Hybrid Electoral Systems:

Strategic Replacements and Popular Support

Abstract

In recent decades, many non-democratic countries introduced local elections in the light of public pressure. However, fear of competition encouraged some non-democratic federal governments to incorporate centralized appointments into the electoral system. Using a game-theoretic model, I describe a 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 support the party's local candidates.

In recent decades, many non-democratic countries introduced elections. Some 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 Svolik, 2013); others to estimate the level of social discontent (Miller, 2015; Gandhi, 2008; Martinez-Bravo et al., 2011) or 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).

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 to office, or do both (Fearon, 1999; Ashworth et al., 2017; Martinez-Bravo et al., 2017). By contrast, non-democratic appointment systems are criticized since central governments' interventions effectively do away with officials' accountability to voters and 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 encourages the population, which might otherwise oppose the government, to preemptively endorse the governing party's candidates. This seemingly suboptimal behavior lets the voter evade excessive replacements of the high-performing opposition, which occurs as the government seeks to improve its co-partisan candidates' prospects in the election.

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, president has the authority to oust elected governors[1] and the

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[1]In Russia, a *governor* is the highest official figure in a subject (territory, region, autonomous region, city) of the Russian Federation. Each governor out of 85 heads the executive branch in the subject.

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. Between 2014 and 2019, the Turkish Interior Ministry ousted 99 mayors to appoint temporary replacements. 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, to take an example, 20 out of 85 governors had resigned, most of them shortly before the end of their mandates,[2] and presidential appointees replaced them.

This article employs a simple theoretical framework to study the implications of between-elections interventions. The critical feature of the model is that the government trades off the local officials' competence and their partisanship and intervenes both to enhance the pool of competing candidates and increase the co-partisan officials' chances of winning the election. I demonstrate that the partisanship motives encourage the government to retain the low-performing opposition, improving the co-partisan challenger's odds to win the forthcoming election. As a result, counterintuitively, the government's bias toward co-partisans incentivizes it to replaces more co-partisan incumbents than 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 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, the election is fair, and the replacements are costless. Next, I study the implications of the government's bias and information clarity on voter

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[2]Most of the replaced governors were the regime's co-partisans.

welfare and the government's conduct. Finally, I demonstrate that electoral unfairness and high replacement costs worsen the voter's utility and aggravate the voter's incentives to elect the regime's co-partisan and show that model's results are robust to asymmetric information.

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. In 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 (potential) forthcoming government's 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 the between-elections governmental interventions, might bolster the regime's stability.

Third, in this paper, I show that the voter benefits 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 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's awareness of the 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 entry 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, although a vast literature studies the implications of constitutional differences, existing work mostly juxtaposes the elected officials to the appointed ones. Klein et al. (1997) and Besley and Coate (2003), for example, demonstrate that elected regulators and commissioners tend to be more pro-consumer than appointed ones. Bohn and Inman (1996) explore heterogeneity in behavior of the elected and appointed judges in the state court and show that the former's harshness tends to correlate with their constituents' political ideology strongly. Hanssen (1999) shows that judicial independence results in lower predictability of the judicial decision making and, as a result, more litigation in state courts. In contrast, in this paper, I examine an institution that combines electoral and appointment systems elements and study its impact on voter welfare.

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 the opposition parties or the

governing party. I denote the overall number of political parties as N s.t. $N \geq 2$. I assume that candidates from the same party do not run against each other in the election.

After local official j takes office, the voter and the government observe a signal s_j about his competence θ_j. Every informative signal s_j is a sum of the official's competence and some random noise ε_j: $s_j = \theta_j + \varepsilon_j$, where ε_j is an independent draw from a normal distribution $\varepsilon_j \sim \mathcal{N}(0, 1/q)$. I refer to informative s_j 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 the official to compete with either incumbent or, if the incumbent is replaced, the appointee in the forthcoming election (the challenger, C).[3] To account for the potential difference in information available about the elected incumbent's type and that of the selected appointee's, 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 the random shocks (ε_I, ε_A, ε_C) and the competence of every (potential) local official: the incumbent (θ_I), the appointee (θ_A), and the challenger (θ_C).

2. The government and the voter observe $s_I = \theta_I + \varepsilon_I$. The government decides whether

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[3]Nature randomly selects the challenger from the pool of available candidates.
[4]For tractability, I assume $p \in [0.5, 1]$. See Appendix C for $p \in [0, 1]$.

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: $s_A = \varnothing$.

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 ϵ_E. The elected local official produces a policy: $s_E = \theta_E + \epsilon_E$, where $\theta_E \in \{\theta_C, \theta_I, \theta_A\}$ is the competence of the elected official.

Payoffs:

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

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

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), to commit electoral fraud, if needed (Magaloni, 2010) and convince the public of the government's competence (Guriev and Treisman, 2015). The government gets utility

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

where value B stands for a *partisanship benefit* and captures how much the government values partisanship of the elected official over the population satisfaction.[5]

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[5]Note that I assume that the government does not get an interim payoff upon selecting an appointee. Between-elections governmental replacements frequently require the "snap" election to follow shortly after appointment. For instance, in Russia, the snap election should be held within a year of every replacement. Because of this, the appointee's impact on the government's welfare is negligible. In addition to that, the

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.

Equilibria

I solve for perfect Bayesian equilibria. Every equilibrium consist of (i) a mapping from the incumbent's performance s_I to the government's decision to replace: $s_I \to \Delta\{0,1\}$ 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: $\{s_I \text{ or } s_A\} \to \Delta\{0,1\}$.

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 follows a cut-off strategy and elects the challenger iff the current office-holder is low-performing ($s_j < 0$, where $j \in \{I, A\}$).

Remark 1. *In all equilibria, the voter returns high-performing office-holders to office and replaces low-performing office-holders.*

Conditional on the voter's lack of information about the appointee's performance ($s_A = \varnothing$), the voter is indifferent between returning the appointee to office and ousting him.[6] Let us denote probability that the voter returns the appointee she learns nothing about to office as β.[7]

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replacements usually happen shortly *before* the end of the mandate and, thus, do serve to substitute a knowingly low-performing incumbent.

[6]The voter's indifference gives rise to a plethora of sequential equilibria. For formal equilibrium selection criteria, see Appendix G. Importantly, the voter's actions do not alter results of the model (Fearon, 1999).

[7]The voter's strategy can depend on the incumbent's partisanship. When necessary, I denote probability that the voter returns the appointee she learns nothing when the incumbent belongs to the opposition as β_O, and when the incumbent is the regime's co-partisan as β_L.

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

Let us first assume that the government does not receive a partisanship benefit (B). In what follows, I refer to such government as *unbiased*. The unbiased government maximizes the expected winner's competence. It replaces the incumbent if and only if:

$$
\underbrace{\overbrace{p}^{\substack{\text{Informative} \\ \text{Signal}}} \left(\overbrace{Pr[s_A \geq 0] E[\theta_A | s_A \geq 0]}^{\substack{\text{Voter Returns} \\ \text{High-Performing Appointee}}} + \overbrace{Pr[s_A < 0] E[\theta_C]}^{\substack{\text{Voter Replaces} \\ \text{Low-Performing Appointee}}} \right)}_{\text{Government Replaces Incumbent}}
$$

$$
> \underbrace{\overbrace{\mathbf{1}[s_I \geq 0] \times E[\theta_I | s_I]}^{\substack{\text{Voter Returns} \\ \text{High-Performing Incumbent}}} + \overbrace{\mathbf{1}[s_I < 0] \times E[\theta_C]}^{\substack{\text{Voter Replaces} \\ \text{Low-Performing Incumbent}}}}_{\text{Government Retains Incumbent}}.
$$

(3)

The LHS of inequality (3) shows the government's expected utility if it decides to replace the incumbent with the appointee. Note that the government does not observe the appointee's competence prior to the replacement and relies on the voter to oust the low-performing appointee. The RHS of inequality (3) shows the government's expected utility if it retains the incumbent.

When the government is unbiased, its strategy weakly increases in the incumbent's performance (see Appendix A): if the government retains some incumbent, it also keeps every incumbent who performs better than him. If the government replaces some incumbent, it also replaces every official who performs worse than him. In equilibrium, the unbiased government follows an interior switching strategy around some *performance threshold*. It re-

tains the incumbents who perform better than this threshold and replaces those who perform worse than this threshold with its appointee. In the following proposition, I first establish the threshold and then study its comparative statics (see Appendix A for proofs).

Proposition 1.

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

$$s^* \equiv p \times \sqrt{\frac{1 + 1/q}{2\pi}};$$

(4)

2. *The performance threshold the government sets is decreasing in clarity of information, q.*

Several important features of the performance threshold (s^*) deserve additional attention. First, the unbiased government never retains low-performing incumbents. Suppose an incumbent is low-performing. Then, the government improves the candidates' pool when it replaces this office-holder with an appointee.

Second, the quality of information q has a two-fold impact on the government's strategy. On one hand, better information (higher q) improves the government's precision when it draws inferences about the incumbent's type from his performance. In Figure 1, 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 is, in fact, unqualified $(\theta_A < 0)$ decreases. As a result, the government's utility from *replacing* the incumbent increases in the clarity of information.

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Higher clarity of information both encourages the government to retain high-performing incumbents and encourages it to replace them. However, as every replacement might result in the appointment of an unqualified official, the former effect of information always prevails. The performance threshold that the government sets decreases in the clarity of information, as illustrated by the dashed line in Figure 2a.
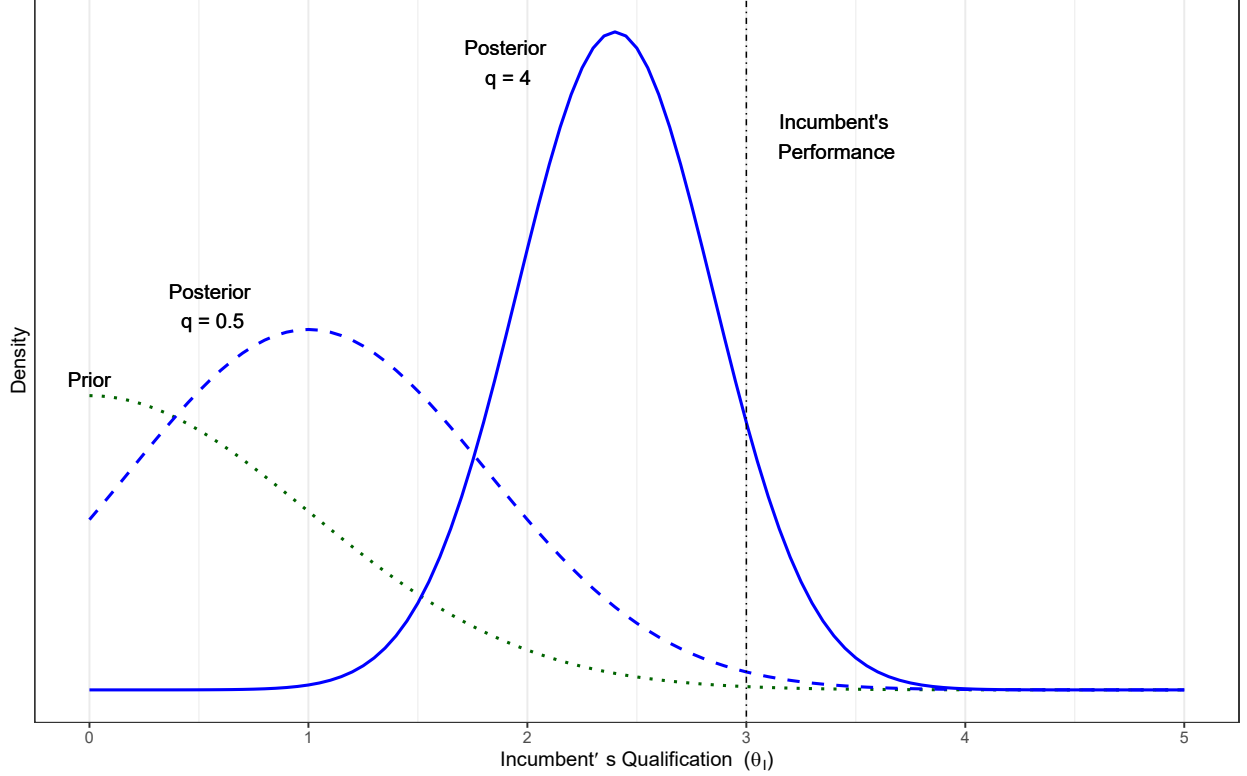

Figure 1: Posterior distribution of the incumbent's competence following the signal $s_I = 3$, assuming $p = 1$. The dotted line represents the prior distribution of the incumbent's competence. The dash-dotted vertical line indicates the signal s_I. The dashed line illustrates the posterior if the clarity of information is $q = 0.5$. The solid line shows the posterior if the clarity is $q = 4$.

In like manner to the second effect of better information, the performance threshold s^* increases in p, probability that the voter will observe some signal about the appointee's type. The higher p is, the more the government can rely on the voter to oust low-performing candidates in the election if it were to replace the incumbent. As a result, higher p encourages the government to replace the incumbent.

Finally, when clarity of information is absolute (q approaches infinity), the government knows that the competence (θ_I) of any high-performing ($s_I > 0$) incumbent exceeds average in the pool of candidates. Therefore, every high-performing incumbent will, in expectation, produce better policy outcomes than any other official in the candidate pool. Despite this, one may notice that the government replaces some high-performing and, thus evidently qualified incumbents with its appointees in equilibrium. Numerically, as q approaches infinity, the performance threshold s^* converges to a positive value. Although this stringency may seem counterintuitive, the government strategy improves the expected winner's competence. There is a high probability that the appointee will outperform the current official if the latter's performance is sufficiently low, while the forthcoming election mitigates risks associated with this replacement.

Biased Government. Co-partisan Incumbent

The biased government first decides whether to replace the incumbent. If it replaces the incumbent, the government also determines the appointee's partisanship: it might select either a co-partisan or a member of the opposition. Although the government values performance, the following is true regardless of the incumbent's party affiliation (see Appendix B.1):

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

The government replaces the co-partisan with the appointee if and only if

$$
p \times (Pr[s_A \geq 0](E[\theta_A|s_A \geq 0] + B) + Pr[s_A < 0]E[\theta_C])
$$
$$
+ \overbrace{(1-p)}^{\substack{Not\ Inf.\\Signal}} \times \overbrace{\beta \times (E[\theta_A] + B)}^{\substack{Voter\ Returns\\Appointee}} \tag{5}
$$
$$
> \mathbf{1}[s_I \geq 0] \times (E[\theta_I|s_I] + B) + \mathbf{1}[s_I < 0] \times E[\theta_C].
$$

Inequality (5) mirrors inequality (4), yet, the government gains a co-partisanship benefit (B) when the voter retains the regimes' co-partisan candidate (either the appointee or the incumbent). The number of competing parties does not affect the government's strategy as

the partisans do not compete against each other. Thus, the electoral defeat of a co-partisan candidate implies the victory of the opposition candidate.

When the incumbent is the regime's co-partisan, the biased government's optimal strategy is weakly increasing in the performance it observes because the biased government's expected utility from retaining the official weakly increases in the incumbent's competence. If the incumbent is a co-partisan, the government follows a switching strategy and retains the office-holder if and only if the signal it observes exceeds some performance threshold (see Appendix B.2).

Proposition 2.

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

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

2. *If the incumbent is co-partisan, the biased government sets the performance threshold that decreases in the government's bias and non-monotonically depends on the clarity of information.*

The first part of Proposition 2 establishes the biased government's strategy. Note that the government that values partisanship never retains low-performing incumbents (s^L is non-negative). Although the biased government can tolerate low competence for a chance to have a co-partisan in office, this trade-off is unfeasible as the voter always ousts low-performing incumbents.

The biased government obtains higher utility when the co-partisan official wins the election. Therefore, the government sets a lower performance threshold for governing party's officials (see Figure 2a) and, on average, replaces fewer co-partisan incumbents than would the unbiased government (see Appendix B.3). The dashed line in Figure 2b, shows how

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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.

The second part of Proposition 2 examines the comparative static of the biased government's strategy. The effect of the government's bias and the value β_L on the performance threshold is obvious. The higher the partisanship benefit, the less willing the government to trade partisanship benefits for a chance of better policies. The solid arrow in Figure 2a shows how the threshold changes if the bias (B) decreases.

The impact of information on the performance threshold is two-fold. Better information (i) improves the government's inferences about the incumbent's type and (ii) alters the partisanship's relative value. As in the case with the unbiased government, the first effect lowers the performance threshold (s^L) as the government's confidence in the high-performing incumbent's competence grows. At the same time, better information also lowers the relative value of the partisanship 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 2a, the solid line represents the performance threshold that the biased government sets for the incumbent.

Figure 2: Government's strategy
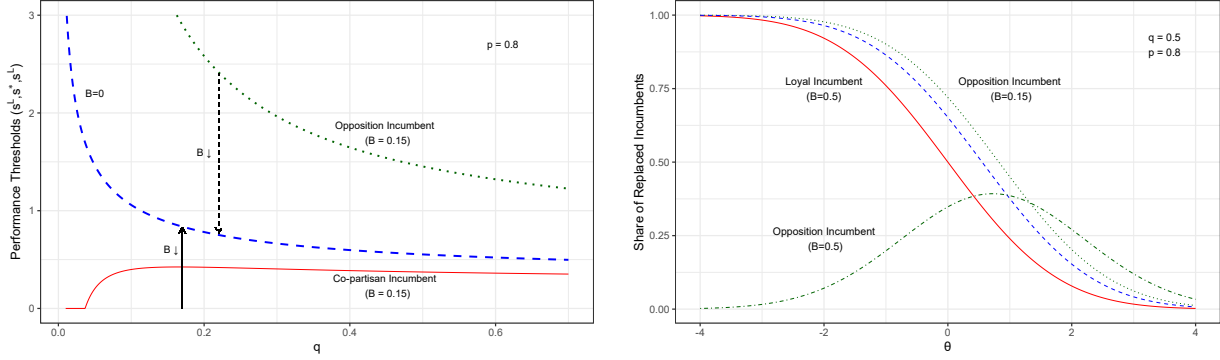
(a) The dotted line indicates the performance threshold that the unbiased government sets. The solid line shows the performance threshold that the biased government ($B = 0.15$, $\beta = 1$) sets for the co-partisan incumbent. The dotted line represents the threshold for the opposition incumbent. The 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.

(b) 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 $B = 0.15$, $\beta = 1$).

Biased Government. Opposition Incumbent

Let us now assume that the incumbent belongs to the opposition. If the government replaces the incumbent, it appoints the co-partisan official (see Remark 2). The government replaces the opposition incumbent if and only if:

$$
\begin{aligned}
p \times (Pr[s_A \geq 0](E[\theta_A | s_A \geq 0] + B) &+ Pr[s_A < 0]E[\theta_C]) \\
&+ (1-p) \times \beta \times (E[\theta_A] + B) \\
> \mathbf{1}[s_I \geq 0] \times E[\theta_I | s_I] + \mathbf{1}[s_I < 0] &\times (E[\theta_C] + \underbrace{\frac{1}{N-1} \times B}_{\substack{Challenger\ is \\ Co\text{-}partisan}}).
\end{aligned}
\tag{6}
$$

Note that the opposition incumbent's electoral defeat results in the co-partisan candidate's victory with probability $\frac{1}{N-1}$. It lets the government to exploit the election to its advantage. As the voter ousts the low-performing incumbent in the election, the government can

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strategically retain the low-performing opposition to improve the co-partisan candidate's chances. Therefore, the sufficiently biased government's strategy depends on the observed performance non-monotonically (see Appendix B.4).

Lemma 1.

1. If a partisanship benefit B is below a threshold

$$B^* \equiv p \times \frac{1}{\sqrt{2\pi}} \frac{1}{\sqrt{1+1/q}} \frac{1}{1-(N-1) \times (p/2 + (1-p) \times \beta)}$$

   or number of political parties exceeds a threshold

$$N^* = \frac{1 + \beta(1-p) + p/2}{\beta(1-p) + p/2},$$

   the optimal strategy of the government is weakly increasing in the incumbent's performance;[8]

2. Otherwise, the government always retains the low-performing incumbent, and the government's strategy depends on the incumbent's performance non-monotonically.

I summarize the optimal strategy of the government with the opposition incumbent in the following proposition:

Proposition 3.

1. If a partisanship benefit B is below the threshold B^* or N exceeds the threshold N^*, the government retains the opposition incumbent if and only if performance of the latter exceeds a performance threshold

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

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[8]Note that N^* converges to $+\infty$ as p and β converge to zero.

2. *Otherwise, the government retains the opposition incumbent when he is low-performing or 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 incumbents. As a result, the biased government sets a higher performance threshold than the unbiased one for the high-performing opposition incumbent. In Figure 2a, 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 3. *Sufficiently biased government replaces more co-partisan incumbents than opposition incumbents.*

When the government is highly biased $(B > B^*)$, it utilizes the forthcoming election to guarantee the co-partisan candidate's victory. As a result, it replaces fewer incumbents on average than the government with the co-partisan incumbent (see Appendix B.5) at the expense of retaining a disproportionately high number of low-type opposition officials. Figure 2b demonstrates that the share of those replaced by the highly biased government $(B > B^*)$ low-qualified $(\theta_I < 0)$ co-partisan incumbent (the solid line) exceeds the share of the replaced low-qualified opposition incumbents.

I study comparative statics of the proposed class of equilibria in the next proposition:

Proposition 4.

1. *The performance threshold s^O 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 deteriorates.*

If the incumbent belongs to the opposition, higher transparency improves the government's inferences and increases the partisanship's opportunity cost. Both encourage the government to retain the incumbent, and the performance threshold decreases in transparency. In Figure 2a, the dotted line representing the opposition incumbent's performance threshold decreases in clarity of information. In contrast, higher partisanship benefit encourages the government to replace the high-performing opposition incumbent, and the performance threshold increases in a partisanship benefit. In Figure 2a, the dotted arrow demonstrates how the threshold shifts if the bias declines.

The second part of Proposition 4 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 a chance that, after the government replaces the incumbent, the voter elects a high-performing ($s_A > 0$) but low-type ($\theta_A < 0$) appointee. Accordingly, higher transparency encourages the government to avoid strategic retention – the partisanship benefit's threshold (B^*) increases in information clarity.

In what follows, to simplify exposition, I consider a special case and set the number of parties to $N = 2$. First, note that the government's utility weakly increases as N decreases. The lower the number of competing parties, the higher the electoral chances of the co-partisan candidates. Therefore, the government should always favor opposition consolidation under the circumstances imposed by this model. Second, as I show above, the overall number of parties does not substantially change the government's strategy and does not affect the voter's actions.

Replacement Institution and Voter Welfare

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 context, a partisanship benefit (B) exogenously captures the relative weight of voter welfare and partisan interests, balancing its conduct: the higher the value of B, the less population's satisfaction is of concern to the government.

So far, the effect of the introduced hybrid institution on voter welfare has been unaddressed. I demonstrate that as far as the forthcoming election restrain the government's conduct, even the most biased government intervention under certain conditions can benefit the voter. Note that I am referring to *ex-ante* (before the voter learns the incumbent's performance) welfare improvements. 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 voter welfare is less apparent.

For instance, when the incumbent is co-partisan, the voter always prefers the government's interventions to the lack thereof, regardless of the government's bias (see Appendix C.2). 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 as the forthcoming election and the value of the official's performance restrain the government from actions that can harm the voter.

If the incumbent belongs to the opposition, the biased government, first, excessively replaces high-performing officials, and second, can strategically retain low-performing incumbents. Both actions lower the voter's utility. 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 strate-

gic 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 (see Appendix C.3).

Proposition 5.

1. *If the incumbent is 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.*

Replacement Institution and Popular Support

The popular support for the governing party can sometimes transpire even in non-democratic countries (Rose et al., 2011). The existing scholarship suggests that the 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 government 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 vote for the governing party candidates despite not being directly coerced. Namely, when the voter expects the forthcoming government's interventions, she avoids excessive replacements of high-performing opposition and excessive retentions of low-performing opposition if she elects the governing party co-partisan.

Let us consider a larger game where the voter first selects either a regime's co-partisan or an opposition candidate in an open seat election that happens before the baseline model's timing. Once the voter makes her choice, the selected candidate becomes an incumbent, and the baseline model timing repeats. Thus, the voter's decision results in one of two

separate subgames: the one with an opposition incumbent and the one with a governing party incumbent. Both subgames are analyzed above.

The government's replacements, unlike lack thereof, supplement the candidates' pool with new, potentially highly qualified officials. Because of that, other things being equal, the voter should prefer excessive replacements to insufficient replacements. Following this intuition, the voter favors opposition candidates over co-partisans of the government in the open seat election (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. Yet, there are conditions under which the voter favors the co-partisans of the regime over the opposition candidate in the open seat election (see Appendix C.5 for proofs). These conditions are summarized in the following proposition.

Proposition 6.

1. *When the government is biased enough to retain low-performing opposition, the voter ex-ante favors the governing party incumbents.*

2. *When the government does not strategically retain low-performing opposition incumbents, the voter ex-ante favors the governing party incumbent when probability of her learning of the appointee's performance is sufficiently low ($p < p'(\beta)$) and prefers the opposition candidate otherwise.*

Two factors divert the voter from supporting the opposition in the open seat election: high government bias (B) and low probability of voter's learning of the appointee's performance (p). High bias encourages the government to retain low-performing opposition incumbents (see Figure 3a). When the government is sufficiently biased, disadvantage produced by an inferior pool of competitors overrides the benefits of excessive replacements over insufficient replacements.

Low probability of the voter's learning of the appointee's performance lowers the expected competence of the electoral winner and, thus, the performance thresholds set by the

government:[9]

$$\frac{\partial s^O}{\partial p} = \frac{\partial s^L}{\partial p} = \sqrt{\frac{1 + 1/q}{2\pi}} + B(1/2 - \beta)(1 + 1/q) > 0,$$

$$\frac{\partial s^*}{\partial p} = \sqrt{\frac{1 + 1/q}{2\pi}}.$$

(8)

Suppose the voter is likely to support the appointee she learns nothing about ($\beta > 1/2$). In that case, the government's bias mitigates the learning probability impact on the government's strategy: the lower the probability that the voter returns the appointee to office, the less likely the government will replace the incumbent. In contrast, if the voter is unlikely to return to office the appointee she learns nothing about ($\beta < 1/2$), the bias aggravates the impact of the learning. Therefore, when $\beta > 1/2$, the lower the probability of voter's learning, the closer the government's strategy with the co-partisan to the voter's first best (s^*) and 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; the voter prefers excessive replacements to the lack thereof and, thus, the opposition candidate to the regime's co-partisan (see Appendix C). 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.

To summarize, when the voter is unlikely to learn the appointee's performance or the government's bias is high, the voter welfare with the governing party incumbent exceeds one

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[9]For $B < \min\{B^*(\beta_O), B^*(\beta_L)\}$.

with the opposition incumbent. This result implies that the voter who (marginally) prefers opposition officials, might, nevertheless, support the regime's co-partisan in the open seat election. This observation proposes an additional explanation for the popular support of non-democratic regimes,

Figure 3: Incumbent's partisanship and voter welfare
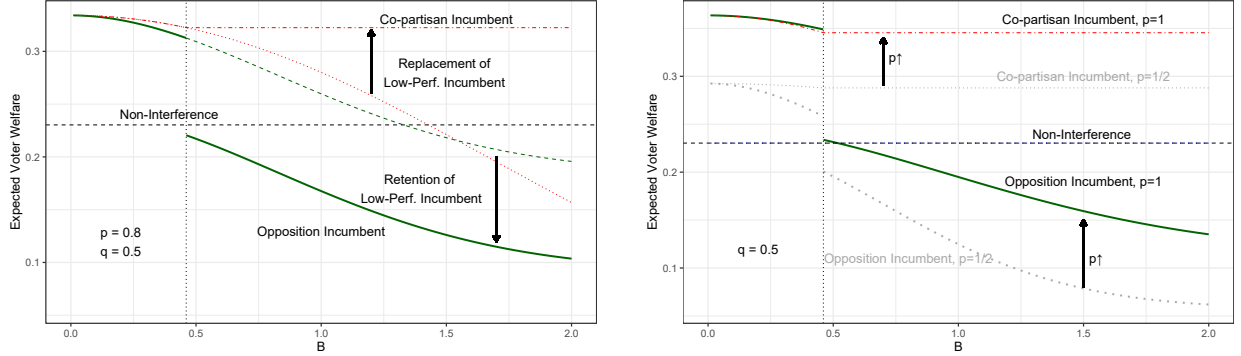
(a) The solid curve represents expected voter welfare with the opposition incumbent and the government that strategically retains low-performing opposition. The dashed curve indicates expected voter welfare when the government retains low-performing incumbents. The dash-dotted curve shows expected voter 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 the 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) Dotted curves indicate the expected voter's utility when probability of 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.

Extensions

In the following section, I relax assumptions of the baseline model and introduce two extensions to it. I allow for (i) electoral unfairness and (ii) costly replacements (iii) asymmetric information. I demonstrate that the paper's main results hold and that the electoral unfair-

ness and costly replacements aggravate the voter's incentives to ex-ante support governing party's candidates. For tractability, I assume that the voter returns to office the appointee she learns nothing about.[10]

Unfair Elections

In non-democratic countries, elections are seldom fair and rarely pursue a selection of qualified officials. Instead, as I mentioned earlier, non-democratic governments can employ elections to estimate popular support, promote the regime's popularity or to persuade the international community in its legitimacy. Given the above, I relax the assumption of electoral integrity and estimate a contribution of fair elections to population welfare.

Let us assume that if the voter casts a ballot against a governing party candidate, the latter, nevertheless, wins the election with probability α. In particular, when $\alpha = 0$, the election is fair, the governing party office-holder wins the race if his performance exceeds the average. On the contrary, if $\alpha = 1$, the voter's preferences cannot change the course of the career of the government's co-partisan. In what follows, I call α electoral unfairness. Examples of electoral unfairness may involve partial media coverage of candidates, candidates' exclusion from the ballot, voter oppression, malicious design of the ballot papers, lack of a secret ballot, and many others (Robie, 2014; Enikolopov et al., 2011; Wilson, 2006; Hartlyn et al., 2008; Rose and Mishler, 2009).

The electoral unfairness (α) does not affect the voter's optimal strategy: She tries to oust low-performing officials. It also does not mitigate the government's incentives to select co-partisan appointees. However, the biased government adapts its replacement strategy to changed circumstances (see Appendix D.1 and D.2). The higher the electoral unfairness, the higher the *low-performing* appointee's chances are to win the election, and the lower the partisanship benefit contribution to the government's utility following the replacement. Therefore, higher electoral unfairness deters the government from replacing high-performing

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[10]For instance, one can assume that every current local authority reaps the benefits of better name recognition and favorable television ratings (Prior, 2006; Kahn and Kenney, 1999).

co-partisans.

When the incumbent belongs to the opposition, the partisanship impact and performance component's impact are not co-aligned as above. Higher electoral unfairness deprives the high-performing opposition incumbent's electoral chances that encourages the government to replace opposition incumbents. At the same time, higher electoral unfairness increases co-partisan challenger's and appointee's[11] chances to win the election, discouraging the government from replacing the opposition.

Higher electoral unfairness lowers the voter's utility (see Appendix D.4). First, it directly improves the electoral chances of low-performing governing party candidates and lowers the high-performing *opposition* incumbent's electoral chances. Second, it indirectly harms the voter by affecting the government's actions and discouraging the government from welfare-improving replacements of the high-performing co-partisans.

Finally, electoral unfairness aggravates the voter's incentives to vote for the governing party incumbent in the open seat election. Note that higher electoral unfairness never affects the low-performing incumbent's chances to win the election: The voter does not re-elect the low-performing opposition incumbent, and the government does not retain the low-performing co-partisan incumbent. Electoral unfairness evenly affects the voter's utility following the incumbent's replacement regardless of his partisanship: It increases the probability of returning the low-performing appointee to office. However, electoral unfairness decreases the high-performing opposition incumbent's electoral chances. It further discourages the voter from supporting the opposition candidate who is unlikely to win the forthcoming election in the open seat election (see Appendix D.5).

The following proposition summarizes the main results of this section:

Proposition 7. *Higher electoral unfairness:*

(i) encourages the government to replace fewer high-performing co-partisan incumbents;

(ii) lowers the voter's utility;

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[11]Note that α affects *only* low-performing appointee's.

(iii) further aggravates the voter's incentives to ex-ante support governing party candidates.

Costly Replacements

Let us assume that every replacement costs the government c, where c is non-negative. This cost might arise from selecting an appointee or persuading a current official to leave office. Alternatively, one can interpret c as a possible adverse population reaction to the replacement. For instance, in 2020, the Russian government arrested and replaced the governor of Khabarovsk Krai, which later sparked protests by the region's population.[12]

The cost of replacements does not affect the voter's strategy. She returns the official to office iff he is high-performing. Neither does it alternates the government's choice of the appointee's partisanship: the government always selects a co-partisan. The replacement cost only affects the government's replecement strategy: higher costs discourage the government from replacing office-holders.

Initially, it seems that the replacement cost should improve voter welfare. It shields high-performing opposition incumbents from unnecessary replacements driven by the government's wish to install a co-partisan. A higher replacement cost lowers the government's performance threshold for opposition incumbents (see Appendix E).

However, first, a higher cost simultaneously discourages welfare improving replacements of government's co-partisan incumbents. Second, the replacement cost deepens the government's incentives to strategically retain the low-performing opposition incumbent (see Appendix E).

The results are summarized below. See Appendix D for formal proofs:

Proposition 8.

1. *When the incumbent belongs to the opposition, voter utility increases in the cost of replacements for $c < c^*$.*

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[12]New Protests in Russia's Far East After Governor Replaced; The New York Times

2. *When the incumbent is a regime's co-partisan, the voter's utility weakly decreases in replacement cost.*

3. *A threshold above which the government retains low-performing opposition incumbents strategically (B_c^*) decreases in the cost of the replacements.*

Finally, a sufficiently high replacement cost aggravates the voter's incentives to ex-ante support the regime's co-partisan and encourages the government to retain fewer co-partisans than opposition incumbents (see Appendix D):

Proposition 9.

1. *If the replacement cost is sufficiently high $c > c^O$, the voter ex-ante weakly prefers the governing party incumbent to the opposition incumbent in the open seat election.*

2. *If the replacement cost is sufficiently high $c > c^O$, the government replaces fewer opposition incumbents than co-partisan incumbents.*

Asymmetric Information

In the baseline model, the government and the voter infer the candidates' competence based on commonly known priors and commonly observed performance. Therefore, there is no information asymmetry. However, the government can learn more than the voter on many occasions. For example, the government can observe the candidates' past performance in different administration jobs (Buckley et al., 2014). Simultaneously, the voter may lack the competence to evaluate the officials (Healy and Malhotra, 2009; Huber et al., 2012), or access to credible information due to the candidates' poor communication efforts (Prato and Wolton, 2016; Hafer and Landa, 2007; Landa and Meirowitz, 2009), political propaganda, and censorship (Morozov, 2011; Allcott and Gentzkow, 2017; Enikolopov et al., 2011; King et al., 2013).

To prove that model is robust to information asymmetry, in this section, I allow the government (but not the voter) to observe the appointee's performance (s_A) before making

a replacement. As in the baseline model, I assume that after the appointee takes office, the voter and the government observe the official's performance with probability p ($s_A = s_A$) and learn nothing with complementary probability ($s_A = \varnothing$). For tractability, in this section, I assume that the government always selects the co-partisan appointee and, thus, the voter does not update based on the appointee's partisanship.

The voter acts last. When the government does not replace the incumbent, and when the voter observes the appointee's performance, the voter returns the current office-holder if and only if he is high-performing. Note that because the government and the voter observe the same incumbent's performance, the voter does not update her beliefs upon lack of a replacement. However, when the government replaces the incumbent, but the voter does not observe the appointee's performance ($s_A = \varnothing$), she updates based on the fact of replacement and the observed incumbent's performance to draw inferences about the appointee's competence.

The government, aware of the voter's strategy, acts accordingly. Figures (4a) and (4b) depict the government's strategy depending on the incumbent's partisanship as well as the observed appointee and incumbent's performances. Importantly, the results of the baseline model are robust to the information asymmetry (for proofs see Appendix E):

Figure 4: Government's strategy and the incumbent's performance
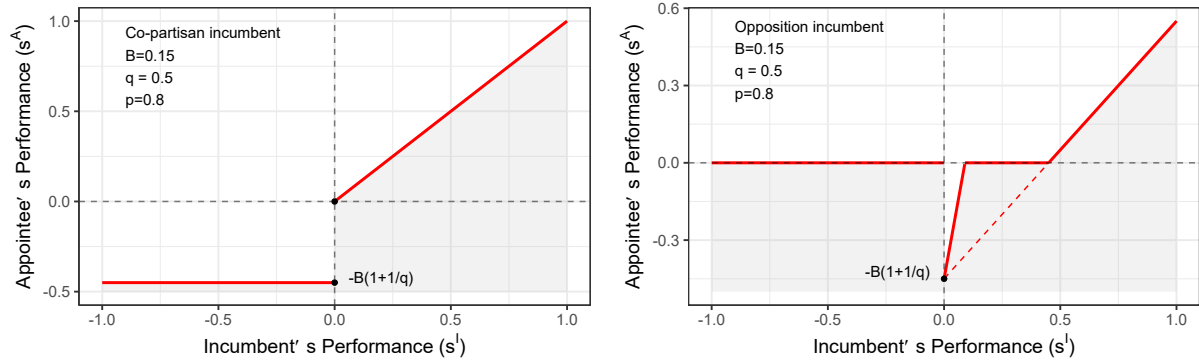
(a) The government replaces the co-partisan in-cumbent if the appointee's performance exceeds a threshold depicted by the solid line.

(b) The government replaces the opposition in-cumbent if the appointee's performance exceeds a threshold depicted by the solid line.

Remark 4.

1. *First, the sufficiently biased government replaces more co-partisan incumbents than opposition incumbents even in the presence of newly available information;*

2. *Second, under certain conditions, the voter prefers the pro-regime incumbent to the opposition one in the open seat election.*

Conclusion

This paper examines 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 the non-democratic regimes. It suggests that the 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.

In addition to this, I the government's interventions lower voter welfare only when multiple factors are combined. Namely: (i) the government is sufficiently biased, and (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 a chance, the rational voter is unlikely to protest against introducing the hybrid institution that combines elections and appointments.

Finally, I show that the clarity of information non-monotonically affects the government's decision to replace co-partisan incumbents, as information clarity alternates the opportunity cost of partisanship to the biased government. I also demonstrate that the biased government will replace fewer opposition incumbents than co-partisans in equilibrium. Lastly, I relax the baseline model's assumptions and show that the results are robust to the introduced extension. What is more, I demonstrate that these modifications lower voter welfare and aggravate voters' incentives to accept the regime's co-partisans.

References

Allcott, Hunt and Matthew Gentzkow (2017). Social media and fake news in the 2016 election. *Journal of economic perspectives 31*(2), 211–36.

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.

Besley, Timothy and Stephen Coate (2003). Elected versus appointed regulators: Theory and evidence. *Journal of the European Economic Association 1*(5), 1176–1206.

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.

Bohn, Henning and Robert P Inman (1996). Balanced-budget rules and public deficits: evidence from the us states. In *Carnegie-Rochester conference series on public policy*, Volume 45, pp. 13–76. Elsevier.

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

Buckley, Noah , Guzel Garifullina, Ora John Reuter, and ALEXANDRA SHUBENKOV (2014). Elections, appointments, and human capital: The case of russian mayors. *Demokratizatsiya 22*(1).

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.

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.

Hafer, Catherine and Dimitri Landa (2007). Deliberation as self-discovery and institutions for political speech. *Journal of theoretical Politics 19*(3), 329–360.

Hale, Henry E (2003). Explaining machine politics in russia's regions: Economy, ethnicity, and legacy. *Post-Soviet Affairs 19*(3), 228–263.

Hanssen, F Andrew (1999). The effect of judicial institutions on uncertainty and the rate of litigation: The election versus appointment of state judges. *The Journal of Legal Studies 28*(1), 205–232.

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.

Healy, Andrew and Neil Malhotra (2009). Myopic voters and natural disaster policy. *American Political Science Review*, 387–406.

Huber, Gregory A , Seth J Hill, and Gabriel S Lenz (2012). Sources of bias in retrospective decision making: Experimental evidence on voters' limitations in controlling incumbents. *American Political Science Review*, 720–741.

Kahn, Kim Fridkin and Patrick J Kenney (1999). Do negative campaigns mobilize or suppress turnout? clarifying the relationship between negativity and participation. *American political science review 93*(4), 877–889.

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.

King, Gary , Jennifer Pan, and Margaret E Roberts (2013). How censorship in china allows government criticism but silences collective expression. *American Political Science Review*, 326–343.

Klein, Linda S , James M Sfiridis, et al. (1997). A market based evaluation of the election versus appointment of regulatory commissioners. *Public Choice 92*(3-4), 337–351.

Landa, Dimitri and Patrick Le Bihan (2018). Does unbundling policy authority improve accountability? *The Journal of Politics 80*(3), 933–947.

Landa, Dimitri and Adam Meirowitz (2009). Game theory, information, and deliberative democracy. *American journal of political science 53*(2), 427–444.

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.

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.

Morozov, Evgeny (2011). *The net delusion: How not to liberate the world*. Penguin UK.

Prato, Carlo and Stephane Wolton (2016). The voters' curses: why we need goldilocks voters. *American Journal of Political Science 60*(3), 726–737.

Prior, Markus (2006). The incumbent in the living room: The rise of television and the incumbency advantage in us house elections. *The Journal of Politics 68*(3), 657–673.

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.

Wilson, Kenneth (2006). Party-system development under putin. *Post-Soviet Affairs 22*(4), 314–348.