

# Opposition Threat and Legislative Process in Dictatorships\*

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## Abstract

Dictators often mitigate threats by allowing their opposition to participate in a legislature (e.g., Gandhi 2008). Although there are benefits to legislative inclusivity, dictators must manage the tradeoff between threat reduction and the protection of their own policy preferences. In this paper, I show that dictators manage the tradeoff between minimizing opposition threat and legislative policy loss by strategically designing the legislative process. Using a series of spatial models that demonstrate variation in dictatorial legislative process and attendant policy loss, I identify the dictator's optimal legislative design—a set of legislative procedures that simultaneously increases opposition participation and protects the dictator's policy preference. I argue that dictators are increasingly likely to create such a legislature as threat increases and show empirically that as the collective action capacity of the opposition increases, dictators are more likely to create legislative institutions that allow them to best mitigate the threat-policy tradeoff.

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# 1 Introduction

In order to quell opposition demands following the 2008 Kenyan presidential election (BBC 2008), President Mwai Kibaki invited the Opposition under Raila Odinga to participate in the Parliament of Kenya. Supporters of both leaders stopped their collective dissent soon after the announcement, agreeing that the new power-sharing agreement seemed promising (Gettleman 2008). In 2012, Opposition member and Deputy Prime Minister Musalia Mudavadi sponsored a bill to decentralize the national government administration system. Administration officers and ministers worried about its potential passage until President Kibaki vetoed the first version of the bill in 2012 (Hassan 2015). Why did President Kibaki permit his opposition to participate in the legislature only to veto an opposition bill aiming to decentralize the political system?

Dictators often face threats to their rule; they often respond by “buying off” the opposition with material or policy concessions (Conrad 2011, Tsai 2007, Wallace 2013) or by increasing inclusivity in the political process via opposition participation in the legislature (Boix and Svobik 2008, Gandhi 2008, Gandhi and Przeworski 2007, Svobik 2012). Legislative inclusivity—and the perks of office—can mitigate opposition dissent by appeasing moderate opposition members and isolating them from more radical opponents (Lust-Okar 2005) and by providing a closed-door setting for discussion whereby information about elite-level conflict is less likely to spread to the broader public (Gandhi 2008). But the establishment of a legislature is costly for dictators: establishing formal rules that allow the opposition to influence legislation may lead to policy loss for the leader. Relative to their non-legislative counterparts, dictators who allow opposition participation in the legislature limit their ability to use of public money for private gains (Boix 2003, Gandhi 2008, Gehlbach and Keefer 2011, Wright 2008), spending less on the military and offering better protections for workers’ rights (Gandhi 2008). How do dictators manage the tradeoff between opposition threat reduction via the creation of a legislature and the protection of their own policy preferences?

In this paper, I argue that dictators manage the tradeoff between minimizing opposition threat and legislative policy loss by strategically designing the legislative process. Using a se-

ries of spatial models that demonstrate variation in dictatorial legislative process and attendant policy loss, I identify the dictator’s optimal legislative design—a set of legislative procedures that simultaneously increases opposition participation and protects the dictator’s policy preference. The dictator’s optimal legislative design gives the opposition the power to propose new legislation—but permits the dictator to unilaterally manage a number of important policy areas and to exercise the right to executive veto. I argue that dictators are more likely to create such a legislature when they face an opposition threat. Relative to other legislative designs, I show empirically that dictators are more likely to institute the optimal design if opposition collective action capacity (as measured by urban concentration, the percentage of democracies in the world, and the number of parties participating in the legislature) is high.

This paper contributes to the scholarly understanding of the strategic use of institutions in dictatorships, showing that dictators respond to opposition threat by carefully selecting legislative procedures. I find empirical support for the hypothesis that opposition threat leads dictators to prefer particular legislative processes over others. In addition, this work provides a foundation for understanding the subtle relationship between opposition participation and policy outcomes in dictatorships. My spatial models counterintuitively show that “inclusive” legislative processes can be made to produce similar policy outcomes to those that look more dictatorial. For example, I show that the opposition’s right to propose a bill does not increase the group’s policy influence if paired with a dictatorial veto. As such, scholars, advocates, and policy makers should take care in assessing the extent to which legislative procedures offer the opposition real power.

## **2 Legislative Institutions in Dictatorships**

Dictators often face costly threats to their rule. Mass civilian uprisings can both directly unseat incumbent rulers (Boix 2003) and indirectly increase the likelihood of elite-level dissent (Casper and Tyson 2014). Military or political elites can plot coups to overthrow incumbent

rulers (Luttwak 1968, Powell and Thyne 2011). These types of collective dissent—even if ultimately unsuccessful—impose immediate costs on the dictator and can also encourage future dissent by providing widespread information about the current level of dissatisfaction in the regime (Casper and Tyson 2014).<sup>1</sup> Although governments sometimes respond to collective dissent with repression (e.g., Davenport 2007, Lohmann 1994, Shadmehr and Bernhardt 2011), repression can be costly (Wintrobe 2000) and ineffective if dictators need cooperation from the opposition (Gandhi 2008). As such, scholars also argue that dictators seek to “buy off” the opposition to quell unrest (e.g., Conrad 2011, Gandhi 2008, Gandhi and Przeworski 2006).

Gandhi (2008, 140) argues that dictators also use nominally democratic institutions to “neutralize threats to their rule and solicit cooperation.” In particular, dictators can limit the capacity of the opposition to organize through the establishment of a legislature (Gandhi 2008, Lust-Okar 2005, Svulik 2012, Woo and Conrad 2019).<sup>2</sup> Because dictators can allow the opposition to express demands in closed-door legislative discussions without causing public disturbance (Gandhi 2008, Gandhi and Przeworski 2007),<sup>3</sup> legislatures serve as forums where the dictator and the opposition can manage monitoring and commitment issues to ameliorate the need for collective dissent (Boix and Svulik 2013, Gehlbach and Keefer 2012, Svulik 2012). In addition, granting the opposition political office—and allowing them to reap the accompanying rewards—is a method by which to appease the moderates and isolate them from more radical opposition members (Lust-Okar 2005).

Although there is general agreement in the literature as to the benefits of establishing a dictatorial legislature, few scholars have investigated the costs of such institutionalization. There is suggestive evidence that the opposition benefits from legislative creation: relative to their

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<sup>1</sup>Ritter and Conrad (2016) define collective dissent as a coordinated citizen act to change status quo outside of state institution.

<sup>2</sup>The “opposition” is a heterogeneous group of individuals whose preferences differ from those of the dictator. Schuler and Malesky (2014, 684) states that “[a] true opposition...is a group whose sole purpose is attempting to control government.” The opposition “might include elite members of the active political opposition with a track record of anti-regime protest, or grassroots members of the real opposition, or even wavering members of the regime-party elite” (Noble 2018, 3).

<sup>3</sup>Svulik (2012) argues that coups are less likely to occur if elites can constantly monitor dictator’s compliance to formal rules.

non-legislative counterparts, dictators in countries with legislatures spend less money on the armed forces but more money on education, health, and social security and pass stronger laws protecting workers' rights (Gandhi 2008). Dictatorial legislatures are also positively correlated with economic growth and domestic investment; scholars have interpreted this correlation as evidence that legislatures constrain dictators' decision-making and prevent expropriation of private properties (Boix 2003, Gandhi 2008, Gehlbach and Keefer 2011, Wright 2008).

Just because the policy outcomes associated with dictatorial legislatures appear to benefit a broad swath of the population does not necessarily mean that dictators who institute legislatures face policy loss for doing so. The design of dictatorial institutions is vulnerable to strategic manipulation by the dictator (Pepinsky 2014). Negretto (2013) reports that constitutions in military regimes are often drafted via a process that prioritizes delegates and commissions appointed by military rulers. In Egypt, for example, Hosni Mubarak was able to modify the national constitution to prevent presidential nominations from non-regime parties (Stilt 2010). Dictators who face a threatening opposition and want to respond via the creation of a legislature can seek to similarly design the legislative process to maximize the benefits of opposition participation and minimize policy loss.

In the following section, I explore the various ways in which a dictator can arrange legislative procedures. Using spatial models, I examine the policy loss associated with various legislative procedures and identify the "optimal" institutional arrangement to mitigate the tradeoff between including the opposition and minimizing legislative policy loss.

### **3 Mitigating Policy Loss via Legislative Process**

The literature on legislative process often considers four procedures (sometimes in isolation and sometimes in combinations) that facilitate legislative power (e.g., Jenkins and Monroe 2016) and thus may provide dictatorial opposition parties with the ability to influence policy: majority vote, amendment power, and first proposal power, and second proposal power. In addition

to offering the opposition these carrots, dictators can also choose to institute procedures to counteract legislative challenges like maintaining exclusive proposal power or implementing an executive veto. In this section, I present various combinations of these procedures and use spatial models to determine the dictatorial policy loss associated with each legislative process.

In each of the models presented below, I construct a theoretical space in which dictators interact with the opposition. In my models, policy loss occurs when there is a difference between a final policy as produced by the legislature and the policy most preferred by the dictator. I set a bundle of baseline assumptions that are constant throughout each of models. Across models, what varies is legislative process: who has the power to make and amend proposals, who has the power to veto them, and in what order. In order to determine the dictators' policy loss associated with different legislative procedures, I present the assumptions of my model and the preferences of its actors in the first subsection below. Solving for Subgame Perfect Nash Equilibrium, I identify the strategy profile that maximizes utility for actors at a given status quo. Once I identify the actors' strategy profiles and equilibrium policy outcomes, I denote the dictator's policy losses by finding the difference between the equilibrium policy outcome and the ideal policy preference of the dictator.

### **3.1 Model: Actors and Preferences**

In my models, three actors interact with each other: a dictator (D), an opposition (O), and the median voter (M). The opposition is simply an actor with a different policy preference than the dictator. I focus on the strategy of the median voter instead of considering the voting decision of all legislators. The median voter in my models conforms to conventional assumptions used in spatial models (Black et al. 1958, Downs 1957, Hotelling 1929, Romer and Rosenthal 1978).<sup>4</sup>

The median has a policy preference that stands in the middle of policy preferences of a dictator

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<sup>4</sup>I assume that legislators can be ranked by how strongly they favor proposed bills. In a distribution of legislators ranging from those who least favor a given bill to those who most favor the bill, there is one legislator in the middle. I consider that legislator to be the median voter.

and the opposition (i.e.,  $|D - M| = |M - O|$ ) in a unidimensional policy space.<sup>5</sup> For simplicity, I assume that dictatorial legislatures in my models require a majority vote to pass legislation.<sup>6</sup> Figure 1 shows the ideal points (i.e., the most preferred policy positions) of the dictator (D), the median voter (M), and the opposition (O). Throughout, for easy explication, I assume that D and O are equally far from M on opposite sides.<sup>7</sup>

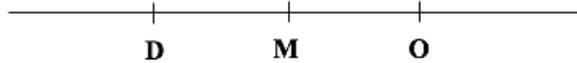


Figure 1: Actors' Ideal Policy Locations

In a complete information setting, a policy outcome ( $x$ ) can be chosen from a proposal by D ( $a$ ), a proposal by O ( $b$ ), or a status quo policy (i.e.,  $x \in \{a, b, sq\}$ ). The status quo, chosen by Nature from a uniform distribution, is the reversionary point for cases in which the actors do not pass a new law. Each actor receives maximum utility if a final policy outcome ( $x$ ) is equal to their ideal points ( $p$ ) and has a single peak utility function such that the payoff is  $-|p - x|$ . Formally, the utility functions can be written as  $U_D = -|d - x| + I_{pi=1}\beta$ ,  $U_O = -|o - x| + I_{pi=1}\beta$ , and  $U_M = -|m - x|$ , where  $I_{pi=1}$  is the indicator function that is equal to 1 when O uses legislative powers.  $\beta$  is a positive infinitesimal quantity that notates the external benefit of allowing the opposition to propose a bill.

<sup>5</sup>Dictators often retain the right to appoint or influence election outcomes to determine who can be legislators (Gandhi and Lust-Okar 2009, Little 2012, Rozenas 2016). As such, it is plausible that the median voter is more likely to share the policy preference of a leader. In my Supplemental Appendix, I show descriptively that, on average, the proportion of legislative seats held by the dictator's party has decreased considerably over time.

<sup>6</sup>Many constitutions explicitly require majority voting in the legislature. For example, consider Article 54(1) of the 1962 Constitution of Republic of Uganda: "any questions proposed for decision in the National Assembly shall be determined by a majority of the votes of the members present and voting." In North Korea, Article 40 of the 1955 Constitution of Democratic People's Republic of Korea states that, "Laws are adopted by a majority vote of the deputies present at the session."

<sup>7</sup>Relaxing this assumption is only consequential for substantive outcomes in unusual circumstances (Den Hartog and Monroe 2011).

### 3.2 Model Equilibria

In this subsection, I present various combinations of opposition procedures—amendment power, first proposal power, and second proposal power—and dictatorial countermeasures—exclusive proposal power and executive veto—to determine the dictatorial policy loss associated with each legislative process.

#### 3.2.1 Baseline Model: Opposition Right to Majority Vote

Figure 2 shows order of play of a basic model in which a dictator decides whether or not to propose a bill, and legislators vote on passage of the bill by majority vote. In this model, the opposition participates in the legislative process only by participating in a simple majority vote.

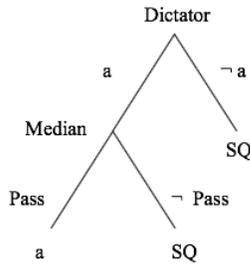


Figure 2: Opposition's role: Voting

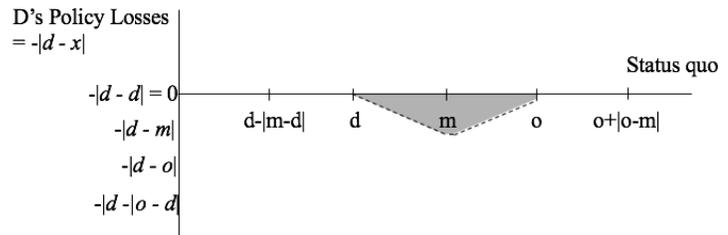


Figure 3: Dictator's Policy Loss

Figure 3 depicts the dictator's policy loss associated with the procedural arrangement presented in Figure 2. The y-axis shows D's policy loss, formally defined as the difference between dictator's most preferred policy  $d$  and final policy outcome  $x$  (i.e.,  $-|d-x|$ ). The x-axis represents a unidimensional space where status quos are uniformly distributed.<sup>8</sup> The shaded area represents the total policy loss incurred by D throughout possible status quos between  $d - 2|m - d|$  and  $o + 2|o - m|$ . When Nature chooses status quos left of  $d$  and right of  $o$ , D maximizes its utility by passing laws through a formal means of a legislature. D incurs policy loss of

<sup>8</sup>I assume that status quos are independently and identically distributed in the unidimensional space.

$\frac{1}{2}|o - d|(-|d - m|) - \alpha * |o - m|$  in total.  $\alpha$  denotes a positive infinitesimal change that D makes to satisfy M.<sup>9</sup> Figure 3 serves as a baseline to compare against policy loss from the legislative procedural arrangements discussed below.

In the following sections, I introduce three opposition powers—amendment power, first proposal power, and second proposal power—to the model, along with a dictatorial veto to protect against unwanted policy change.<sup>10</sup> I introduce these powers in conjunction with a veto for two reasons. First, executive vetoes are common and effective; empirically, dictators often reserve a veto when they create legislative process. Second, although the results presented below are similar without a veto,<sup>11</sup> dictatorial policy loss is lower in all of the following models if the dictator reserves the right to veto opposition legislation.

### 3.2.2 Opposition Right to Amendment Power

Figure 4 shows order of action in a legislative setting where the opposition is offered the right to amend legislation—and the dictator additionally institutes an executive veto. Figure 5 depicts the associated policy loss. In equilibrium, the dictator will propose at  $m$  throughout the policy space—except for status quos between  $d - |m - d|$  and  $m$ , where the dictator keeps the status quo deciding not to offer a proposal at all. When D proposes  $m$ , O has the right to amend the initial proposal. While an amended proposal will be rejected by the median voter, the opposition still gets a chance to acquire  $\beta$ . Compared to the baseline arrangement where dictators only suffer policy loss between  $d$  and  $o$ , here, dictators incur policy loss throughout the entire unidimensional space except when the status quo is already set at  $d$ . In short, relative to the baseline model, dictators incur greater policy loss if they institute procedures for the opposition to amend dictatorial proposals.

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<sup>9</sup>Formal proofs of Subgame Perfect Nash Equilibria of all models are provided in the Supplemental Appendix.

<sup>10</sup>I do not show a veto in the baseline model because it does not affect the outcomes for any status quo.

<sup>11</sup>These results are reported in my Supplemental Appendix.

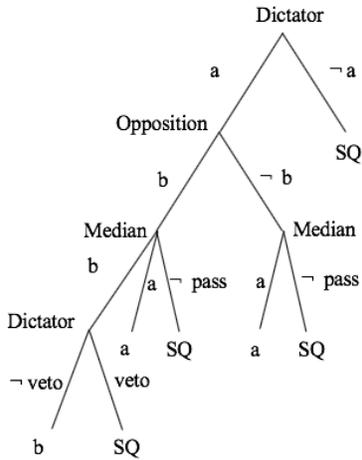


Figure 4: Opposition's role: Amendment

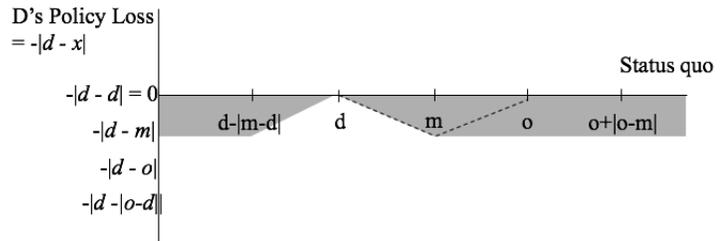


Figure 5: Dictator's Policy Loss

### 3.2.3 Opposition Right to First Proposal Power

The dictator incurs even greater policy loss if the opposition is offered a procedure to propose its own bills in the legislature. Figure 6 presents an example of one such a procedural arrangement, where the opposition has the right of first proposal power, but the dictator retains the right to veto final legislation. In equilibrium, the opposition has the right to make proposals throughout the entire policy space.

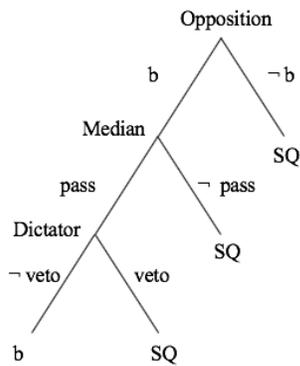


Figure 6: Opposition's role: First Proposal

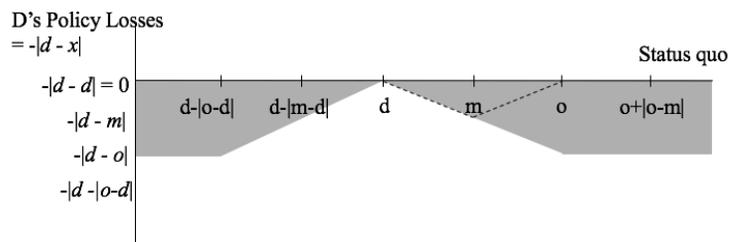


Figure 7: Dictator's Policy Loss

Figure 7 shows the policy loss associated with an arrangement that allows the opposition to

be a sole proposer. In this arrangement, the opposition proposes a bill throughout the policy space—except for status quos between  $d$  and  $o$ , where the opposition keeps the status quo. The first proposal power gives the opposition even greater power to translate his or her policy preference into a policy outcome than any other legislative procedure. With the amendment power, for example, the policy outcome is  $x = m$  if  $sq = d - |d - o|$ . The opposition with the first proposal power can propose and pass  $x = o$ , which is further from the dictator's ideal point than  $x = m$ . Compared to the baseline arrangement where dictators only suffer policy loss between  $d$  and  $o$ , here, dictators incur policy loss throughout the entire policy space.

### **3.2.4 Opposition Right to Second Proposal Power**

In some legislative regimes, dictators institute rules that specify particular (and often limited) conditions under which the opposition can exercise its right to proposal power. For example, dictators may select “critical” policy issues as exceptions, reserving first proposal power for the dictator for bills related to those policy areas. In such cases, the opposition is often allowed to propose as a second proposer. Being the second proposer in the model means that the opposition is allowed to propose under two conditions: 1) when  $D$  does not propose anything, and 2) when  $D$  fails to satisfy the median voter to pass a new bill. I model such a procedural arrangement in Figure 8 and show the attendant policy loss in Figure 9.

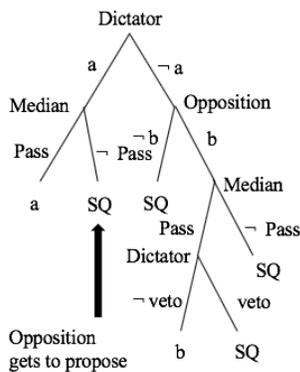


Figure 8: Opposition’s role:  
Second Proposal

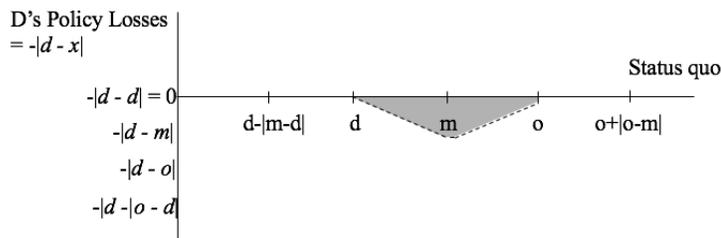


Figure 9: Dictator’s Policy Loss

Here, D perfectly retrieves the policy outcomes of the baseline procedural arrangement. Since this is complete information game, O is assumed to know that policy outcomes will not change from the status quo under the procedural arrangement. O has an incentive to propose only because of  $\beta$ .<sup>12</sup> The comparison between the baseline in Figure 2 with the procedural arrangement depicted in Figure 8 shows that allocating second proposal power to the opposition produces similar policy outcomes as those produced via a process where dictators monopolize the proposal power completely.

### 3.2.5 Implications of the Modeling Exercise: An “Optimal” Legislative Arrangement

In sum, this modeling exercise shows that there is variance in the extent to which legislative arrangements allow dictators to manage the tradeoff between opposition inclusion and legislative policy loss. More specifically, I show that if dictators employ the procedural arrangement depicted in Figure 8—offering the opposition the right to second proposal power and reserving the dictatorial right to veto—they can simultaneously increase opposition participation and protect the dictator’s policy preferences. Rather than derive hypotheses directly from my spatial models, I combine the main insight from this modeling exercise—that the procedural arrange-

<sup>12</sup>The same equilibria outcome ( $x = sq$ ) can be derived without the assumption about  $\beta$ . Without such an assumption, however, it is unclear why the status quo remains the same; such a result can happen either if O does not propose any bills or because D does not propose any bills when  $sq$  is between  $d$  and  $m$ .

ment depicted in Figure 8 is “optimal” from the perspective of the dictator’s tradeoff—with insights from previous literature to generate a hypothesis that dictators who face a threatening opposition with the capacity to collectively organize are more likely to institute the “optimal” procedural arrangement described above.

## 4 Opposition Threat & Legislative Process

A wealth of scholarship suggests that dictators create legislatures in response to threats from the opposition (e.g., Gandhi 2008). But dictators who face threatening opposition *outside* the legislature—because the opposition has the collective action capacity to mobilize—also likely anticipate opposition threats *inside* the legislature—because collective action capacity can also be wielded in the legislature. Although the majority of previous literature treats dictatorial legislatures as monolithic, dictators are strategic in their choice of legislative design to mitigate the tradeoff between the benefits of opposition cooptation and the costs of legislative policy loss. How does opposition threat influence the dictator’s choice of legislative process? When do dictators implement the “optimal” legislative arrangement described above?

The modeling exercise in the previous section suggests that some configurations of legislative process are more effective than others at helping the dictator balance between the perks of legislative cooptation and the downfalls of legislative policy loss. It is when the collective action capacity of the opposition is high that dictators face the starkest tradeoff between coopting the opposition into the legislature and needing to protect their own policy preferences. Dictators make decisions about legislative process and design based on two considerations: 1) the benefits of opposition participation in the legislature, and 2) the costs of (expected) policy loss in the legislature. I define opposition participation as the degree to which the opposition is able to use legislative means to formally present their demands. Policy loss is defined as the extent to which dictators experience a discrepancy between policy outcomes and their most preferred policy. Although each of these dimensions is conceptually continuous, for simplicity, I depict

them as binary at low and high values in Table 1. Each combination of these values suggests the creation of a particular type of dictatorial legislature that corresponds to my modeling exercises above. I discuss each of these types of legislative process—and the extent to which they mitigate the dictator’s tradeoff—below.

Table 1: Variation in Legislative Process

		<b>Policy Loss (Dictatorial Costs)</b>	
		<i>Low</i>	<i>High</i>
<b>Opposition Participation (Dictatorial Benefits)</b>	<i>Low</i>	Cheap Legislature (e.g., Majority Vote)	Null Legislature
	<i>High</i>	Optimal Legislature (e.g., Second Proposal)	Desperate Legislature (e.g., First Proposal; Amendment)

A *Cheap Legislature* is a legislative arrangement in which both the benefits of opposition participation and the costs of expected legislative policy loss are low. Relative to other arrangements, although the expected policy loss is low, this design is not particularly effective at reducing opposition threat; the degree to which the opposition can utilize institutional means to push its agenda is relatively low. The quintessential cheap dictatorial legislature is where only the regime party is permitted to participate; my baseline model where the opposition only has the right to engage in majority vote (Figures 2 and 3) is also a cheap legislature. If an organized opposition perceives that there is not a sufficient legislative means by which to formally express its demands, the opposition may seek extralegal means and take dissent to the street (e.g., Conrad 2011). Therefore, I do not expect dictators without legislatures to create cheap legislatures in response to opposition threat.<sup>13</sup>

A *Null Legislature* is a legislature in which opposition participation is low, but the expected policy cost from the opposition operating within the legislature is high. If the potential opposition is not participating in a legislature—or is procedurally limited in its ability to influence

<sup>13</sup>I expect the likelihood of establishing a cheap legislature to decrease *relative to the creation of other legislative arrangements* as the opposition threat increases. In my Supplemental Appendix, I present empirical tests of these expectations.

policy—there is no reason to expect systematic policy loss for the dictator. I refer to this type of legislature as a null legislature because there is no theoretical reason to believe that such a legislative procedure would be preferred by a dictator in response to opposition threat.

A *Desperate Legislature*, as depicted in Table 1, is an institutional arrangement in which both the opposition's legislative participation and the expected legislative policy loss for the dictator are high. My model in which the opposition has the right to amendment power (Figures 4 and 5) and my model in which the opposition has first proposal rights (Figure 6 and 7) are desperate legislatures. Model equilibria show that these arrangement produce high policy loss since the opposition will certainly make proposals that result in changing the status quo. Even if amendment and proposal procedures are paired with an exclusive executive veto, the dictator cannot effectively counteract legislative challenges to minimize policy loss. Although desperate legislatures adequately “buy off” the opposition, they provide dictators with little leverage to minimize legislative policy loss. As such, I do not expect dictators without legislatures to create desperate legislatures in response to opposition threat.<sup>14</sup>

The *Optimal Legislature* shown in Table 1 is a legislative arrangement where opposition participation opportunities are high but cost of policy loss expected to be incurred by the dictator is low. As noted above, this is an optimal arrangement because it offers the opposition the institutional means to make demands, but affords the dictator levers to reduce potential policy losses when necessary. The legislative procedure in Figure 8 exemplifies an optimal legislative procedure; the dictator can respond to the threat of an organized opposition through legislative cooptation by incorporating the opposition into the legislature and offering them second proposal power, but reserves the right to first proposal power and executive veto to minimize attendant policy loss. As the collective action capacity of the opposition increases, then dictators increasingly want to up their (perceived) participation but minimize the policy loss associated with their incorporation into the legislature.

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<sup>14</sup>I present an empirical test of this expectation in my Supplemental Appendix. A highly threatened dictator may prioritize street-level dissent at time,  $t$ , discounting legislative threat at time,  $t+1$ . Such a decision would be akin to democratization and so is outside the scope of my argument.

**Hypothesis 1.** *As opposition threat increases, dictators are more likely to establish an Optimal Legislature.*

## 5 Testing Hypotheses

I expect a positive relationship between opposition threat and the dictatorial establishment of an Optimal Legislature. I test my hypothesis using time-series cross-sectional (TSCS) data on 91 dictatorships from 1947 to 2006. The unit of observation is the country-year.<sup>15</sup> Because of the non-random nature of opposition threat, I preprocess my data using coarsened exact matching (CEM) in order to limit comparisons of opposition threat to dictatorships that are otherwise similar (Fong, Hazlett and Imai 2018, Hirano and Imbens 2004, Imai and Ratkovic 2014).

### 5.1 Operationalization

In order to generate measures of the legislative designs shown in Table 1, I use data from the Comparative Constitutions Project (CCP) (Elkins, Ginsburg and Melton 2016) on characteristics of de jure legislative procedures as written in national constitutions. I require measures of common legislative procedures—majority vote, the opposition’s right to amendment, the opposition’s right to first and second proposal power, and executive veto. Using CCP data, I operationalize the executive’s exclusive right to proposal procedure with a measure of “Executive Proposal,” which asks, “[d]oes the constitution provide for any of the following special legislative processes?” If the answer to the question is one of Organic laws, Budget bills, Tax bills, or Spending bills, I code 1 for “Executive Proposal,” and 0 otherwise. The codebook does not define “special legislative processes.” But countries such as Kenya, Rwanda, and Uganda are coded as having “special legislative processes” when only the executive can propose budget bills. Therefore, I assume that “special legislative process” proxies for the concept of the executive exclusive proposal for important policy areas. I operationalize the opposition’s right to

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<sup>15</sup>Following Cheibub, Gandhi and Vreeland (2010), observations enter my data if an executive leader in a given country-year has not taken power through legitimate and contested elections.

second proposal power with data on “Proposal Right,” which asks, “[w]ho does the constitution specify can initiate general legislation?” If the answer to the question is “Political Party,” “Member of First Chamber of the Legislature,” or “Member of Second Chamber of the Legislature,” I code 1 for “Proposal Right,” and 0 otherwise. I measure executive veto using the variable, “Executive Veto,” which asks, “[w]ho has the power to approve/reject legislation once it has been passed by the legislature? If the answer is “Head of State,” “Head of Government,” or “Both Head of State and Head of Government,” I code 1, and 0 otherwise.<sup>16</sup> I use the information outlined above to operationalize the legislative process types described in Table 1.<sup>17</sup> The final variable included in my model, OPTIMAL LEGISLATURE is coded 1 when Executive Proposal, Proposal Right, and Executive Veto are coded 1 and 0 otherwise.

My main independent variable is opposition threat, which I proxy with data on the level of the opposition’s collective action capacity. I operationalize COLLECTIVE ACTION CAPACITY using three measures: urban concentration, the percentage of world democracies, and whether there are multiple parties operating in a dictatorial legislature, all of which have been argued to positively influence the ability of the opposition to mobilize (Gandhi 2008, Opalo forthcoming, Wallace 2013).

Urban concentration is “the share of the urban population living in the capital city” (Wallace 2013, 633). High population densities reduce the cost of organizing collective action (Ades and Glaeser 1995). Urban residents are also often located physically closer to the government and various industries, enabling urban collective action to be more relevant and influential to the government (Bates 1981). I use data from Wallace (2013) to code HIGH URBAN CONCENTRATION as 1 if the share of the urban population living in the capital city is greater than the sample mean, and 0 otherwise.

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<sup>16</sup>CCP does not code three legislative procedures of interest: 1) a majority vote, 2) amendment procedure for legislation and 3) executive’s exclusive proposal procedure. To address this issue, I assume that all dictatorial legislatures pass legislation via majority vote, and I do not identify procedural arrangements with an amendment procedure. Coding country-years with desperate legislatures as having optimal legislatures will bias my empirical results in favor finding support for my hypothesis; coding them instead as cheap legislatures will bias them against finding support for my hypothesis.

<sup>17</sup>Additional information on my coding decisions and the coding of other legislative processes are included in my Supplemental Appendix.

Since the collapse of the Soviet Union, the United States and other democracies began imposing military and diplomatic pressure and conditionality for assistance programs on dictatorships (Bratton and Van de Walle 1997, Carothers 1999). Economic assistance became increasingly linked to democratization and human rights (Nelson and Eglinton 1992, Stokke 2013). Such external pressure “may help the opposition mount a challenge and create obstacles for regime trying to answer with repression. This pressure increases as more countries are democratic so that the remaining ones are isolated” Gandhi (2008, 96). I code WORLD DEMOCRACY 1 if the the percentage of world democracies in a given year is greater than the sample mean, and 0 otherwise. Finally, I operationalize opposition collective action capacity with whether there are multiple political parties in a legislature. Dictators invite non-regime political parties to participate in a political institution only when threats from them are high enough (Gandhi 2008) and worth monitoring their behavior (Magaloni 2006). I create a binary measure of MULTIPLE LEGISLATIVE PARTIES using data from Cheibub, Gandhi and Vreeland (2010). It is coded 1 in country-years in which the government has “a legislature with multiple parties” and 0 otherwise.

I include a number of control variables in my models to control for potential confounding variables. First, I control for economic conditions that can affect both the level of the opposition collective action capacity and a dictator’s incentives to reduce threats using institutions. High level of economic development can enhance the ability of dissenters to organize coups and uprisings (Svolik 2012). It can also enable dictators to use material means to decrease citizen grievance instead of investing in democratic institutions (Ross 2013). Thus, I expect that dictatorships with high GDP and GDP growth are less likely to manage opposition threat by strategically designing a legislative process. I include real GDP per capita and the annual percentage change of real GDP per capita from Penn World Table 7.0 (Heston, Summers and Aten 2011) in my models.

Military leaders are argued to care more about the military’s integrity than maintaining power in the office (Geddes 1999). As a result, military leaders rule short period of time and

quickly hand out the leadership to a democratically elected leader (Debs 2016, Geddes, Wright and Frantz 2014). This characteristics of military leaders are likely to correlated with both of the independent variable and dependent variable. Since their time in the government is short, military leaders are less likely to invest in establishing an institution (e.g., Gandhi (2008, 98-101)). Military officers often act as guardians of the nation and redistribute resources to the middle class (Albertus 2015, 108-9). Then military leaders may face a less likelihood of popular dissent than non-military leaders. I account for these relationships by including a variable coded 1 if a country-year is led by military leaders and 0 otherwise (Cheibub, Gandhi and Vreeland 2010).

Similarly, communist leaders, backed by Moscow or Beijing, are more likely to maintain a single-party regime and become resilient to coups and uprisings (Svolik 2012). I expect that communist leaders are less likely to manage opposition threats by establishing a more inclusive institution. Due to the expected communist leaders' resilience to coups and uprisings, dissenters may expect high costs of collective action against government and be less likely to participate in protests or revolution. Thus, I include binary variable coded 1 if a country-year is led by Communist Party leaders and 0 otherwise (Cheibub, Gandhi and Vreeland 2010).

Finally, I include a measure of how the domestic economy is open to international markets. Dictators often compete for scarce development resources and entrance into international markets (Bratton and Van de Walle 1997). To position their countries favorably in the market contest, dictators establish democratic institutions, such as elections (Levitsky and Way 2002). Thus, country-years with high trade openness may increase the likelihood of dictators' use of strategic institutional designs, instead of using repression. The concept of trade openness is also likely to correlated with my independent variable. Countries that have open economy are subject to exogenous shocks from global market conditions, and citizens are less likely develop grievance against the government due to bad economic performance (Duch and Stevenson 2008). I control for trade openness,  $[(Exports + Imports)/GDP]$ , using the replication data in (Hollyer, Rosendorff and Vreeland 2015).

## 5.2 Empirical Analyses

Opposition threat is not randomly assigned; dictators that face threats from the opposition may be systematically different in terms of legislative creation than dictators who do not face such threats. As such, it is difficult to test my hypotheses using conventional methods; to do so requires me to argue that the exact same dictator would have chosen different legislative institutions if s/he faced different levels of opposition threat (King and Zeng 2006). In order to determine the effect of threat on institutionalization, I need to compare country-years that created faced threat to country-years that did not, but are otherwise identical in every other respect. Few such comparisons exist, and so I approximate this ideal experiment using matching methods. Matching allows us to explicitly address the nonrandom assignment issues associated with threat incidence—to account for the potential confounding effects between the treatment and the outcome and reduce the probability that the results are model dependent (King and Zeng 2006). I use matching methods to calculate the latent probability of observing threat for each unit of observation, match units that have a similar probability, and separate units into either a treatment group (in my case, those units in which threat occurred) and a control group (in our case, those units in which there was no threat).

I have data on many of the observable characteristics that lead governments to experience threat, so use CEM as a preprocessing step before running logit models on my binary binary variable. In particular, I use Coarsened Exact Matching (CEM) to “coarsen” the variables used for matching so that they assume fewer values prior to the matching procedure. CEM then matches dictatorships on the recoded variables (Hill 2010).<sup>18</sup> In doing so, CEM reduces imbalance in the observable covariates by matching unobservable propensity for the high level of opposition threat.<sup>19</sup> The results are presented in Table 2.

The coefficients on variables that proxy COLLECTIVE ACTION CAPACITY are all significant

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<sup>18</sup>For more information on CEM methods, see Iacus and King (2012).

<sup>19</sup>The overall imbalance is given by the L1 statistic. L1 is scaled from 0 to 1, where 0 indicates perfect global balance and larger values represent the larger global imbalance. L1= 0.547 for HIGH URBAN CONCENTRATION (compared to the baseline balance of 0.690). L1= 0.528 for WORLD DEMOCRACY (compared to the baseline balance of 0.628). L1= 0.647 for MULTIPLE LEGISLATIVE PARTIES (compared to the baseline balance of 0.749).

Table 2: Relationship between Opposition Threat and Legislative Process

	<i>Dependent variable:</i>					
	OPTIMAL LEGISLATURE					
High Urban Concentration	0.588*** (0.142)	0.703*** (0.157)				
World Democracy			0.397*** (0.126)	0.524*** (0.146)		
Multiple Legislative Parties					0.434*** (0.130)	0.652*** (0.158)
GDPPC		-1.824*** (0.269)		-0.302** (0.133)		-0.577*** (0.207)
GDPPC Growth		0.004 (0.010)		-0.011 (0.012)		-0.016 (0.010)
Trade Openness		0.008*** (0.003)		-0.002 (0.002)		-0.003 (0.002)
Military Leader		1.514*** (0.189)		0.862*** (0.164)		0.906*** (0.175)
Communist		-18.026 (404.767)		-4.336*** (0.737)		-18.342 (378.220)
Constant	0.447*** (0.092)	0.326 (0.217)	0.591*** (0.093)	0.585*** (0.200)	0.579*** (0.085)	0.976*** (0.182)
Observations	1,403	1,403	1,299	1,299	1,403	1,403
Log Likelihood	-637.346	-448.037	-617.556	-536.791	-705.333	-570.491
Akaike Inf. Crit.	1,278.693	910.074	1,239.111	1,087.582	1,414.665	1,154.981

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

and in the predicted (positive) direction. Columns two and three show that dictators are more likely to institute an OPTIMAL LEGISLATURE in areas of high urban concentration. Columns four and five show that dictators are more likely to institute an OPTIMAL LEGISLATURE if 45% or more of the world's countries are democratic. Columns six and seven indicate that dictators are more likely to institute OPTIMAL LEGISLATURE when they allow multiple parties to participate in the dictatorial legislature. In order to show the substantive effect of my measures of opposition threat on the probability of a dictator instituting optimal legislative institutions, I estimate the predicted probability of OPTIMAL LEGISLATURE and calculate the difference in predicted probabilities across the range of my main independent variable. To do so, I first estimate the probability of OPTIMAL LEGISLATURE in a country-year in which urban concentration is low (proxying for low collective action capacity). Next, I estimate the probability of OPTIMAL LEGISLATURE in a country-year in which urban concentration is high (proxying for high collective action capacity).<sup>20</sup>

<sup>20</sup>I compute predicted probabilities for country-years that are non-military and non-communist. For other continuous variables, I set the value of the independent variable at the in-sample mean. Other variations of these choices are available in my Supplemental Appendix.

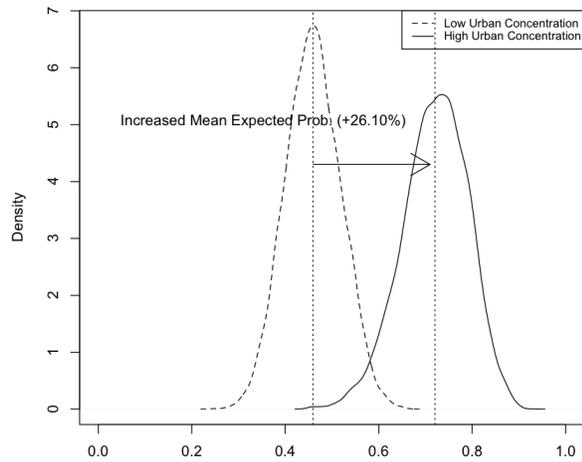


Figure 10: Change in the Expected Probability with Low (Dashed Line) and High Urban Concentrations (Continuous Line)

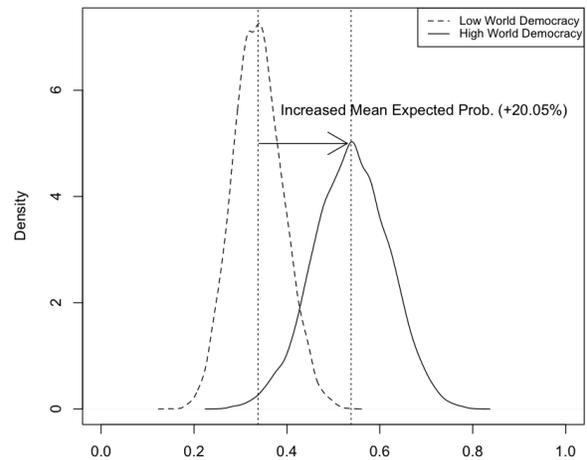


Figure 11: Change in the Expected Probability with Low (Dashed Line) and High level of World Democracy (Continuous Line)

Figure 10 shows the distribution of the expected probability of OPTIMAL LEGISLATURE with low and high urban concentration. The mean expected probability with a low urban concentration is 45.9% (34.5%, 57.34%), whereas the mean expected probability with a high urban concentration is 72.9% (45.9%, 72.0%). Dictatorships with high urban concentration are approximately 26.1% more likely to institute optimal legislative procedures as compared to dictatorships with low urban concentration. The results in Figure 11 are substantively similar; dictatorships are more likely to create an OPTIMAL LEGISLATURE when the level of world democracy is high. The mean expected probability with a low level of world democracy is 33.8% (23.6%, 44.8%). By comparison, the mean expected probability with a high level of world democracy is 53.8% (37.6%, 69.2%). Dictatorships with high levels of world democracy are approximately 20.1% more likely to institute an OPTIMAL LEGISLATURE.

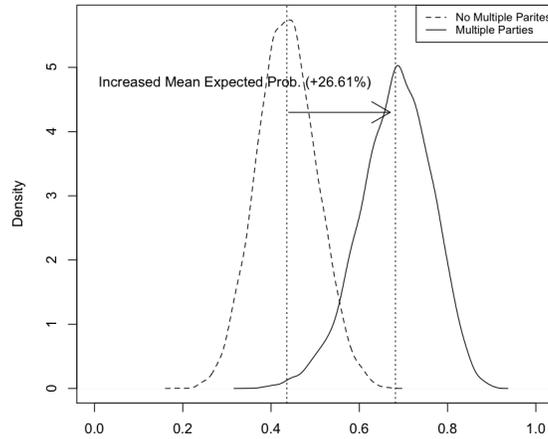


Figure 12: Change in the Expected Probability with No Party or a Single party (Dashed Line) and Multiple Parties in a Legislature (Continuous Line)

Now I turn to the substantive relationship between number of parties in a legislature and the dictator’s choice of legislative process. Figure 12 shows the distribution of the expected probability of instituting an OPTIMAL LEGISLATURE for country-years with and without multiple parties in a legislature. The mean expected probability with no party or a single party in a legislature is 43.6% (30.6%, 57.0%), while the mean expected probability with multiple parties in a legislature is 68.2% (50.8%, 82.7%). Dictatorships with multiple parties in a legislature are approximately 26.61% more likely to institute OPTIMAL LEGISLATURE than dictatorships with fewer than two parties in the legislature. As such, these results support my expectation that the predicted probability of a dictator creating an OPTIMAL LEGISLATURE is greater when oppositional collective action capacity is high compared to when it is low.

Although the use of matching is important in accounting for the non-random nature of my treatment variable, matching methods generally optimize on only one of two factors. CEM techniques maximize the sample size with a fixed level of imbalance decided ex-ante; other techniques, such as propensity score or Mahalanobis distance matching, minimize imbalance with a matched sample size that is fixed ex ante. Making decisions about these tradeoffs ex ante can be problematic for two reasons. First, although using a smaller sample size reduces model dependency, it can create “unacceptably” high variance (King, Lucas and Nielsen 2017). Sec-

ond, when a larger sample size can be used to generate create a smaller variance, coefficients will often suffer from high levels of imbalance, leading to concerns of model dependence and bias (King, Lucas and Nielsen 2017). To address these concerns, I use the “Matching Frontier,” an algorithm that minimizes country-year imbalance for each sample size in a dataset (King, Lucas and Nielsen 2017). The algorithm allows researchers to preprocess the data and visualize the effects of independent variables for each sample size. I preprocess the data by calculating Mahalanobis Discrepancy with covariates used as control variables in the previous logit regressions. Figure 13 presents the matching frontiers for each independent variable and shows their effects across sample size.

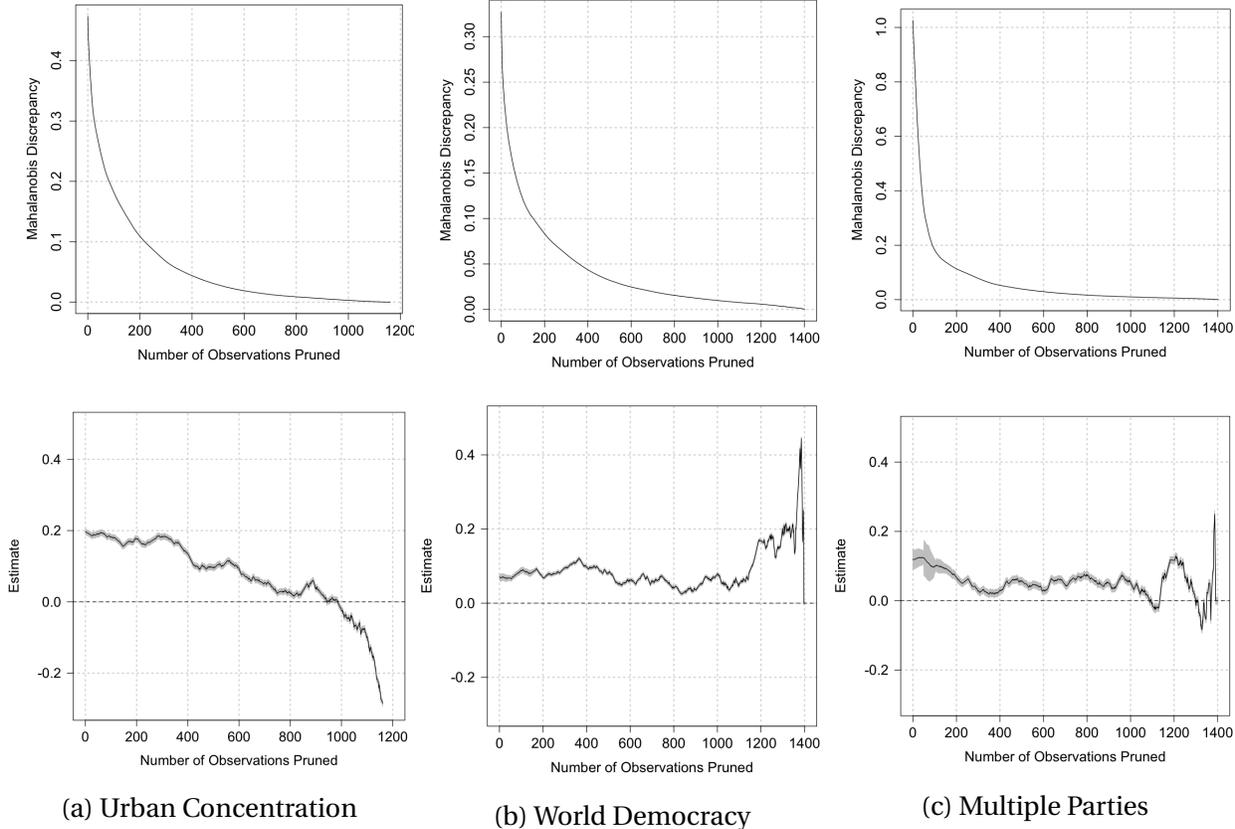


Figure 13: Matching Frontier Results

My results using CEM matching are robust to using the matching frontier. The top right panel of Figure 13 is the matching frontier for HIGH URBAN CONCENTRATION. The y-axis in-

dicates the imbalance proxied with the Mahalanobis Discrepancy.<sup>21</sup> Mahalanobis Discrepancy varies from 0 (which represents the lowest level of imbalance in the sample) to 1 (which represents the highest level of imbalance in the sample). The x-axis shows the number of observation pruned for matching. In the dataset for HIGH URBAN CONCENTRATION, I have 1299 country-year observations. The reduction in imbalance is steep until about 300 observations are pruned. In the datasets for WORLD DEMOCRACY and MULTIPLE LEGISLATIVE PARTIES, I have 1403 country-year observations. As depicted in the center and right top panels of Figure 13, the reduction in imbalance is steep until about 400 observations are pruned. After that point, the benefit of reducing sample size becomes smaller.

In support of my hypotheses, the bottom left panel of Figure 13 presents the estimated effect of HIGH URBAN CONCENTRATION on the creation of an OPTIMAL LEGISLATURE along the frontier. The coefficients on HIGH URBAN CONCENTRATION stay mostly positive until after more than 1000 country-years are pruned, when they become negative. The center and right bottom panels of Figure 13 display the estimated effect of WORLD DEMOCRACY and MULTIPLE LEGISLATIVE PARTIES, respectively. The coefficients of these two variables are positive. As the majority of samples are pruned, I observe an expected high level of variance in the values of coefficients (King, Lucas and Nielsen 2017). The coefficient estimates of all three variables are positive across the majority of the frontier. Overall, the results from the Matching Frontier are robust to changes in the sample size assumptions required by the Coarsened Exact Matching techniques, which provides additional support for the hypothesized relationship between opposition threat and legislative process.

## 6 Conclusion

This paper is the first to examine the relationship between the design of dictatorial legislatures and the opposition's collective action capacity. Dictators can strategically arrange legislative

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<sup>21</sup>Mahalanobis distance is a transformed version of Euclidean distance to remove the effect of the unit magnitude from results. Values of variables are transformed so that their variance is 1.

procedures in response to threatening opposition groups who have the capacity to engage in collective action. In a departure from previous work, I identify the legislature design that best enables dictators to make the legislative process more inclusive while simultaneously minimizing potential policy loss. Using spatial models, I show that the dictator's optimal legislative procedure—the procedure that best “buys” off the opposition and minimizes dictatorial policy loss—is one that gives the opposition the power to make a second proposal coupled with executive veto. I find empirical support for the hypothesis that dictators are more likely to establish optimal legislative procedures when threats from the opposition are high and show high urban concentration, high proportion of world democracy, and multi-partisan legislatures to be positively associated with the ‘ideal’ legislative arrangement.

This study aims to motivate further study on the procedural arrangements of a legislative process. By closely examining procedural arrangements, we can expand understanding about why legislatures sometimes seem to be window-dressing institution and other times result in effective policy change. Future research should continue to examine the relationship between legislative arrangements and policy outcomes. Furthermore, my research suggests that procedural arrangements are a reflection of dictators' preferences, which are often unobservable. The mere presence of a legislature cannot tell us whether dictators are willing to provide an inclusive legislative process or produce investment-friendly policies. Instead, careful examination of procedural arrangements serve as a tool to learn about dictator's preferences and inform the decision-making of advocates and policy-makers.

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