possible amount that will induce an acceptance from E. E's best response is to accept an offer that is at least as good as his expected utility of fighting in the second period.

Moving to period 1, A can make an offer $x_1 = 1$ that will ensure peaceful bargaining as long as $g \geqslant g^*$, or she will not be able to make any offer that will satisfy E if $g < g^*$. We show that if A can make an offer $x_1 = 1$, given that $g = g^*$, she will choose to do so, rather than choosing to fight.

We have already established from Lemma 4.1 that if $p_1 > \hat{p}$, then A will always offer $x_1 = 1$. If she chooses to do this, then her total expected utility over the two periods is simply the expected utility of $1 - x_2$, since she receives nothing in period 1. We show that $EU_A(x_1 < 1) < EU_A(x_1 = 1)$.

A's expected utility from fighting in period 1 is equal to $2\sigma(1 - p_1)$. To calculate $EU_A(1 - x_2)$, we first establish x_2 given that $g = g^*$. We know that $x_2 = EV(p_2)\sigma$.

$$\begin{aligned} EV(x_2) &= \sigma(p_2 + g^*) \\ &= \sigma p_2 + \sigma\left(2p_1 - p_2 - \frac{1}{\sigma}\right) \\ &= 2\sigma p_1 - 1 \end{aligned} \tag{26}$$

A's two period expected utility from peaceful bargaining is equal to $1 - EV(x_2) = 2 - 2p_1\sigma$. We show that this is strictly larger than A's expected utility from fighting in period 2.

$$\begin{aligned} EU_A(x_1 < 1) &< EU_A(x_1 = 1) \\ 2\sigma(1 - p_1) &< 2 - 2\sigma p_1 \\ \sigma &< 1 \end{aligned} \tag{27}$$

Once again, since $\sigma \leq 1$ by assumption, equation (27) is always true. Therefore, it is always the case that setting $x_1 = 1$ produces a larger expected utility for A than fighting in period 1. A's strict best response, given that $g = g^*$ is to offer $x_1 = 1$ in period 1. E's best response is to accept $x_1 = 1$ because by construction, g^* ensures that E's expected utility of accepting $x_1 = 1$ is greater than or equal to his expected utility of fighting in period 1.

We now move to the very start of the game, where A decides what to set g. We have already established that the following is always true: $EU_A(\textit{institutionalize}) \geqslant EU_A(\textit{not\_institutionalize})$. Therefore if $p_1 > \hat{p}$, then A's best response is to set $g = g^*$ at the onset of the game. □

Appendix C

Proofs: Model extension

We demonstrate that, similar to the baseline model, when A enters power sufficiently strong, she will not establish constraints because she will always be able to make an offer x_1 that E will accept. Unlike the baseline model, when we introduce uncertainty over the future distribution of power p_2, conflict is possible in equilibrium when A cannot establish a high enough level of constraints because $g^* > max(g)$.

First we establish that when A enters power sufficiently strong, she does not face a commitment problem in bargaining, and therefore does not establish constraints. Assume that a commitment problem never exists. If that is the case, then A can always make an offer x_t that can always be accepted in both periods. In period 1, A makes E indifferent between accepting and rejecting an offer by satisfying the following condition:

$$\begin{aligned} EU_E(reject) &\leq EU_E(accept) \\ 2\sigma p_1 &\leq x_1 + V_E \end{aligned} \tag{28}$$

In the second period, A will hold E down to his reservation price by offering the expected utility of rejecting. V_E is therefore equal to E's period 2 expected utility of fighting. E's expected utility of fighting is equal to σp_m. Plugging V_E into the equation above allows us to solve for x_1^*. Formally, A will make the following offer in period 1:

$$x_1^* = max\{0, 2\sigma p_1 - \sigma p_m\} \tag{29}$$

Whether A will always be able to make this offer depends on her relative strength in period 1. Since A cannot commit to future offers, the largest possible period 1 offer she can make is $x_1 = 1$. We plug in $x_1 = 1$ and solve for p_1. When $p_1 \leq \frac{1}{2\sigma} + \frac{p_m}{2} \equiv \tilde{p}$, then A can always make an offer x_1 that can induce an acceptance by E.

Similar to the baseline model, when $p_1 \leq \tilde{p}$, A does not face a commitment problem in bargaining, and therefore does not establish constraints.

However, when $p_1 > \tilde{p}$, A cannot make a period 1 offer that E will accept if $g = 0$. A needs to set $g > 0$ in order to prevent conflict from occurring in period 1.

In period 1, E will accept an offer only if the following condition is satisfied:

$$\begin{aligned} EU_E(reject) &\leq EU_E(accept) \\ 2\sigma p_1 &\leq 1 + V_E \end{aligned} \tag{30}$$

To find the equilibrium level of constraints, g^*, we first observe that E's continuation value is, once again, equal to his expected utility of rejecting the offer in period 2. V_E is therefore equal to $\sigma(p_m + g)$. Plugging V_E into the equation above allows us to solve for the equilibrium level of constraints:

$$g^* = 2p_1 - p_m - \frac{1}{\sigma} \tag{31}$$

As long as A sets $g = g^*$, she will be able to make an offer $x_1 = 1$ that will satisfy E in period 1. However, we show that A will not always be able to set g at a high enough level if $g^* > max(g)$.

Proof of Proposition 5.1. We established above that as long as A sets $g = g^*$, she will be able to make an offer, x_1, that E will accept and conflict will not occur in period 1. However, g is bounded above by $1 - (p_m + \mu)$ because it is drawn from the following distribution: $g \in [0, 1 - (p_m + \mu)]$. To see why g is bounded above by $1 - (p_m + \mu)$, refer to Figure 3 in the body of the paper. g shifts the entire distribution of p_2 upwards, and the largest value the upper bound of p_2 can take is 1. Therefore the largest possible value g can take is the distance between 1 and the upper bound of the original distribution of p_2, $p_m + \mu$.

A can set $g = g^*$ only when $g^* \leq 1 - (p_m + \mu)$.

$$\begin{aligned} g^* &\leq 1 - (p_m + \mu) \\ 2p_1 - p_m - \frac{1}{\sigma} &\leq 1 - (p_m + \mu) \\ p_1 &\leq \frac{1}{2} + \frac{1}{2\sigma} - \frac{\mu}{2} \equiv \bar{p} \end{aligned} \tag{32}$$

A can set $g = g^*$ only when $p_1 \leq \bar{p}$. When $p_1 > \bar{p}$, even if A were to set g to the highest possible level, it would not be high enough to prevent conflict in period 1. □

Proposition 5.2. Proposition 5.2 establishes the following equilibria: Unconstrained Rule, Constrained Rule, and Conflict. First, we note that the Unconstrained Rule and Constrained Rule equilibria follow an identical logic as the Unconstrained Rule and Constrained Rule equilibria that was established in the baseline model version of the game. The reader can therefore refer to the proof of Proposition 4.8 for these equilibria.

We now address the Conflict equilibrium. If the game reaches a second period of bargaining, then A can always make an offer that will satisfy E, since $p_2 \leq p_m + \mu$, which is strictly less than the total size of the pie. A's strict best response in period 2 is to offer $x_2 = \sigma p_2$ because doing so allows her to pocket the surplus saved from not fighting while offering the smallest possible amount that will induce an acceptance from E. E's best response is to accept an offer that is at least as good as his expected utility of fighting in the second period.

Moving to period 1, we have already established through Proposition 5.1 that A will not be able to set g high enough to induce an acceptance from E in period 1. In other words, conflict is inevitable in equilibrium if $p_1 > \bar{p}$. Since this is the case, any offer $x_1 \in [0, 1]$ is a best response, since no offer will be able to satisfy E in period 1. Therefore in the conflict equilibrium, A can offer any $x_1 \in [0, 1]$. E's best response is to accept x_1 only if $EU_E(accept) \geqslant EU_E(reject)$. Since this equation will never be satisfied in the conflict equilibrium, E will always reject the offer.

Moving back to the start of the game, since $\mu > \bar{\mu}$, then $g^* > 1 - (p_m + \mu)$. In other words, no level of institutionalization will be high enough to prevent conflict. Since this is the case, any level of institutionalization $g \in [0, 1 - (p_m + \mu)]$ is a best response, since no level of g is high enough to prevent conflict. A can therefore select any $g \in [0, 1 - (p_m + \mu)]$. $\square$

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Notes

1. Even conditioning on cases where the founding leader experienced a non-violent exit from power, only 58 percent of ruling parties outlive the leader. Furthermore, 43 percent of ruling parties that are coded as part of dominant-party regimes by Geddes et al. (2014) fail to survive a year past the departure of the founding leader.
2. In fact, as the model will show, commitment problems that arise due to dynamic power shifts can occur even with full information.
3. In Acemoglu and Robinson's (2006) model of democratization, elites cannot *voluntarily* give up power in order to prevent the masses from rebelling.
4. To borrow terminology from the international relations literature, access to the state turns elites into a 'rising power'.
5. As I argue in Section 2 of the article, intra-elite commitment problems arise due to shifts in power, rather than information problems that prevent elite coordination. Since this article does not focus on elite collective action problems, I treat the coalition of elites as a single player (E) in the model.
6. We assume that A does not value g inherently. She does not consume g; it only affects the extent to which the distribution of p_2 shifts. In other words, A only cares about the *results* of g, rather than the inherent level of g. This assumption reflects the idea that leaders do not have a preference ordering about the strategies they use to rule. Instead, I assume that they care only about maximizing rents and time in office, rather than the continuation of the regime after their death.
7. If p_1 is very small relative to p_2, $2\sigma p_1 - \sigma p_2$ can actually be a negative number. Because offers are restricted to be within $[0, 1]$ we must restrict x_1 to non-negative numbers.
8. Changing the functional form of g does not alter the results substantively. For instance, if g was inefficient, say some input $\hat{g}$ would only shift the distribution by $f(\hat{g})$, such that $f(\hat{g}) < \hat{g}$, A will not be more or less likely to establish constraints. See Appendix B for discussion.
9. Recall that g is bounded above by $1 - p_2$, therefore A can establish the equilibrium level of constraints only if $g^* \leq 1 - p_2$.
10. Recall that if a commitment problem occurs in period 1, then A will set $x_1 = 1$ and consume nothing in the first period.

11. Note that in the Acemoglu and Robinson (2006) model, elites are the analogous player as the autocrat (A) in our model, and the poor are the analogous player as the elite (E) in our model.
12. Unlike in the Acemoglu and Robinson (2006) model, where the probability that elites will be unseated jumps discontinuously from 0 to 1 if the poor initiate a revolution, p_t is a continuous parameter in our model.
13. We assume that μ is sufficiently small, such that $p_m - \mu > 0$ and $p_m - \mu < 1$.
14. A small sliver of Cameroon was controlled by the British, but the country was mostly under French colonial rule.
15. In fact, people throughout the country believed that forced labor would be reinstated if Houphouët-Boigny left office.
16. Jackson and Rosberg referred to the government of the Ivory Coast as the 'government of virtually one man' (Jackson and Rosberg, 1982: 145) .
17. And even so, Houphouët-Boigny's own ethnic group was often overrepresented in the cabinet.
18. Bédié was designated as the presidential successor only at the very end of Houphouët-Boigny's tenure, prior to his death.

References

Acemoglu D and Robinson JA (2001) A theory of political transitions. *American Economic Review*. 91(4): 938–963.

Acemoglu D and Robinson JA (2006) *Economic Origins of Dictatorship and Democracy*. New York: Cambridge University Press.

Albertus M and Menaldo V (2012) Dictators as founding fathers? The role of constitutions under autocracy." *Economics & Politics* 24(3): 279–206.

Blaydes L (2010) Elections and distributive politics in Mubarak's Egypt. In: *blaydes 2010 elections*. Cambridge University Press

Boix C and Svolik M (2013) The foundations of limited authoritarian government: Institutions, commitment, and power-sharing in dictatorships. *The Journal of Politics* 75(2): 300–316.

Brownlee J (2007) *Authoritarianism in an Age of Democratization*. New York: Cambridge University Press.

Cheibub JA, Gandhi J and Vreeland JR (2010) Democracy and dictatorship revisited. *Public Choice* 143(1–2): 67–101.

Cox G (2016) *Marketing Sovereign Promises: Monopoly Brokerage and the Growth of the English State*. New York: Cambridge University Press.

Debs A and Monteiro NP (2014) Known unknowns: Power shifts, uncertainty, and war. *International Organization* 68(1): 1–31.

DeLancey M (1989) *Cameroon: Dependence and Independence*. Boulder, CO: Westview Press.

Elkins Z, Ginsburg T and Melton J (2008) The Comparative Constitutions Project: A Cross-National Historical Dataset of Written Constitutions. University of Illinois at Urbana Champagne. Available at: http://people.bu.edu/jgerring/Conference/MeasuringDemocracy/documents/ElkinsGinsburgMelton2008.pdf (accessed 10 April 2019).

Fearon JD (1995) Rationalist explanations for war. *International Organization* 49(3): 379–414.

Gandhi J (2008) *Political Institutions Under Dictatorship*. New York: Cambridge University Press.

Gandhi J and Lust OE (2009) Elections under authoritarianism. *Annual review of political science*. 12: 403–422.
Gandhi J and Przeworski A (2007) "Authoritarian Institutions and the Survival of Autocrats." *Comparative Political Studies* 40(11): 1279–1301.
Geddes B (2009) How Autocrats Defend Themselves against Armed Rivals. Prepared for presentation at the American Political Science Association Annual Meeting, Toronto, 3–6 September 2009. Available at: https://pdfs.semanticscholar.org/9c63/fea96ba579bccf8f4898777c0d01fa16a29c.pdf (accessed 10 April 2019).
Geddes B, Wright J and Frantz E (2014) Autocratic breakdown and regime transitions: A new data set. *Perspectives on Politics* 12(2): 313–331.
Gehlbach S and Keefer P (2011) Investment without democracy: Ruling-party institutionalization and credible commitment in autocracies. *Journal of Comparative Economics* 39(2): 123–139.
Ginsburg T and Simpser A (eds) (2013) *Constitutions in Authoritarian Regimes*. New York: Cambridge University Press.
Goemans HE, Gleditsch KS and Chiozza G (2009) Introducing Archigos: A dataset of political leaders. *Journal of Peace Research* 46(2): 269–283.
Greene K (2007) *Why Dominant Parties Lose: Mexico's Democratization in Comparative Perspective*. Cambridge: Cambridge University Press.
Greene K (2010) The political economy of single-party dominance. *Comparative Political Studies* 43(7): 807–834.
Haber S, Maurer N and Razo A (2003) *The Politics of Property Tights: Political Instability, Credible Commitments, and Economic Growth in Mexico, 1876–1929*. Cambridge: Cambridge University Press.
Haggard S and Kaufman RK (1995) *The Political Economy of Democratic Transitions*. Princeton, NJ: Princeton University Press.
Hayek F von (1960) *The Constitution of Liberty*. Chicago, IL: University of Chicago Press.
Jackson RH, Jackson R Houghwout and Rosberg C Gustav (1982). Personal rule in Black Africa: prince, autocrat, prophet, tyrant. Univ of California Press.
Joseph R (1978) *Gaulist Africa: Cameroon under Ahidjo*. Enugu, Nigeria: Fourth Dimension Publishing.
Landes D (1998) *The Wealth and Poverty of Nations*. New York: W.W. Norton and Co.
La Porta R, Lopez-de Silanes F, Shleifer A, et al. (1998) Law and finance. *Journal of Political Economy* 106(6): 1113–1155.
Lucardi A (2017) Authoritarian Party Institutionalization. *Paper presented at the American Political Science Association Annual Meeting and Exhibition*, San Francisco, California, 30 August–4 September 2017.
Lust-Okar E (2006) Elections under authoritarianism: Preliminary lessons from Jordan. *Democratization* 13(3): 456–471.
Magaloni B (2008) Credible power sharing and the longevity of authoritarian rule. *Comparative Political Studies* 41(4–5): 715–741.
Malesky E and Schuler P (2010) Nodding or needling: Analyzing delegate responsiveness in an authoritarian parliament. *American Political Science Review* 104(3): 482–502.
Meng A (2019) Constraining Dictatorship: From Personalized Rule to Institutionalized Regimes. Book manuscript.
Meng A (Forthcoming). Ruling Parties in Authoritarian Regimes: Rethinking Institutional Strength. *The British Journal of Political Science*.
Myerson RB (2008) The autocrat's credibility problem and foundations of the constitutional state. *American Political Science Review* 102(1): 125–139.

North D and Weingast B (1989) Constitutions and commitment: The evolution of institutions governing public choice in seventeenth-century England. *The Journal of Economic History* 49(4): 803–832.

Powell R (2006) War as a commitment problem. *International organization*. 60(1): 169–203. Cambridge University Press

Powell JM and Thyne CL (2011) Global instances of coups from 1950 to 2010: A new dataset. *Journal of Peace Research* 48(2): 249–259.

Powell R (2013) Monopolizing violence and consolidating power. *The Quarterly Journal of Economics* 128(2): 807–859.

Putnam RD (1993) *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton, NJ: Princeton University Press.

Reuter OJ (2017) *The Origins of Dominant Parties: Building Authoritarian Institutions in Post-Soviet Russia*. Cambridge: Cambridge University Press.

Reuter OJ and Gandhi J (2011) Economic performance and elite defection from hegemonic parties. *British Journal of Political Science* 41(1): 83–110.

Slater D (2010) *Ordering Power: Contentious Politics and Authoritarian Leviathan in Southeast Asia*. New York: Cambridge University Press.

Smith B (2005) Life of the party: The origins of regime breakdown and persistence under single-party rule. *World Politics* 57(3): 421–451.

Stasavage D (2003) *Public Debt and the Birth of the Democratic State: France and Great Britain 1688–1789*. Cambridge: Cambridge University Press.

Svolik MW (2012) *The Politics of Authoritarian Rule*. New York: Cambridge University Press.

Truex R (2016) *Making Autocracy Work: Representation and Responsiveness in Modern China*. New York: Cambridge University Press.

Wright J (2008) Do authoritarian institutions constrain? How legislatures affect economic growth and investment. *American Journal of Political Science* 52(2): 322–343.

Zolberg AR (1969) *One-Party Government in the Ivory Coast*. 2nd revised edition. Princeton, NJ: Princeton University Press.