

Hybrid Regimes: Strategic Replacements and Popular Support

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Abstract

In recent decades, many non-democratic countries introduced local elections in response to public pressure. However, fear of competition encouraged some non-democratic federal governments to incorporate centralized appointments into the electoral cycle, allowing the government to intervene between elections and replace elected office-holders with the government's appointees. Using a game-theoretic model, I describe this previously unexamined procedure that combines appointments and elections. I show that this hybrid institution, currently employed in a number of authoritarian regimes, has counterintuitive implications for the voter's behavior and the government's conduct, including encouraging the population that might not approve of the governing party to preemptively endorse the party's local candidates.

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In recent decades, many non-democratic countries introduced elections. Some did so in response to pressure from their populations’ protests or in pursuit of international legitimacy (Levitsky and Way, 2002); some to co-opt elites (Magaloni, 2006; Boix and Svobik, 2013); others to estimate the level of social discontent (Miller, 2015; Gandhi, 2008; Martinez-Bravo et al., 2011), to promote popularity (Rozenas, 2016; Egorov and Sonin, 2014) or the strength of their regime (Simpser, 2013; Little, 2012; Little et al., 2015; Przeworski, 2009), or deflect regime’s responsibility for unfavorable policy outcomes (Beazer and Reuter, 2019).

Democratic and fair elections are praised for granting the population a *formal* right to hold policymakers accountable. Elections allow voters to punish politicians for performing poorly (Ferejohn, 1986; Manin, 1997), help improve the selection of higher-type politicians for office, or do both (Fearon, 1999; Ashworth et al., 2017; Martinez-Bravo et al., 2017). By contrast, non-democratic appointment systems, where the appointer is not directly accountable to the people, are criticized since central governments’ interventions effectively do away with officials’ accountability to voters, create perverse incentives for local office-holders (Malesky and Schuler, 2010), and can aggravate the competence-loyalty trade-off (Egorov and Sonin, 2011; Harasymiw, 1984).

However, the above dichotomy is not exhaustive: Among non-democratic governments’ routine tools are various “hybrid” procedures that combine elections and appointments. In this paper, I study the normative properties of a particular hybrid system that grants the central government the ability to (non-democratically) replace and appoint officials between (democratic) elections. I demonstrate that the anticipation of these between-election interventions under certain conditions encourages the population, which might otherwise oppose the government, to preemptively endorse the governing party’s candidates. This seemingly counterintuitive behavior lets the voter evade the suboptimal – from the voter’s perspective – government conduct that inevitably follows the selection of opposition officials.

Though the properties of the institution I study are new to the literature, between-election personnel replacements are standard in many non-democratic countries. For instance, per

federal legislation in Russia, the president has the authority to oust elected governors¹ and the discretion to choose temporary replacements. In Turkey, the Interior Ministry can intervene between elections to replace mayors with trustees (*kayyum*). In Venezuela, the government-controlled Municipal Council (*Concejo Municipal*) can replace district mayors and appoint interim office-holders to fill vacancies until the next election.

Between-election interventions are indeed frequent in non-democratic countries. In 2020, the Turkish Interior Ministry ousted 47 democratically elected mayors out of 1,351 to appoint temporary replacements (*trustees*).² In Russia, massive gubernatorial replacements occur every year: the central government forces the governors to resign just before the expiry of their mandate, and the president fills vacancies with temporary appointees. In 2017, for example, presidential appointees replaced 20 out of 84 governors³.

This article employs a simple theoretical framework to explore the implications of between-election interventions. The critical feature of the model is that the government trades off the local officials' competence and their partisanship. It intervenes in the electoral process not only to enhance the pool of competing candidates but also to increase the co-partisan officials' chances of winning the next election. I demonstrate that partisan motives encourage the government to retain the low-performing opposition official, as it permits the government to improve the co-partisan challenger's odds of winning the forthcoming election. Because of that, first, the government that highly values partisanship replaces more co-partisan incumbents than opposition incumbents. And second, the voter is forced to preemptively support the regime's co-partisan to avoid both the excessive replacements of high-performing opposition incumbents and potential retentions of low-performing opposition incumbents. Importantly, the model's results do not depend on information asymmetry between the government and the voter or present electoral unfairness, generating a new

¹In Russia, a *governor* is the highest official figure in a subject (territory, region, autonomous region, city) of the Russian Federation.

²The government accused three among them of links with terrorism. A total of 18 mayors were detained for various accusations.

³Most of the replaced governors were the regime's co-partisans.

explanation behind popular support in non-democratic countries.

The remainder of the paper proceeds as follows. I start with a baseline model where I assume that the information available to the voter and the government regarding local officials' competence is symmetric and the election is fair, but the government can intervene in the electoral process and install its candidate between (fair) elections. Next, I characterize the government's optimal strategy and specify conditions under which the government retains more opposition incumbents than co-partisan incumbents in equilibrium. After that, I describe comparative static results for each of the different environments considered (benchmark, co-partisan incumbent, opposition incumbent). Then, I study the impact of the proposed hybrid institution on popular support for the regime. I identify conditions under which the voter elects the governing party co-partisan in an open-seat election. Finally, I establish conditions under which the voter won't oppose the government's between-election interventions, thereby describing the potential mechanism by which the proposed hybrid systems might arise.

Literature Review

This paper connects with several literatures that study weakening of the formal institution of elections.

First, this paper proposes a new explanation of popular support for non-democratic regimes. The most common explanations of this phenomenon in the existing literature include: (i) Control of information: either low political awareness in the population ([Geddes and Zaller, 1989](#)) or strict government control over the media and educational system ([Kennedy, 2009](#)); (ii) Electoral unfairness: non-democratic governments can resort to violence to either deter opposition candidates ([Levitsky and Way, 2010](#)) or opposition voters. With this paper, I contribute to this literature by showing that even when information is symmetric and elections are fair, the voter may strategically elect governing party candidates

conditional on the government's (potential) forthcoming interventions.

Second, this paper contributes to the literature on the persistence of political systems. Extensive empirical scholarship highlights the remarkable robustness of non-democratic regimes (Bunce and Wolchik, 2010; Geddes et al., 2014; Gandhi and Przeworski, 2007; Gerschewski, 2013). This project explores the extent of institutions' impact on regimes' sustainability. It suggests that even a minor change in the existing electoral procedures, such as the introduction of between-elections governmental interventions, might bolster the regime's stability.

Third, in this paper, I show that voters benefit from the government's interventions under certain conditions as it improves electoral selection and, substantively, the voter favors lower formal electoral accountability. Among many (empirical and theoretical) papers that study electoral accountability, some acknowledge the potential welfare-improving effect of lower accountability: Ashworth and Bueno de Mesquita (2014), Snyder Jr and Strömberg (2010), Canes-Wrone et al. (2001), Ferraz and Finan (2011) demonstrate that higher voter awareness of officials' conduct creates perverse incentives to office-holders and might worsen electoral selection; Ashworth et al. (2017) and Landa and Le Bihan (2018) show that more demanding retention decisions can result in lower voter welfare; finally, Gordon et al. (2007) shows that although low barriers to enter an electoral race boosts the competition, they might worsen the electoral selection, as they distort voters' incentives to become politically informed and encourage the incumbent to conceal her type.

Finally, this paper contributes to the vast literature on dynamic information acquisition, in particular to the papers that explore learning by trial-and-error mechanism (Callander, 2011a,b; Strulovici, 2010; Majumdar and Mukand, 2004; Zhong, 2022) where the actors initiate a series of experiments in their search for the best product or the best policy. However, the trial-and-error mechanism obscures fundamental complexity of interaction between those who initiate the experiments and those who suffer consequences. In contrast, my model studies how the ability of the regime to non-democratically intervene and replace the elected local officials (which might be interpreted as the regime's initiation of the experiment) affects the

voter both prior to the interventions and in its aftermath.

Baseline Model

My baseline model is a two-period game between a central government (*it*) and a representative voter (*she*). There is also a pool of nonstrategic *potential* local officials competing for office (each *he*). Every potential official i has a privately known competence θ_i , where θ_i is an independent draw from a normal distribution, $\theta \sim \mathcal{N}(0, 1)$. Each official also has a publicly known political party affiliation; he belongs to one of many opposition parties or he is a regime's co-partisan. I assume that candidates with the same party affiliations do not run against each other in the election.

After local official i takes office, the voter and the government observe a signal s_i about his competence θ_i . Every informative signal s_i is a sum of the official's competence and some random noise ε_i : $s_i = \theta_i + \varepsilon_i$, where ε_i is an independent draw from a normal distribution $\varepsilon_i \sim \mathcal{N}(0, 1/q)$. I refer to informative s_i as the official's performance.

Variable $q \in \mathcal{R}^+$ is a measure of the signal's precision that defines how much the government and the voter learn about the local official's competence from his performance. This variable allows for broad interpretation. For instance, q can stand for the level of media transparency: The government's suppression of media freedom can lower awareness of the legislator's incompetence (Egorov et al., 2009; Besley and Prat, 2006). Alternatively, q can indicate the local official's decision-making independence. For example, if the central government imposes hard budget constraints and tightly controls resource allocation, it limits the information value of the officials' performance.

The model features three types of local officials: a current office-holder (the incumbent, I), a temporary official selected by the government (the appointee, A), and officials who compete with either incumbent or, if the incumbent is replaced, the appointee in the forthcoming election (the challengers, C). To account for the potential difference in information available

about the elected incumbent's and the selected appointee's types, I assume that the voter and the government learn about the appointee's performance with probability $p \in [0.5, 1]$.⁴ With complementary probability, they observe nothing.

The sequence of events is as follows. *Timing:*

1. Nature determines random shocks $(\varepsilon_I, \varepsilon_A)$ and the competence of every (potential) local official: the incumbent (θ_I) , the appointee (θ_A) , and all challengers $(\vec{\theta}_C)$.
2. The government and the voter observe $s_I = \theta_I + \varepsilon_I$. The government decides whether to retain the incumbent ($R = 1$) or replace him ($R = 0$).
3. If the government replaces the incumbent, with probability p the actors see an informative signal about the selected appointee's competence: $s_A = \theta_A + \varepsilon_A$. With complementary probability they observe nothing: $s_A = \emptyset$.
4. The voter decides whether to return the current local office-holder (the incumbent or the appointee, $C = 0$) to office or to elect a challenger ($C = 1$).
5. Nature determines η_E . The elected local official produces a policy: $s_E = \theta_E + \eta_E$, where $\theta_E \in \{\theta_I, \theta_A, \vec{\theta}_C\}$ is the competence of the elected official.

Payoffs:

The voter values only the policy outcome that the elected candidate implements. The voter's utility is

$$U_V(C) = \theta_E + \eta_E. \tag{1}$$

Note that the voter's utility does not depend on the partisanship of the elected official. This assumption guarantees that partisan motifs do not drive the voter's actions, and she acts with the sole goal of maximizing the competence of the elected official.⁵

⁴The assumption that $p \in [1/2, 1]$ implies that the voters (and the government) anticipate observing the appointee's performance, if he is appointed. All the results I introduce are robust to the assumption of $p \in [0, 1]$. The only proposition that is directly affected by this assumption is proposition 8 part 1. I specify how $p \in [0, 1]$ modifies this proposition in Appendix C.2.

⁵I relax this assumption in the Appendix and allow the voter to accrue some benefit when voting for a particular party. I demonstrate that as far as this benefit is sufficiently small, the results in this paper hold.

The government values the policy outcome: the local official’s inferior performance may lower citizen satisfaction, which can trigger popular discontent. The government also benefits if a *co-partisan* assumes local office: local co-partisans help the central government mobilize electoral support (Hale, 2003), deter potential challengers of the regime (Bueno de Mesquita et al., 2002), commit electoral fraud, if needed (Magaloni, 2010), and convince the public of the government’s competence (Guriev and Treisman, 2015). The government gains utility

$$U_G(R) = \theta_E + \eta_E + B \times \mathbf{1}\{\text{Co-partisan}\}, \quad (2)$$

where value B stands for a *partisanship benefit* and captures how much the government values the partisanship of the elected official over the population’s satisfaction. Note that the government does not get an interim payoff upon selecting an appointee, nor does it get an intrinsic benefit when it replaces the opposition incumbent. Between-elections governmental replacements frequently require a “snap” election to follow shortly after the appointment.⁶ Because of this, the appointee’s impact on the government’s utility should be negligible. Two lines of reasoning can rationalize the second assumption. First, the introduction of the lump-sum benefit in an implication of an opposition incumbent’s removal further encourages the leader to replace the opposition but does not eliminate the competence-partisanship trade-off that drives the model’s results. Second, the co-partisan benefit B can be interpreted as an opportunity cost of retaining the opposition. Unless the leader experiences animosity towards a particular party, the co-partisan benefit captures the utility the leader gets from not having an opposition candidate in office. Finally, co-partisan benefit B can measure the importance of a particular locale to the government and capture the utility the government receives when installs its candidate in a region.

In what follows, I refer to an official as *high-performing* (*low-performing*) if the signal about his competence exceeds (is lower than) the average competence of the candidates.

⁶For example, in Russia, a snap election must be held within one year of every replacement. Moreover, most replacements usually happen shortly *before* the end of the incumbent’s mandate and serve to expel low-performing incumbents.

Equilibria

I solve for perfect Bayesian equilibria. Every equilibrium consists of (i) a mapping from the incumbent's performance s_I to the government's decision to replace: $s_I \rightarrow \Delta\{0, 1\}$ that is sequentially rational given the voter's strategy, (ii) a mapping from the current office-holder's performance s_I or s_A to the voter's electoral choice: $\{s_I \text{ or } s_A\} \rightarrow \Delta\{0, 1\}$.

The Voter

The voter acts last and decides whom to elect. The baseline model is a game of incomplete symmetric information; thus, the government's actions do not affect the voter's information set. The voter makes her decision based on the signals (s_I and s_A) she observes.

If she learns the office-holder's performance, she returns him to office if and only if the official's expected competence exceeds the average in the candidates' pool. Because s_j is an unbiased signal of the official's competence, the voter knows that low-performing incumbent ($s < 0$) is likely to be of low competence ($\theta < 0$), and, thus, she follows a cut-off strategy and elects the challenger when the current office-holder is low-performing ($s_j < 0$, where $j \in \{I, A\}$) and elects the current official otherwise.

Remark 1. *In all equilibria, the voter returns high-performing office-holders ($s_j \geq 0$) to office and replaces low-performing office-holders ($s_j < 0$).*

Conditional on the voter's lack of information about the appointee's performance ($s_A = \emptyset$), the voter is indifferent between returning the appointee to office and ousting him. The voter's indifference gives rise to a plethora of sequential equilibria.⁷ In what follows I assume that when the voter learns nothing about the appointee, she selects a regime's co-partisan with probability γ and chooses an opposition candidate with probability $1 - \beta$. The parameter β allows for a variety of interpretations. For instance, β might describe the local popularity or

⁷I provide a formal equilibrium selection criteria in Appendix F where I characterize the unique payoff dominant equilibrium. Importantly, the voter's selection does not alter the results of the model (Fearon, 1999).

strength of the regime. Alternatively, it might capture the unfairness of the electoral process that benefits pro-regime candidates due to direct electoral fraud, partial media coverage of candidates, or voter oppression (Robie, 2014; Enikolopov et al., 2011; Wilson, 2006; Hartlyn et al., 2008; Rose and Mishler, 2009). When β is equal to one, a regime’s co-partisan always wins the election when the voter learns nothing about the competence of the current office-holder. Conversely, when β converges to zero, the voter always elects the opposition candidate when she learns nothing about the office-holder.

The Government

The government knows the incumbent’s performance s_I but not the incumbent’s competence θ_I . The government decides whether to replace the incumbent and, if so, selects either a co-partisan appointee or an opposition appointee. The government’s strategy depends on a signal about the incumbent’s type (s_I), a partisanship benefit (B), and the party affiliation of the incumbent.

Unbiased Government

To begin, let us assume that the government does not receive a partisanship benefit (B) or that this benefit is equal to zero. In what follows, I refer to such a government as *unbiased*. The unbiased government maximizes the expected winner’s competence. It replaces the incumbent when

$$\begin{aligned}
 & \underbrace{\overbrace{p}^{\text{Informative Signal}} \left(\overbrace{Pr[s_A \geq 0] \cdot E[\theta_A | s_A \geq 0]}^{\text{Voter Returns High-Performing Appointee}} + \overbrace{Pr[s_A < 0] \cdot E[\theta_C]}^{\text{Voter Replaces Low-Performing Appointee}} \right)}_{\text{Government Replaces Incumbent}} \\
 & > \underbrace{\overbrace{\mathbf{1}[s_I \geq 0] \cdot E[\theta_I | s_I]}^{\text{Voter Returns High-Performing Incumbent}} + \overbrace{\mathbf{1}[s_I < 0] \cdot E[\theta_C]}^{\text{Voter Replaces Low-Performing Incumbent}}}_{\text{Government Retains Incumbent}}, \tag{3}
 \end{aligned}$$

and retains the incumbent otherwise. The LHS of inequality (3) shows the government's expected utility following its decision to replace the incumbent with the appointee. It is important to note that the government cannot observe the appointee's performance prior to the appointing him and the government does not intervene in the electoral process once the replacement occurs. Therefore, even though the government observes the appointee's performance after the replacement, it must rely on the voter to oust the low-performing appointee. The RHS of inequality (3) shows the government's expected utility when it retains the incumbent.

Note that when the government does not benefit from the elected official's partisanship, its strategy weakly increases in the incumbent's performance (see Appendix A). If the unbiased government retains some incumbent, it must retain every incumbent who performs better, as the incumbent's competence increases the unbiased government's utility following the decision to retain and has no effect on its utility following the incumbent's replacement. Similarly, if the government replaces some incumbent, it replaces every official who performs worse. Therefore, in every potential equilibrium, the unbiased government follows an interior switching strategy around some *performance threshold*, retaining incumbents who perform better than this threshold and replacing those who perform worse than it with its appointee. In the following proposition, I characterize the unbiased government's equilibrium strategy (see Appendix A for proofs).

Proposition 1. *In equilibrium, the unbiased government retains the incumbent if and only if the incumbent's performance (s_I) exceeds a performance threshold*

$$s^* \equiv p \cdot \sqrt{\frac{1 + 1/q}{2\pi}} \tag{4}$$

One important feature of the performance threshold (s^*) deserves additional attention. Namely, the unbiased government never retains low-performing incumbents. Every replacement of the incumbent produces a high-performing second period office-holder: the voter

is expected to elect high-performing appointees and to oust low-performing ones, which, in expectation, begets an elected official of positive competence. Therefore, the government replaces incumbents with positive performance when it anticipates the potential electoral victor to have higher expected competence.

Biased Government. Co-partisan Incumbent

When the government benefits from the elected official's partisanship, it is no longer indifferent toward the partisanship of its appointee. Conditional on the decided replacement, the biased government always prefers a co-partisan appointee over any opposition appointee regardless of the incumbent's party affiliation (see Appendix B.1):

Remark 2. *The biased government always selects the co-partisan appointee.*

Knowing that the only sequentially rational decision will be to select a co-partisan appointee, the government replaces the co-partisan incumbent with the appointee when

$$\begin{aligned}
 & p \cdot (Pr[s_A \geq 0](E[\theta_A|s_A \geq 0] + B) + Pr[s_A < 0]E[\theta_C]) \\
 & \quad + \underbrace{(1-p)}_{\substack{\text{Not Inf.} \\ \text{Signal}}} \cdot (E[\theta_A] + \underbrace{\beta \cdot B}_{\substack{\text{Voter elects} \\ \text{regime's candidate}}}) \tag{5} \\
 & > \mathbf{1}[s_I \geq 0] \cdot (E[\theta_I|s_I] + B) + \mathbf{1}[s_I < 0] \cdot E[\theta_C],
 \end{aligned}$$

and retains him otherwise. Inequality (5) mirrors inequality (4), yet, when the government values the elected official's partisanship it gains utility B when the voter retains the regimes' co-partisan candidate (either the appointee or the incumbent). Note that the assumption that the candidates from the same party do not run against each other ensures that all the challengers who compete against the regime's co-partisan belong to the opposition, and the electoral defeat of a co-partisan candidate always implies the victory of the opposition candidate.

The utility of the biased government with the co-partisan local incumbent, conditional on

the incumbent's retention, increases in the incumbent's competence. Therefore, the biased government's strategy echoes the one of the unbiased government. The biased government retains the office-holder when his competence exceeds some performance threshold and replaces him otherwise (see Appendix B.2). However, the threshold itself differs from the one the unbiased government chooses, as the co-partisan benefit encourages the biased government to consider partisanship of the electoral victor. The next proposition characterizes the biased government's equilibrium strategy.

Proposition 2. *In all equilibria, the government retains the co-partisan incumbent if and only if performance of the latter exceeds a performance threshold*

$$s^L \equiv \max\{0, p \cdot \sqrt{\frac{1 + 1/q}{2\pi}} + B \cdot (1 + 1/q) \cdot (p/2 + (1 - p) \cdot \beta) - B \cdot (1 + 1/q)\}.$$

Similar to the case of the unbiased government, the government that values partisanship never retains low-performing incumbents (s^L is non-negative). When the government is sufficiently biased ($B > \hat{B} \equiv p \cdot \frac{1}{\sqrt{2\pi}} \cdot \frac{1}{\sqrt{1+1/q}} \cdot \frac{1}{1-p/2-(1-p)\cdot\beta}$) the benefit of having a co-partisan in office (B) might, other things being equal, override the low competence of the elected official. However, this trade-off is never feasible as the voter always ousts low-performing incumbents.

The biased government obtains a partisanship benefit (B) when a co-partisan official wins the election. Because of this, the performance threshold – which the biased government sets for the co-partisan incumbent – is lower than the one the unbiased government would set ($s^L < s^*$, see Figure 2b). Additionally, the biased government, on average, replaces fewer co-partisan incumbents than would the government that does not value partisanship (see Appendix B.3). The dashed line in Figure 1, shows how many incumbents the unbiased government replaces on average depending on the official's competence (θ_I). Other things being equal, the biased government always removes fewer office-holders; the solid line, which represents a share of the co-partisan incumbents replaced by the biased government, lies

below the dashed one.

Remark 3. *The biased government replaces fewer co-partisan incumbents than the unbiased government.*

Biased Government. Opposition Incumbent

Let us now assume that the incumbent belongs to the opposition. If the government replaces the incumbent, it appoints a co-partisan appointee (see Remark 2). The government replaces the opposition incumbent when

$$\begin{aligned}
 & p \cdot (Pr[s_A \geq 0] \cdot (E[\theta_A | s_A \geq 0] + B) + Pr[s_A < 0][\theta_C]) \\
 & + (1 - p) \cdot (E[\theta_A] + \underbrace{\beta \cdot B}_{\substack{\text{Voter elects} \\ \text{regime's candidate}}}) \\
 & > \mathbf{1}[s_I \geq 0] \cdot E[\theta_I | s_I] + \mathbf{1}[s_I < 0] \cdot (E[\theta_C] + \gamma \cdot B),
 \end{aligned} \tag{6}$$

where γ denotes the probability with which the voter selects the government's co-partisan from the pool of challengers competing against the low-performing opposition incumbent in the election. The government retains the opposition incumbent otherwise. Because the opposition incumbent's electoral defeat with some probability (γ) results in the victory of the regime's co-partisan, the government can exploit the forthcoming election to install its co-partisan. The voter always ousts the low-performing incumbent in the election, and the government might strategically retain the low-performing opposition incumbent in anticipation that his electoral defeat will result in its co-partisan's victory. Therefore, the sufficiently biased government's strategy depends on the opposition incumbent's performance non-monotonically (see Appendix B.4).

Lemma 1.

1. *When the voter is sufficiently likely to select the government's co-partisan out of pool of competing challengers*

$$\gamma > \gamma^* \equiv (1 - p) \cdot \beta + p/2,$$

and the partisanship benefit B that the government receives when a co-partisan wins the election is sufficiently high

$$B > B^* \equiv p \cdot \frac{1}{\sqrt{2\pi}} \cdot \frac{1}{\sqrt{1+1/q}} \cdot \frac{1}{\gamma - p/2 - (1-p) \cdot \beta},$$

the government retains low-performing ($s_I < 0$) opposition incumbents and its optimal strategy depends on the opposition incumbent's performance non-monotonically;

2. Otherwise, the government always replaces the low-performing incumbent, and its optimal strategy weakly increases in the opposition incumbent's performance.

In what follows, I impose γ to be equal to β to highlight that the local popularity of the regime might affect the probability that the voter selects the regime's co-partisan among other challengers.⁸ I characterize the government's equilibrium strategy in the following proposition.

Proposition 3.

1. If a partisanship benefit B is below the threshold B^* or local regime's strength β is below $1/2$, the government retains the opposition incumbent if and only if performance of the latter exceeds a performance threshold

$$s^O \equiv p \cdot \sqrt{\frac{1+1/q}{2\pi}} + B \cdot (1+1/q) \cdot (p/2 + (1-p) \cdot \beta); \quad (7)$$

2. Otherwise, the government retains the opposition incumbent both when he is low-performing and when his performance exceeds the threshold s^O .

If the incumbent belongs to the opposition, every replacement might result in the co-partisan's electoral victory, encouraging the government to replace high-performing incum-

⁸Note that γ does not affect the government's conduct following the replacement decision. Therefore, this assumption only affects the government's incentives to retain low-performing opposition incumbents but has no impact on the subgame that follows this decision. Therefore, γ does not affect the thresholds the government installs for the opposition incumbent.

bents. As a result, the biased government sets a higher performance threshold than the unbiased one for the high-performing opposition incumbent. In Figure 2b, the dotted line representing the performance threshold for the opposition incumbent lies above the dashed line showing the threshold that the unbiased government sets.

However, the government's inclination to replace the opposition does not necessarily translate into an ex-ante higher rate of the opposition incumbent's dismissal.

Remark 4. *When the government is sufficiently biased ($B > B^*$) and its local strength is high ($\beta > 1/2$), it replaces more co-partisan incumbents than opposition incumbents.*

When the government's bias exceeds the threshold B^* , and it is confident in its popularity or strength ($\beta > 1/2$), the government retains low-performing opposition incumbents in an attempt to utilize the forthcoming election and bolster the electoral chances of its co-partisan. At the same time, when $B > B^*$ it should be the case that $B > \hat{B}$, and, thus, such government only retains high-performing co-partisan incumbents and replaces low-performing co-partisan incumbents, aware that the low-performing ones never survive the forthcoming election. Figure 1 demonstrates that the share of replaced co-partisan incumbents of low competence ($\theta_I < 0$) exceeds the share of replaced opposition incumbents of low competence ($\theta_I < 0$). Because of that, the government, on average, replaces fewer opposition incumbents than co-partisan incumbents (see Appendix B.5).

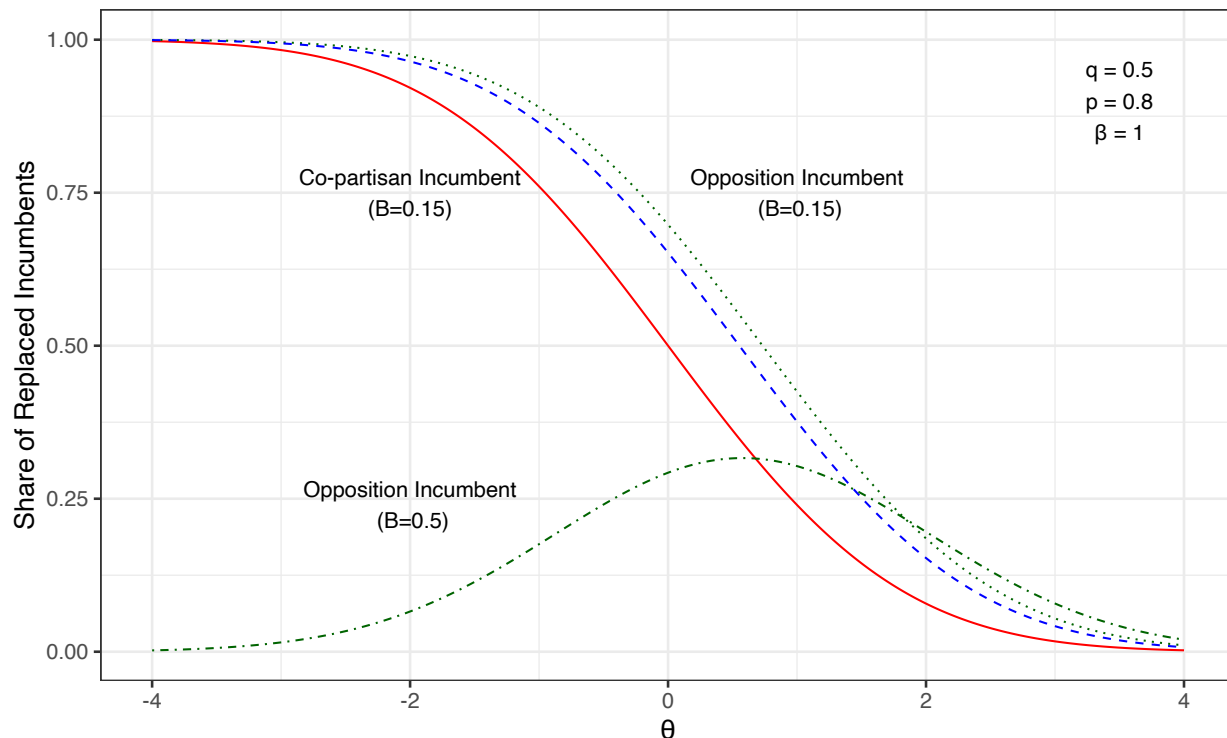


Figure 1: The dashed line shows the share of the incumbents whom the unbiased government replaces depending on the officials' true competence. The solid line shows the share of the co-partisan incumbents replaced by the biased government ($B = 0.5$, $\beta = 1$). Dash-dotted lines represent the share of the opposition incumbent replaced by the biased government ($B = 0.5$ and $B = 0.15$, $\beta = 1$).

Comparative Statics

In this section, I study how clarity of information (q), the government's bias (B), and the probability to learn about the appointee's performance (p) affect the government's equilibrium strategy. The following series of propositions summarizes the main findings, and the subsequent discussions provide general intuition behind the results.

Unbiased Government

Proposition 4. *When the government does not value partisanship of the local office-holder, the performance threshold it sets (s^*) decreases in clarity of information (q) and increases in probability to learn about the appointee's performance (p).*

Note that the quality of information q has a two-fold impact on the government's strategy. On one hand, higher clarity of available information (higher q) improves the government's precision when it draws inferences about the incumbent's competence from the incumbent's performance. In Figure 2a, the dashed line depicts the posterior distribution of the incumbent's competence after the government observes his performance. The solid line shows the posterior for the numerically identical but more *informative* signal. These two curves illustrate that the government's expected utility from retaining *high-performing* incumbents increases in clarity of information, other things being equal. On the other hand, as transparency grows (higher q), a chance that the voter will mistakenly return to office an appointee who, in fact, is of low competence ($\theta_A < 0$) decreases. Because of that, the government's utility from *replacing* the incumbent increases in the clarity of information.

Therefore, higher clarity of information simultaneously encourages the government to retain high-performing incumbents and encourages it to replace them. However, every replacement has a chance to result in the appointment of an incompetent official. Therefore, the former effect will always dominate the latter, and the government sets a performance threshold that decreases in the clarity of information, as illustrated by the dashed line in Figure 2b.

Similarly, the higher the probability to observe the appointee's performance, the more the government can rely on the voter to oust the low-performing candidates in the forthcoming election. Therefore, the higher the government utility from replacing the incumbent, which results in a higher performance threshold s^* that the government set.

Finally, when the information is complete, and the incumbent's competence is public knowledge (as q approaches infinity), the government knows that every high-performing

($s_I > 0$) incumbent is simultaneously highly competent ($\theta_I > 0$). Yet, under the assumption of complete information, the government continues to replace some high-performing incumbents. It sets a performance threshold s^* to be equal to $p \cdot \sqrt{1/2\pi}$ that exceeds zero; thus, the unbiased government replaces some evidently competent officials with appointees of lower expected competence. Although such stringency might seem counterintuitive at first, this unbiased government's strategy secures the high expected competence of the electoral victor. When the high-performing incumbent's competence is sufficiently low, there is a high probability that the appointee will outperform this incumbent, while the forthcoming election mitigates risks associated with such replacement.

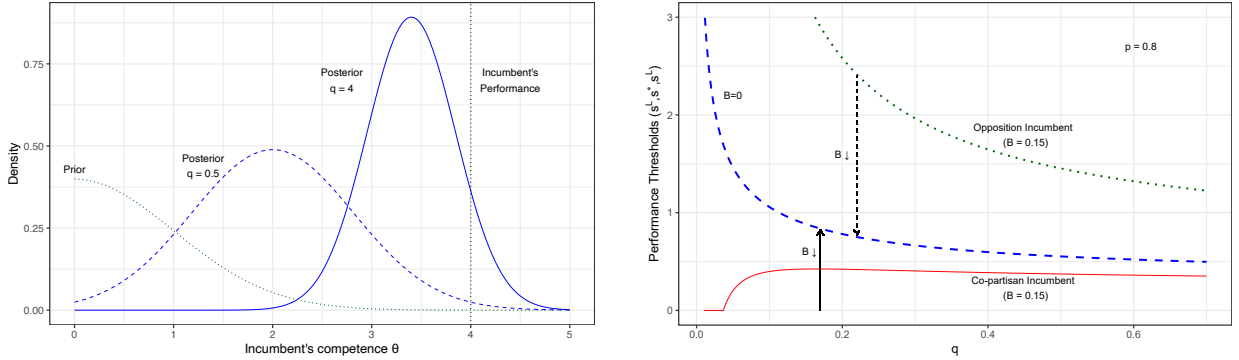
Biased Government. Co-partisan Incumbent

Proposition 5. *If the incumbent is the regime's co-partisan, the performance threshold that the biased government sets weakly decreases in the government's bias (B) and depends on the clarity of information non-monotonically.*

The effect of the government's bias on the performance threshold is straightforward. The higher the partisanship benefit, the less willing the government is to trade the partisanship of the incumbent for a chance of better policies. Therefore, higher bias encourages the government to retain more high-performing co-partisan incumbents regardless of potential policy benefits associated with the replacement. The solid arrow in Figure 2b indicates how the performance threshold (s^L) changes as the bias (B) decreases.

Higher clarity of information improves the government's inferences about the incumbent's type, encouraging the government to retain more co-partisans as it boosts the government's confidence in their competence. However, higher clarity of information also lowers the partisanship's relative value and, thus, increases the opportunity cost of retaining the co-partisan. When the quality of information is low, the latter effect overrides the former. As clarity of information improves, the former effect begins to prevail. In Figure 2b, the solid curve represents the performance threshold that the biased government sets for the incumbent.

Figure 2: Government's strategy



(a) Posterior distribution of the incumbent's competence following the signal $s_I = 4$. The dotted line represents the prior distribution of the incumbent's competence. The dotted vertical line indicates the signal s_I . The dashed curve illustrates the posterior when clarity of information is $q = 0.5$. The solid curve shows the posterior when clarity q is equal to 4.

(b) The dotted green line indicates the performance threshold that the unbiased government sets. The solid line shows the performance threshold that the biased government ($B = 0.15$, $\beta = 1$) sets for the co-partisan incumbent. The dotted line represents the threshold for the opposition incumbent. The solid arrow shows how the threshold for the co-partisan changes as B decreases. The dashed arrow demonstrates how the threshold for the opposition changes as the bias decreases.

Biased Government. Opposition Incumbent

Let us now assume that the incumbent is a member of an opposition party.

Proposition 6. *When the incumbent belongs to an opposition party*

1. *the performance threshold s^O that the government sets is decreasing in clarity of information and increasing in a co-partisanship benefit;*
2. *the biased government is more likely to strategically retain low-performing opposition incumbents as clarity of information (q) deteriorates.*

Similar to the situation with the co-partisan incumbent, higher clarity of information improves the government's inferences about the incumbent's true competence and encourages the government to reevaluate the partisanship-related component of its utility. However, when the incumbent belongs to an opposition party, both effects are co-aligned and motivate the government to retain the opposition incumbent. In Figure 2b, the dotted line

representing the opposition incumbent’s performance threshold decreases in clarity of information (q). At the same time, the higher the government’s bias, the more likely it is to replace a high-performing opposition incumbent, and the performance threshold increases in a partisanship benefit. In Figure 2b, the dotted arrow demonstrates how the threshold shifts if the bias declines.

The second part of Proposition 6 studies the impact of transparency on the government’s decision to retain the low-performing incumbent. When the incumbent belongs to the opposition, the government’s ability to draw better inferences about his type is redundant – the low-performing incumbent will not win the election. Nevertheless, the higher the clarity of information, the lower the chance that, after the government replaces the incumbent, the voter will return to office a high-performing ($s_A > 0$) but low-competent ($\theta_A < 0$) appointee. Accordingly, higher transparency encourages the government to avoid strategic retention – the partisanship benefit’s threshold (B^*) increases in information clarity.

Replacement Institution and Popular Support

Popular support for the governing party can sometimes transpire even in non-democratic countries (Rose et al., 2011). Existing scholarship suggests that public support for non-democracies is either a result of preference – when the public supports regimes that represent its values (Mishler and Rose, 2002) – or a result of coercion – when the population fears the regime or lacks information and choice (Geddes and Zaller, 1989; Kennedy, 2009; Levitsky and Way, 2010). However, as I demonstrate in this section, the population that disapproves of the regime might, nevertheless, strategically endorse the governing party candidates despite not being directly coerced. The mechanism I propose builds on the voter’s expectation of the forthcoming government’s interventions. In particular, I demonstrate that the voter ex-ante endorses the regime’s co-partisans to avoid excessive replacements of high-performing incumbents and excessive retentions of low-performing incumbents that are imminent if she selects a member of the opposition.

Let us consider a larger game where the voter selects either a regime’s co-partisan or an opposition candidate in an open seat election before the baseline model’s timing. Once the voter makes her choice, the selected candidate becomes an incumbent, and the baseline model timing continues. Thus, the voter’s decision results in one of two subgames: the one with an opposition incumbent and the one with a governing party incumbent. Both subgames are studied above.

To begin, let us note that the government’s replacements – unlike a lack thereof – supplement the candidates’ pool with new, potentially highly qualified officials. Therefore, other things being equal, the voter should prefer excessive replacements to insufficient replacements (see Appendix C.4). In Figure 3a, the dashed curve representing the voter’s expected utility with excessive replacements lies above the dashed line that shows utility with insufficient replacements. However, the preference for excessive replacements over insufficient ones does not imply the voter will favor opposition candidates over the regime’s co-partisans in the open seat election. The next proposition specifies conditions under which the opposite will hold.

Proposition 7.

1. *There exists a unique threshold p^* such that when the probability of the voter’s learning of the appointee’s performance is less than this threshold, the voter ex-ante favors the regime’s co-partisan over the opposition candidate.*
2. *There exists a unique threshold B^* such that when the government’s bias B exceeds this threshold, the voter ex-ante favors the governing party incumbents.*
3. *There exists unique thresholds $p^{**} < p^*$ and $B^{**} \in (\hat{B}, B^*)$ such that the voter prefers the regime’s co-partisan over the opposition when $p > p^{**}$ and $B > B^{**}$.*
4. *The voter favors the opposition incumbent over the regime’s co-partisan otherwise.*

Two factors divert the voter from supporting the opposition candidate in the open seat

election: low probability of the voter’s learning of the appointee’s performance (p) and high regime bias (B).

The following represents the impact of the voter’s learning on the performance threshold the government sets for the incumbents⁹

$$\frac{\partial s^O}{\partial p} = \frac{\partial s^L}{\partial p} = \sqrt{\frac{1 + 1/q}{2\pi}} + B \cdot (1/2 - \beta) \cdot (1 + 1/q) \quad (8)$$

Suppose the voter is likely to elect the regime’s co-partisan when she learns nothing about the incumbent ($\beta > 1/2$). In this case, the government’s bias mitigates the learning probability impact on the government’s strategy: the lower the probability that the voter returns the regime’s co-partisan to office, the less likely the government to replace the incumbent. In contrast, if the voter is unlikely to elect the regime’s co-partisan ($\beta < 1/2$), the bias aggravates the impact of the voter’s learning. Therefore, when $\beta > 1/2$, the lower the probability of voter’s learning, the closer the government’s strategy with the co-partisan is to the voter’s first best (s^*) and, thus, the higher is the voter’s utility with the regime’s co-partisan as an incumbent, and the further is the government’s strategy with the opposition incumbent to the voter’s first best (s^*) and, thus, the lower the voter’s utility with the opposition incumbent; the opposite is true when $\beta < 1/2$.

In the former case, the voter preference for the governing party candidate over the opposition candidate strengthens as p decreases. In Figure 3b, the dashed curve that indicates the voter’s expected utility with the governing party incumbent and $p = 1/2$ lies above the dotted curve that indicates the voter’s utility with the opposition incumbent and $p = 1/2$ for all B . When $\beta > 1/2$, the voter’s utility with the opposition incumbent always exceeds the voter’s utility with the governing party incumbent. To see that, assume $\beta = 1/2$. The government’s bias does not affect the impact of the voter’s learning and because the voter prefers excessive replacements to the lack thereof (see Appendix C), the voter prefers the

⁹When $B > \hat{B}$, the probability of the voter’s learning does not affect the threshold the government sets for the co-partisan incumbent.

opposition candidate to the regime's co-partisan. The threshold set by the government decreases in β for all p . Therefore, when $\beta < 1/2$, the voter prefers the opposition to the regime's co-partisan in the open seat election.

As I have just demonstrated, when the government's local popularity or strength is sufficiently low ($\beta < 1/2$), the voter will always prefer the opposition to the regime's co-partisan. Only when the government's local strength is high enough might the voter have incentives to ex-ante support the regime's candidate in the open seat election. The first reason to encourage this support is a low probability to learn the appointee's performance. The second reason is high government bias.

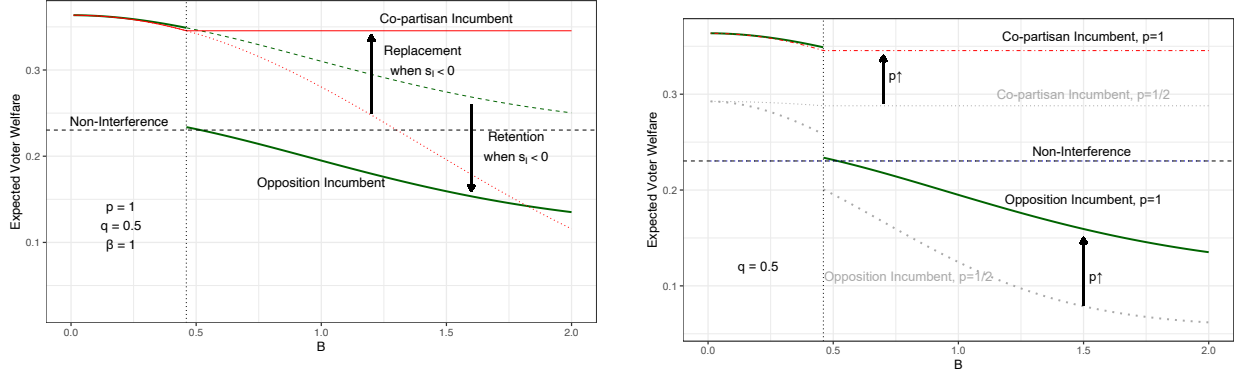
When $\beta > 1/2$, first, higher co-partisanship bias encourages the government to retain low-performing opposition incumbents. The disadvantage produced by an inferior pool of competitors immediately overrides the benefits of excessive replacements associated with the selection of opposition candidates in open seat elections. Second, higher co-partisanship bias encourages the government to constantly raise the performance threshold it sets for the opposition candidate. At the same time, the forthcoming election introduces a limit on the government's strategy concerning the co-partisan incumbent, constraining its ability to retain low-performing co-partisans. Thus, when the co-partisanship benefit is sufficiently high, the forthcoming elections will eliminate the under-replacement-related disadvantage while not affecting the over-replacement-related one, encouraging the voter to support the regime's co-partisan in the open seat election.

To summarize, when the voter is unlikely to learn the appointee's performance or the government's bias is high, the voter's utility with the governing party incumbent strictly exceeds one with the opposition incumbent. This result implies that even if the voter were to receive an exogenous utility gain from selecting the opposition (for instance, the voter might value not only competence but the partisanship of the selected candidate), when this utility is sufficiently small, the government's bias is large, and the information acquisition is unlikely, the voter would have preferred to disregard this benefit and select the regime's

co-partisan instead. (See Appendix E for further discussion.)

In the baseline model, the local officials have no agency and cannot choose whether to participate in the election. However, knowing the government's optimal strategy, it is possible to contemplate what might happen to the composition of the competitors if they were to expect the government's interventions. For instance, one can imagine a candidate entry mechanism similar to the one that [Gordon et al. \(2007\)](#) employ, where the candidates first choose whether to participate in the election, which conveys information about their type to the voter. Interestingly, because a sufficiently biased government retains a low-performing opposition incumbent when the government is sufficiently biased, the low-competent opposition has higher incentives to enter the race than the low-competent regime's co-partisans, whom the government always replaces. Therefore, when the government is sufficiently biased, the pool of competing opposition candidates is less competent than a pool of the competing regime's co-partisans. This should further encourage the voter to support the regime's co-partisans in the open-seat election because the voter should expect the competence of the opposition to be lower than that of the regime's co-partisans.

Figure 3: Incumbent’s partisanship and voter welfare



(a) The solid curve represents expected voter welfare with the opposition incumbent and the government that strategically retains low-performing opposition incumbents. The dashed curve indicates expected voter welfare when the government retains low-performing incumbents. The dash-dotted curve shows expected voter welfare with the governing party incumbent. The dotted curve indicates expected voter welfare when the voter cannot affect the incumbent’s electoral perspectives and the government retains low-performing co-partisan incumbents. The dashed line represents expected voter utility in the case of non-interference. The vertical dotted line demonstrates the partisanship benefit threshold above which the biased government retains low-performing opposition incumbents.

(b) The dotted curves indicate the expected voter’s utility when the probability of the voter’s learning of the appointee’s performance $p = 1/2$. The solid curve shows the voter’s utility with the opposition incumbent. The dash-dotted curve demonstrates the voter’s utility with the governing party incumbent.

Impact of the Replacement Institution on the Voter

Every regime must constantly balance the interests of the people and those of the elites: Although the latter may help the regime to “obtain principality,” revolutionary threats by the former can quickly undermine the state’s authority (Machiavelli, 2008; Bueno de Mesquita and Smith, 2010). Within the current model, a partisanship benefit (B) exogenously captures the relative weight of the voter’s satisfaction and partisan interests in the government’s objective function, balancing the government’s conduct: the higher the value of B , the less the population’s satisfaction concerns the regime.

However, so far, the model provides little insight into the robustness of the hybrid systems to the potential backlash from the population. If the voter were to assume that the government’s interventions will inevitably have a detrimental impact on her, why would she not actively oppose those interventions? One possible explanation is that it might be costly to protest against the regime. But in this section I will demonstrate that even when there is no cost associated with forbidding the government’s interventions in the electoral process, the voter does not necessarily rebel against them. I will specify conditions under which the voter, from the *ex-ante* perspective, prefers the government’s interventions to the lack thereof.

Note that I am referring to *ex-ante* (before the voter learns the incumbent’s performance but after she votes in the open seat elections) utility benefits associated with the government’s interventions. From the *ex-post* perspective, the biased government’s actions are always suboptimal for the voter: While the government values partisanship, it is tempted to improve a co-partisan candidate’s chances. As a result, upon seeing the incumbent’s performance, the voter will favor the response opposite to the one the government adopts. However, the hybrid system’s *ex-ante* impact on the voter is less apparent.

For instance, when the incumbent is the regime’s co-partisan, the voter always prefers the government’s interventions to a lack thereof, regardless of the government’s bias.¹⁰ In Figure 3a, the solid curve representing the *ex-ante* voter’s expected utility with the governing party incumbent and the government’s interventions lies above the dashed horizontal line that shows the expected utility subject to non-interference. Intuitively, when the incumbent is the regime’s co-partisan, the government’s interventions are always beneficial when the voter is likely to learn the appointee’s performance as the forthcoming election and the value of the official’s performance restrain the government from actions that can harm the voter.

In Figure 3a, we can also note that regardless of the incumbent’s partisanship, the voter’s

¹⁰This result is a direct implication of the assumption that $p \in [1/2, 1]$. When p ranges from 0 to 1, for every β there exists a unique threshold such that the voter prefers the regime’s interventions when p exceeds this threshold and prefers a lack thereof otherwise. For characterization of this threshold see Appendix C.2.

utility always decreases in the government's bias.

Remark 5. *The voter's utility weakly decreases in the government's bias (B).*

Even the voter does not suffer any direct disutility associated with higher government's bias; higher government's bias indirectly lowers the expected voter's utility, as the voter anticipates a more biased government to employ a suboptimal (from the perspective of the voter) replacement strategy.¹¹

If the incumbent belongs to the opposition and the government is unbiased, the voter always prefers the government's retention to a lack thereof. However, the higher the government's bias, the more likely the government is to, first, excessively replace high-performing officials and, second, strategically retain low-performing incumbents. In Figure 3a, the solid line that demonstrates the voter's utility with the opposition incumbent and the government's interventions decreases in the government's bias; the downward arrow indicates the impact of the strategic retentions on the voter's utility. When the incumbent belongs to the opposition and the government's bias is sufficiently high, the voter ex-ante prefers non-interference to the government's interventions (Appendix C.3).

Proposition 8.

1. *If the incumbent is the regime's co-partisan, the voter (ex-ante) always prefers the biased governmental intervention to non-interference.*
2. *If the incumbent belongs to the opposition, the voter prefers the biased governmental interventions to non-interference if the government's bias is sufficiently low ($B < B'(\beta, p)$) and favors non-interference otherwise.*¹²

¹¹To see the consequences of direct voter's disutility associated with the government's selection of co-partisan candidates, please see Appendix E.

¹²The threshold $B'(\beta, p)$ is characterized in Appendix C.

Conclusion

This paper examines a novel to the literature but frequently employed institution that combines elections and federal appointments. I show that in the presence of this hybrid procedure, high government bias toward co-partisan local officials forces voter support of governing party candidates in the open seat election, even when the election is fair and the information available to the government and the voter is symmetric. This finding speaks to a broader question of local robustness for non-democratic regimes. It suggests that voters who might otherwise oppose the regime can unwillingly contribute to its sustainability as they pursue the selection of high-type local officials in office.

I analyze two channels by which the voters' support for non-democratic regimes arises. The first one emphasizes the heterogeneity in how the forthcoming elections affect the government's optimal actions depending on the incumbent's partisanship. The government's bias encourages it to *excessively replace* opposition incumbents and *excessively retain* co-partisan incumbents even though this results in worse-performing local officials in office. I demonstrate that when the incumbent is the regime's co-partisan, the forthcoming election constrains the biased government for the voter's benefit, forbidding it to retain low-performing candidates. However, the forthcoming elections cannot prevent excessive replacements of opposition as the election comes after the replacement occurs. The second channel concerns the strategic use of the forthcoming election by the central government: A sufficiently biased government retains low-performing opposition incumbents to ensure the co-partisan challenger's victory. Combining these two effects forces voters to elect the governing party's incumbents in the open seat election.

Additionally, the government's interventions are detrimental for the voter only when multiple factors are combined. Namely: (i) the government is sufficiently biased, (ii) the incumbent belongs to the opposition, and (iii) the probability of the voter's learning about the appointee's competence is sufficiently low. Therefore, if given the chance, a rational representative voter is unlikely to protest against introduction of the hybrid institution that

combines elections and appointments.

I show that the clarity of information non-monotonically affects the government's decision to replace co-partisan incumbents, as information clarity switches the opportunity cost of partisanship to the biased government, encouraging it to value candidates' competence differently. Finally, I also demonstrate that the biased government will replace fewer opposition incumbents than co-partisans in equilibrium, which seems counterintuitive but results from the government's intention to install co-partisans in office. To pursue this, the government must retain opposition incumbents destined to lose, to fortify the co-partisan's electoral chances.

References

- Ashworth, Scott and Ethan Bueno de Mesquita (2014). Is voter competence good for voters?: Information, rationality, and democratic performance. *American Political Science Review* 108(3), 565–587.
- Ashworth, Scott , Ethan Bueno de Mesquita, and Amanda Friedenberg (2017). Accountability and information in elections. *American Economic Journal: Microeconomics* 9(2), 95–138.
- Beazer, Quintin H and Ora John Reuter (2019). Who is to blame? political centralization and electoral punishment under authoritarianism. *The journal of politics* 81(2), 648–662.
- Besley, Timothy and Andrea Prat (2006). Handcuffs for the grabbing hand? the role of the media in political accountability. *American Economic Review* 96(3), 720–736.
- Boix, Carles and Milan W Svobik (2013). The foundations of limited authoritarian government: Institutions, commitment, and power-sharing in dictatorships. *The Journal of Politics* 75(2), 300–316.

- Bueno de Mesquita, Bruce and Alastair Smith (2010). Leader survival, revolutions, and the nature of government finance. *American journal of political science* 54(4), 936–950.
- Bueno de Mesquita, Bruce Bueno , James D Morrow, Randolph M Siverson, and Alastair Smith (2002). Political institutions, policy choice and the survival of leaders. *British Journal of Political Science* 32(4), 559–590.
- Bunce, Valerie J and Sharon L Wolchik (2010). Defeating dictators: Electoral change and stability in competitive authoritarian regimes. *World Pol.* 62, 43.
- Callander, Steven (2011a). Searching and learning by trial and error. *American Economic Review* 101(6), 2277–2308.
- Callander, Steven (2011b). Searching for good policies. *American Political Science Review* 105(4), 643–662.
- Canes-Wrone, Brandice , Michael C Herron, and Kenneth W Shotts (2001). Leadership and pandering: A theory of executive policymaking. *American Journal of Political Science*, 532–550.
- Egorov, Georgy , Sergei Guriev, and Konstantin Sonin (2009). Why resource-poor dictators allow freer media: A theory and evidence from panel data. *American political science Review* 103(4), 645–668.
- Egorov, Georgy and Konstantin Sonin (2011). Dictators and their viziers: Endogenizing the loyalty–competence trade-off. *Journal of the European Economic Association* 9(5), 903–930.
- Egorov, Georgy and Konstantin Sonin (2014). Incumbency advantage in non-democracies. Technical report, National Bureau of Economic Research.
- Enikolopov, Ruben , Maria Petrova, and Ekaterina Zhuravskaya (2011). Media and political persuasion: Evidence from russia. *American Economic Review* 101(7), 3253–85.

- Fearon, James D (1999). Electoral accountability and the control of politicians: selecting good types versus sanctioning poor performance. *Democracy, accountability, and representation* 55, 61.
- Ferejohn, John (1986). Incumbent performance and electoral control. *Public choice* 50(1-3), 5–25.
- Ferraz, Claudio and Frederico Finan (2011). Electoral accountability and corruption: Evidence from the audits of local governments. *American Economic Review* 101(4), 1274–1311.
- Gandhi, Jennifer (2008). Political institutions under dictatorship.
- Gandhi, Jennifer and Adam Przeworski (2007). Authoritarian institutions and the survival of autocrats. *Comparative political studies* 40(11), 1279–1301.
- Geddes, Barbara , Joseph Wright, and Erica Frantz (2014). Autocratic breakdown and regime transitions: A new data set. *Perspectives on Politics*, 313–331.
- Geddes, Barbara and John Zaller (1989). Sources of popular support for authoritarian regimes. *American Journal of Political Science*, 319–347.
- Gerschewski, Johannes (2013). The three pillars of stability: legitimation, repression, and co-optation in autocratic regimes. *Democratization* 20(1), 13–38.
- Gordon, Sanford C , Gregory A Huber, and Dimitri Landa (2007). Challenger entry and voter learning. *American Political Science Review* 101(2), 303–320.
- Guriev, Sergei and Daniel Treisman (2015). How modern dictators survive: An informational theory of the new authoritarianism. Technical report, National Bureau of Economic Research.
- Hale, Henry E (2003). Explaining machine politics in russia’s regions: Economy, ethnicity, and legacy. *Post-Soviet Affairs* 19(3), 228–263.

- Harasymiw, Bohdan (1984). *Political elite recruitment in the Soviet Union*. Springer.
- Hartlyn, Jonathan , Jennifer McCoy, and Thomas M Mustillo (2008). Electoral governance matters: Explaining the quality of elections in contemporary latin america. *Comparative Political Studies* 41(1), 73–98.
- Kennedy, John James (2009). Maintaining popular support for the chinese communist party: The influence of education and the state-controlled media. *Political Studies* 57(3), 517–536.
- Landa, Dimitri and Patrick Le Bihan (2018). Does unbundling policy authority improve accountability? *The Journal of Politics* 80(3), 933–947.
- Levitsky, Steven and Lucan A Way (2002). Elections without democracy: The rise of competitive authoritarianism. *Journal of democracy* 13(2), 51–65.
- Levitsky, Steven and Lucan A Way (2010). *Competitive authoritarianism: Hybrid regimes after the Cold War*. Cambridge University Press.
- Little, Andrew T (2012). Elections, fraud, and election monitoring in the shadow of revolution. *Quarterly Journal of Political Science* 7(3), 249–283.
- Little, Andrew T , Joshua A Tucker, and Tom LaGatta (2015). Elections, protest, and alternation of power. *The Journal of Politics* 77(4), 1142–1156.
- Machiavelli, Niccolò (2008). *The prince*. Hackett Publishing.
- Magaloni, Beatriz (2006). *Voting for autocracy: Hegemonic party survival and its demise in Mexico*, Volume 296. Cambridge University Press Cambridge.
- Magaloni, Beatriz (2010). The game of electoral fraud and the ousting of authoritarian rule. *American journal of political science* 54(3), 751–765.

- Majumdar, Sumon and Sharun W Mukand (2004). Policy gambles. *American Economic Review* 94(4), 1207–1222.
- Malesky, Edmund and Paul Schuler (2010). Nodding or needling: Analyzing delegate responsiveness in an authoritarian parliament. *American political science review* 104(3), 482–502.
- Manin, Bernard (1997). *The principles of representative government*. Cambridge University Press.
- Martinez-Bravo, Monica , Gerard Padró I Miquel, Nancy Qian, and Yang Yao (2017). The rise and fall of local elections in china: Theory and empirical evidence on the autocrat’s trade-off. Technical report, National Bureau of Economic Research.
- Martinez-Bravo, Monica , Nancy Qian, Yang Yao, et al. (2011). Do local elections in non-democracies increase accountability? evidence from rural china. Technical report, National Bureau of Economic Research.
- Miller, Michael K (2015). Elections, information, and policy responsiveness in autocratic regimes. *Comparative Political Studies* 48(6), 691–727.
- Mishler, William and Richard Rose (2002). Learning and re-learning regime support: The dynamics of post-communist regimes. *European Journal of Political Research* 41(1), 5–36.
- Przeworski, Adam (2009). Constraints and choices: Electoral participation in historical perspective. *Comparative Political Studies* 42(1), 4–30.
- Robie, David (2014). Unfree and unfair?: Media intimidation in fiji’s 2014 elections. *The people have spoken: the 2014 elections in Fiji*, 83.
- Rose, Richard and William Mishler (2009). How do electors respond to an” unfair” election? the experience of russians. *Post-Soviet Affairs* 25(2), 118–136.

- Rose, Richard , William Mishler, and Neil Munro (2011). *Popular support for an undemocratic regime: The changing views of Russians*. Cambridge University Press.
- Rozenas, Arturas (2016). Office insecurity and electoral manipulation. *The Journal of Politics* 78(1), 232–248.
- Simpser, Alberto (2013). *Why governments and parties manipulate elections: theory, practice, and implications*. Cambridge University Press.
- Snyder Jr, James M and David Strömberg (2010). Press coverage and political accountability. *Journal of political Economy* 118(2), 355–408.
- Strulovici, Bruno (2010). Learning while voting: Determinants of collective experimentation. *Econometrica* 78(3), 933–971.
- Wilson, Kenneth (2006). Party-system development under putin. *Post-Soviet Affairs* 22(4), 314–348.
- Zhong, Weijie (2022). Optimal dynamic information acquisition. *Econometrica* 90(4), 1537–1582.