

# Electoral institutions and repression in dictatorships<sup>☆</sup>

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## ABSTRACT

We argue that the relationship between authoritarian elections and repression depends on the electoral system in use. Proportional representation (PR) systems co-opt more heterogeneous political groups to contest and receive seats in the legislature and thus, dictators are less likely to use broad-based repression. Under plurality rules, by contrast, the regime has more incentives to mobilize turnout and deter collective action. Examining electoral systems from 1990 to 2010, we find that elections only reduce broad-based repression under PR systems, which are less commonly used in non-democracies. Our results highlight the importance of formal institutions in shaping political outcomes even in dictatorships.

## 1. Introduction

Throughout history, dictators have relied on repression to eliminate threats, both at peace and war (Wintrobe, 1998; Davenport, 2007; Greitens, 2016; Truex, 2018; Young, 2019).<sup>1</sup> However, studies of authoritarian regimes indicate that many leaders also consolidate their rule through instruments of co-optation which help to distribute patronage, acquire information, and bolster elite cohesion (e.g., Magaloni, 2006; Gandhi and Przeworski, 2006; Levitsky and Way, 2010; Tsourapas, 2021).

Co-optation and repression thus work jointly to pave the foundation of authoritarian resilience (Hassan et al., 2022). Existing studies have reported a negative relationship between repression and co-optation via nominally democratic institutions (Geddes, 2005), including national elections (Davenport, 1997; Richards, 1999; Guriev and Treisman, 2019), opposition parties (Vreeland, 2008; Conrad, 2014), and multi-party legislatures (Gandhi, 2008). Others argue that parties and legislatures in dictatorships decrease repression of civil liberties while increasing violations of physical integrity rights, such as torture, kidnapping, and killings (Frantz and Kendall-Taylor, 2014). Existing research on authoritarian politics, however, largely focuses on the presence of these institutions rather than their design. In a departure from previous research, we show how underlying differences across authoritarian electoral institutions, which vary as much as those in

democracies, shape the regime incentives to repress the masses.

In this article, we evaluate the effects of the two electoral systems – proportional representation (PR) and plurality/majority (P/M) – on the dictator's strategic use of repression. Our theory focuses on broad-based, mass repression, such as the restrictions on the press and speech affecting the “majority of a country's population” (Frantz and Kendall-Taylor, 2014, 336). On the one hand, PR systems facilitate co-optation of different political groups and produce a more inclusive electoral process. The resulting multiparty legislature, in turn, makes the regime leader better informed and less reliant on broad repression of civil liberties and press freedom. Under plurality or majority rules, on the other hand, the dictator faces a higher winning threshold to secure an electoral victory. Thus, there are more incentives to employ coercive measures to curb the rise of a unified opposition and any popular support for it. We expect to observe more broad repression in regimes that use plurality/majority systems.

We test our hypotheses with a new cross-national dataset of electoral systems that includes all authoritarian regimes between 1990 and 2010. Using ordinary least squares and matching estimators (see Sekhon, 2009), we find that only those regimes using PR systems exhibit lower levels of repression of press freedom and civil liberties. By contrast, autocracies using plurality rules – used in 75% of all authoritarian elections – appear to be as repressive as those that hold no elections. Consistent with our theoretical expectations, PR rules are also positively

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<sup>1</sup> In this article, we use dictatorship, autocracy, authoritarian regime, and other near synonyms interchangeably.

associated with opposition participation and multiparty legislatures as well as higher levels of electoral integrity. We also show that though PR systems decrease broad-based repression, they increase selective repression.

This article advances our understanding of authoritarian elections in two ways. First, while a vast literature has explored the nature of post-Cold War authoritarianism which often features elections, existing studies overlook electoral *institutions*. Building on the extensive research on electoral systems in advanced democracies, we theorize and test the consequences of electoral institutions in non-democracies. This way, we also offer a much needed bridge between the literature on institutions in democracies and autocracies. Second, we add to the literature on the impact of authoritarian elections on citizen welfare in autocracies (e.g., Miller, 2015; Little, 2017; Cheibub and Hays, 2017) by showing how certain elections, albeit nominally democratic, may further erode human rights in dictatorships. Our findings yield important policy implications by highlighting the importance of authoritarian institutional design. In addition to promoting free and fair political contestation, the international community should also pay attention to the rules that govern these elections.

Our article proceeds as follows. In Sections 2, we discuss the link between authoritarian elections, repression, and regime survival based on previous research. Section 3 presents our theory of the role of electoral systems in shaping repression decisions and develop hypotheses. Section 4 describes our data and methods to report the main findings. We also perform a series of additional tests to evaluate the robustness of our main findings and substantiate causality. In Section 5, we look at additional observable implications of electoral systems in dictatorships. Section 6 concludes and suggests the directions for future research.

## 2. Elections, repression and authoritarian survival

An ongoing debate in the literature is whether authoritarian elections strengthen the regime by helping the dictator maintain political dominance and co-opt the opposition (e.g., Magaloni, 2006; Knutsen et al., 2018).<sup>2</sup> Elections can serve as a “fair” arena through which elites compete for and receive the spoils of co-optation, reinforcing their commitment to the status quo (Lust-Okar, 2005; Blaydes, 2011; Mahdavi, 2015; Opalo, 2019).

Authoritarian elections also generate valuable information for incumbents to assess their popularity as well as grievances against them (Magaloni, 2006; Brownlee, 2007; Cox, 2009; Cheibub and Hays, 2017). For example, elections can signal pro- or anti-regime sentiments to both the masses and elites and in turn, influence political actors’ decision to either remain loyal to or rebel against the incumbent (Little, 2012). Similarly, by allowing citizens to signal their dissatisfaction through voting, elections enable dictators to make appropriate policy adjustments, helpful for their survival (Miller, 2015). Moreover, local elections in China inform the ruling party of the local agents’ performance and enable timely responses to citizen grievances (Birney, 2007; Bernstein and Xiaobo, 2008).

The prevalence of elections and other co-optative institutions in dictatorships, however, should not obscure the fact that repression remains ubiquitous and necessary for regime survival. While patronage allocated through the nominally democratic institutions can increase support for the regime, they also create a political opening for the opposition to rally support (Geddes, 2005). As a result, institutional co-optation is always accompanied by a certain level of repression. Moreover, in the absence of effective power constraints, autocrats can

deploy coercive tactics to neutralize threats at a lower cost (Francisco, 1995; Moore, 1998; Ritter, 2014).

Both co-optation and repression come with costs and benefits for authoritarian survival (Hassan et al., 2022). A power-maximizing leader can be characterized as someone who employs both patronage and repression to induce loyalty and compliance (Wintrobe, 1998). If the ruling coalition only consists of a small group of elites who dominate the economy, repression is more cost-efficient than co-optation (Svolik, 2012). By contrast, in regimes that depend on broader support to stay in power, such as Communist China or PRI’s Mexico, co-optation is optimal because of higher repression costs.

Scholars have suggested that there exists a negative correlation between repression and the presence of elections in authoritarian regimes. In a pioneering study, Davenport (1997) shows that elections are negatively associated with restrictions on free speech and assembly in non-democracies, an insight that has been extended by subsequent studies. Gandhi (2008), for example, suggests that co-optation in dictatorships reduces the need for state repression because the resulting legislatures induce enough compliance by creating a space for the opposition to participate in the policy-making process and receive concessions.

A few studies provide more insight into the link between elections and repression by examining different types of coercive tactics. Drawing from a unique event dataset, Bhasin and Gandhi (2013) demonstrate that dictators use less repression against the masses before elections in order to induce turnout and increase vote share; nonetheless, targeted repression remains common regardless of the electoral cycle. Frantz and Kendall-Taylor (2014) argue that political parties and legislatures allow authoritarian leaders to better isolate dissidents from the general population. Because the leaders can focus on eliminating the identified threats through detainment and torture, they employ less broad-based repression.

This article offers a departure from previous research by addressing institutional features of elections in dictatorships to theorize their differential effects on broad-based repression – namely, state repression that is meant to constrain the masses. As noted by Ginsburg and Simpser (2014), existing studies have largely overlooked the importance of constitutional variations and resulting institutional differences in authoritarian regimes.<sup>3</sup> We aim to fill the gap.

## 3. How electoral systems shape repression in dictatorships

Studies examining advanced democracies have extensively explored different varieties of electoral rules, largely grouped into the proportional representation (PR) or plurality/majority.

(P/M) systems, and how they can shape political representation, electoral accountability, and many other political outcomes (e.g., Rae, 1967; Gallagher, 1991; Lijphart, 1994; Powell, 2000; Persson and Tabellini, 2003; Gallagher and Mitchell, 2005; Becher, González, and Stegmüller, 2023). Among various propositions, the one that links electoral rules to party systems has perhaps received the most scholarly attention (Kam et al., 2020). On the one hand, PR systems are associated with lower degrees of disproportionality between votes and seats (Cox, 1997). PR rules are thus associated with higher degrees of party fragmentation (Taagepera and Shugart, 1989; Lijphart, 1999) and lead to the creation of coalition governments. On the other hand, majoritarian rules help large parties obtain a much larger share of seats than their share of votes in the elections. As a result, within individual constituencies, majoritarian elections tend to induce strategic voting while

<sup>2</sup> Other researchers point out that authoritarian elections may increase the likelihood of regime breakdown or democratization (e.g., Brownlee, 2009; Roessler and Howard, 2009; Little et al., 2015) and that electoral fraud can incite mass protests and revolutions (Tucker, 2007; Kuntz and Thompson, 2009).

<sup>3</sup> Several studies have examined other nominally democratic institutions and the effects of their design. Gandhi (2013) shows that strong presidential powers hinder opposition coordination efforts. Roberts (2015) argues that a parliamentary system prolongs an authoritarian regime’s durability as the system encourages inner-circle elites to cooperate for their mutual survival.

discouraging small parties being from entering the race.

Examining the prevalence of elections in authoritarian regimes, scholars have argued that these non-democratic elections – which are usually far from free and fair compared to their democratic counterparts – serve different purposes (Gandhi and Lust-Okar, 2009; Brancati, 2014). While scholars of democracy have closely examined normative debates such as the accountability-representativeness tradeoff (Carey and Simon, 2011), such concepts are less meaningful in non-democratic settings. The informational benefits associated with elections are unidirectional in autocracies; the benefits exist for ruling elites but not for the masses. Studies on dictatorships have instead focused on how electoral rules may shape the regime-opposition dynamics and their implications, such as campaign strategies, candidate entry, and vote choices in authoritarian elections (Pripstein Posusney, 2002; Masoud, 2014). Lust-Okar and Jamal (2002) are among the few to examine authoritarian electoral institutions and their political implications. Drawing from a comparative analysis of seven Middle Eastern and Northern African countries, they argue that monarchs, who do not depend on popular support to legitimize their rule, prefer PR systems so as to reinforce existing divisions in the society and deter opposition unity. By contrast, presidential dictators favor plurality rules that bolster their political dominance by maximizing turnout and votes. In a study of Rwanda, Stroh (2009) examines the link between electoral systems and accountability and argues that the country's PR system helps authoritarian incumbents stay in power by hindering the linkage between local politicians and their constituents.

Our theory considers how the key characteristics of the two electoral systems can shape the dictator's incentive to employ broad-based repression, including broad restrictions on media freedom and civil liberties, increasingly used by dictators who seek to control and manipulate the masses (Guriev and Treisman, 2019; Hassan et al., 2022). We seek to bring together the literature on institutional design in democracies and electoral dictatorships. The aim of the paper is not to argue that one electoral system is better than the other for the dictator. Rather, we examine how different electoral institutions create different dynamics between the regime and the opposition. Given the institutional environment, authoritarian leaders adopt survival strategies – such as broad-based repression – that they deem more effective after evaluating the costs and benefits.

To begin with, we highlight that PR rules are associated with greater numbers political parties and higher degrees of party fragmentation (Taagepera and Shugart, 1989; Lijphart, 1999). It is unlikely for a particular opposition party to enjoy an overwhelming electoral success against the regime under PR. Relatedly, keeping the opposition divided is easier in this context. As a result, PR systems create incentives for the dictator to reduce broad-based repression and instead to divide and conquer – to strategically co-opt some parties and repress others.<sup>4</sup>

Algeria offers an illustrative example in which an authoritarian regime both co-opts moderate parties and fragments the opposition under PR, all the while employing selective repression of dissidents. Under the control of the ruling National Liberation Front (FLN) party, Algeria has long been characterized by numerous but weak parties, many of which are co-opted by the ruling FLN (Roberts, 1998). In every national election within the last two decades, FLN has formed multiple coalitions with different parties such as the National Rally for

Democracy (RND) and the Movement for Society and Peace (MSP). In the May 2017 legislative elections, 63 political parties along with many independent lists participated, but the ruling coalition easily won the majority of the seats. Under PR in authoritarian Algeria, opposition forces have never been able to become unified, even though the level of mass repression is relatively lower in the country. The regime also has not actively hindered anti-regime collective action and instead allowed protests to occur frequently in the last 15 years. However, selective detention and torture of dissidents persist in the country. The regime-opposition dynamics continue even after the overthrow of President Abdelaziz Bouteflika in 2019 after weeks of mass protests.

In comparison, plurality/majority rules are more likely to create a zero-sum electoral competition between the incumbent and the opposition as there is normally only a single seat per district. Plurality rules entail higher thresholds, lower district magnitudes, fewer parties, and less party fragmentation, all of which encourage the endeavors of coalition-building among opposition groups in order to win seats. Thus, it should be more difficult for the regime to keep them divided. As a result, to suppress collective action and drive turnout, the regime is likely to use broad-based repression that targets both the opposition and the masses. Broadly repressive strategies, such as the restrictions on the press and speech, is also an effective way to weaken the link between the opposition and the masses. Of course, all dictators, whether using PR or P/M, would prefer to get as many votes as they could. However, in many PR regimes, the vote share is not the source of their legitimacy. Lust-Okar and Ahmad Jamal (2002), for example, argue how monarchies, compared to one-party regimes, prefer PR systems, which fragment political parties and reinforce social divisions. For the monarchies, the basis of their legitimacy is seemingly active political competition, rather than an overwhelming electoral victory of pro-regime parties.

For example, in post-WWII Taiwan under P/M rules, opposition politicians and civilians were heavily repressed during the period known as the White Terror. Opposition politicians who did not belong to the regime party, Kuomintang (KMT), could contest in the legislative elections as independent candidates. However, any efforts to bring together non-KMT politicians in the single non-transferable vote elections faced several brutal crackdowns by the ruling party throughout the 1970s (Cheng, 1989). Any coordination efforts were also difficult because the Martial Law imposed strict media censorship and a variety of restrictions on mass mobilization. Even after the lifting of the Martial Law in 1987, the Democratic Progressive Party (DPP), which started as an informal alliance of non-KMT politicians in the early 1980s, had to struggle for at least another decade. As the KMT maintained its grip on the police forces and mass media in the 1990s, it was not until the 2000 presidential election that broad-based repression eased in Taiwan.

In sum, we argue that PR systems reduce the incentive to employ broad-based repression because they create an electoral environment that keeps the opposition fragmented. Instead, authoritarian regimes benefit from using strategic co-optation and selective repression. In contrast, under plurality/majority rules, it is more efficient to use broad-based repression to deter the opposition from working together. Broad repression also mobilizes the masses to turnout. Therefore, we hypothesize that PR regimes are associated with less repression of civil liberties and press freedom. In other words, the negative correlation between authoritarian elections and repression, as shown in the aforementioned studies, should only exist in PR autocracies.

**Hypothesis 1.** Compared to dictatorships that use plurality/majority systems, those adopting PR systems are associated with lower levels of broad repression.

Based on our theory, the two electoral systems should also have diverging effects on the dictator's incentive to manipulate elections and employ targeted, rather than broad, repression. First, as PR regimes are more likely to work with at least some opposition groups, they should have less incentive to manipulate the elections. In other words, we expect to observe more electoral irregularities in regimes that adopt

<sup>4</sup> Overall, single-party regimes have become rare since the Cold War (Magaloni and Kricheli, 2010). By nature, single-party regimes are much more likely to use plurality/majority electoral systems. In these non-democracies, however, having multiple groups contest in elections and win seats does not mean opposition parties can truly influence policy or gain power. For instance, in Cambodia, although multiple parties for years have contested across a wide ideological spectrum under PR rules, the Cambodian People's Party (CPP) has remained in power since the 1998 General Election, as discussed by Gainsborough (2012).

plurality/majority rules. Second, and relatedly, compared to P/M dictatorships, PR regimes should hold more inclusive elections and produce more representative legislatures with a greater number of political groups participating in the elections.

Third, while PR elections are more likely to reduce the need for broad-based repression by producing small, weak parties easily co-opted by the regime, they will instead lead to more selective repression, which tend to be violations of physical integrity rights (Bhasin and Gandhi, 2013; Frantz and Kendall-Taylor, 2014).<sup>5</sup> By nature, physical repression is selective, as autocrats generally use it to target and punish specific political opponents.

(Goldring and Matthews, 2021).<sup>6</sup> Similarly Frantz and Kendall-Taylor (2014, 5) writes that physical repression “tends to be more narrow and targeted in scope, typically affecting specific individuals identified by the regime as posing the greatest threat to its rule.”

Finally, as PR is associated with less broad repression, including the government’s attempts to restrict media freedom and censor information, we also expect to see a higher degree of transparency and openness in PR electoral autocracies.

**Hypothesis 2.** Compared to dictatorships that use plurality/majority systems, those adopting PR systems are associated with a higher degree of electoral integrity.

**Hypothesis 3.** Compared to dictatorships that use plurality/majority systems, those adopting PR systems are associated with higher levels of electoral participation and representation of opposition groups.

**Hypothesis 4.** Compared to dictatorships that use plurality/majority systems, those adopting PR systems are associated with higher levels of selective repression.

**Hypothesis 5.** Compared to dictatorships that use plurality/majority systems, those adopting PR systems are associated with a higher degree of transparency.

Our theory sheds light on key debates in the literature by emphasizing the importance of electoral institutions in dictatorships. On the one hand, studies like Cox (2009) and Miller (2015) argue that elections inform dictators of their popular support. Such information helps them craft appropriate strategies to prolong their survival. On the other hand, Malesky and Schuler (2011) and others suggest that authoritarian elections may only reflect the strength of the dictator’s grip on power, rather than producing much useful information regarding the masses. In the middle stands Little (2012), who contends that elections yield a distorted public signal about anti-regime sentiments and incumbent strength. Our theory suggests that electoral institutions shape different information contexts in elections. With less broad repression and fewer electoral irregularities, the arguments of Cox (2009) and Miller (2015) align with PR dictatorships, while the scenario laid out by Malesky and Schuler (2011) may be more relevant to authoritarian regimes using plurality rules.

In order to theorize the consequences of electoral systems in dictatorships, it is important to take into account their origins. This study does not intend to discuss the politics behind initial institutional choice as many regimes continue using the electoral rule they inherit from the

previous regime. However, we acknowledge there are several factors that may have influenced both electoral rule choices and coercive tactics – such as colonial legacies, international pressure, and previous democratic experiences. Pepinsky (2014), for example, suggests the endogeneity of authoritarian institutions: historical legacies may have shaped both institutional choice and repression decisions. In the empirical section, we further address the possible endogeneity concerns and show that, even after taking potential confounding variables into account, we still observe a systematic difference in the levels of broad repression in plurality versus PR rules. Furthermore, it is quite rare that authoritarian leaders actually change the electoral systems (see Footnote 9). The infrequency of electoral system changes helps solidify our argument that one electoral system is not necessarily better than the other for the dictator. Rather, authoritarian regimes have chosen to adopt appropriate survival strategies – such as broad-based vs. selective repression – that they deem more appropriate given the political environment.

#### 4. Empirical strategy

To examine the relationship between repression and electoral institutions, we first use OLS regressions followed by matching methods to adjust for potential selection bias as well as additional tests to further evaluate the robustness of our findings.

##### 4.1. Data and variables

We have assembled a unique dataset of electoral systems in authoritarian regimes.<sup>7</sup> Using the Autocratic Regimes Dataset (Geddes et al., 2014), we identify the set of authoritarian regimes and generate a sample of 1387 regime-year observations from 1990–2010.<sup>8</sup>

We focus on the post-1990 period for two reasons. First, the end of the Cold War has significantly altered how authoritarianism operates (Howard and Roessler, 2006; Schedler, 2006; Levitsky and Way, 2010). As examined by Levitsky and Way (2010), the post-1990 world witnessed the rise of “competitive authoritarianism” – autocracies that combine the institutional features of totalitarian regimes and democratic governance, such as elections. It is thus common for scholars studying authoritarian elections to distinguish the post-1990 period in the empirical analysis (e.g., Donno, 2013; Bhasin and Gandhi, 2013; Wiebrecht, 2021). Second, widely used annual ratings of “democraticness” are considered more biased in the pre-1990 period. For instance, numerous studies report that before 1990, the scores published by Freedom House, a leading non-governmental organization studying democracy, systematically underrated Communist countries (Bollen and Paxton, 2000) and favored US allies (Steiner, 2014).

<sup>7</sup> See Appendix Table A2 for the list of countries by electoral systems. We consult a variety of sources, such as the IFES Election Guide (<http://www.electionguide.org/>), the IPU Parline Database (<https://data.ipu.org/>), and the Oxford series of election data handbooks edited by Dieter Nohlen and his colleagues. We have also consulted other datasets that focus more on documenting the systems of democratic elections, such as the Database on Political Institutions (Cruz et al., 2015) and the Varieties of Democracy (Coppedge et al., 2016).

<sup>8</sup> We also update and extend our dataset to 2014 for robustness checks (See Appendix Table A22). Overall, we show that our main results remain robust. Electoral autocracies are still significantly less repressive than non-electoral ones, and PR autocracies, compared to non-electoral and P/M regimes, are consistently less repressive. Interestingly, however, when we extend the data, we find that P/M elections are not distinctive from non-electoral autocracies. While the results are not entirely identical with the original results, substantively they are consistent with our argument that P/M electoral autocracies can be quite repressive, and the results based on the extended dataset may as well suggest P/M electoral authoritarian regimes have become more so in the recent years, in line with the global trend of democratic backsliding and right-wing populism.

<sup>5</sup> Cingranelli and Richards (2010, 403) similarly differentiates “civil rights and liberties” from “physical integrity rights.” Civil rights and liberties are defined as “the rights to free speech, freedom of association and assembly, freedom of domestic movement, freedom of international movement, freedom of religion, and freedom to participate in free and fair elections for the selection of government leader” that apply to the masses. Physical integrity rights, in contrast, are defined as “the rights not to be tortured, extrajudicially killed, disappeared, or imprisoned for political beliefs.”

<sup>6</sup> However, during violent conflicts, physical repression is more likely to be widespread and indiscriminate (Kalyvas, 2006).



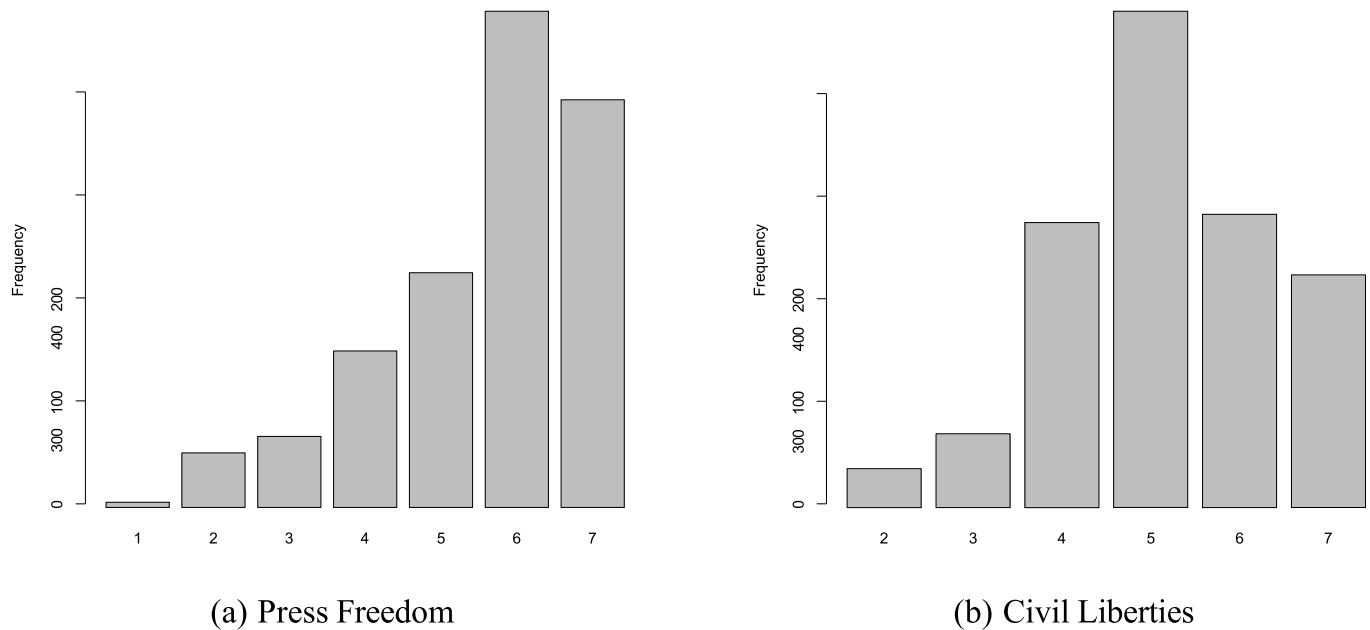


Fig. 1. Freedom House ratings for authoritarian regimes, 1990–2010.

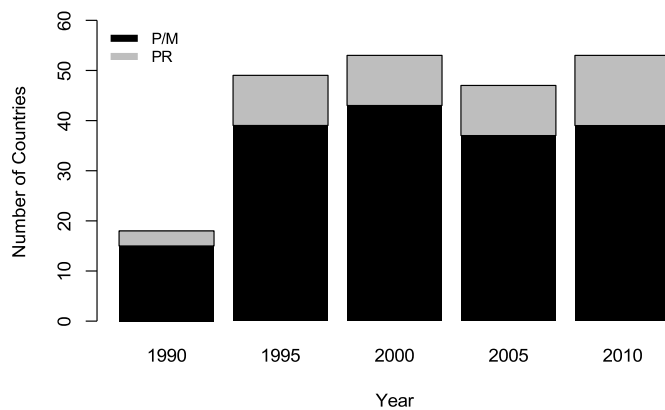


Fig. 2. Plurality/majority (P/M) and proportional representation (PR) systems in dictatorships.

Following previous studies of repression, we use press freedom and civil liberties to measure broad-based repression – our dependent variables. Existing studies emphasize that autocrats have increasingly used information to control and manipulate the masses. For example, [Guriev and Treisman \(2019\)](#) argue that “informational” autocracies use propaganda and censorship to signal competence and control the public. Similarly, [Hassan et al. \(2022\)](#) emphasize that autocrats have increasingly used information – by monopolizing and manipulating it – to control the masses. Following [Frantz and Kendall-Taylor \(2014\)](#), we use the Freedom House ratings, ranging from 1 to 7, with 7 indicating the most oppressive countries. As shown in [Fig. 1](#), though most authoritarian regimes are assigned high scores, there exists a wide variation. In our analysis, we standardize the ratings so that the mean and standard deviation are 0 and 1, respectively. By doing so, we can discuss the quantities of interest in terms of the number of standard deviations with respect to the outcome variables.<sup>9</sup>

We collected data on elections and electoral systems to code three key explanatory variables. First, we use a binary indicator that takes a

value of 1 if an authoritarian regime holds regular *legislative elections* at the national level as stipulated by the law and/or established precedents. The variable is coded as 0 if the country has never experienced elections or if elections have been suspended or interrupted due to conflict or regime authorities. The second and third explanatory variables are dummy variables coded as 1 to capture the electoral systems – plurality or majority (P/M) systems and proportional representation (PR) rules.<sup>10</sup> [Fig. 2](#) show that while the number of electoral autocracies has increased significantly between 1990 and 2010, the vast majority still use P/M rules. Our coding of electoral systems are specified in the Appendix.<sup>11</sup>

Our empirical focus on national legislative elections are appropriate for two reasons. First, legislative elections, along with political parties and legislatures, have been highlighted as key co-optative political institutions in the aforementioned literature. Second, as illustrated earlier, almost all authoritarian regimes now hold legislative elections at the national level. In our main results (Section 4.3), we include all elections, even those single party, as electoral autocracies. However, we also show that our results remain robust to moving single-party elections to the no-elections category (see [Table A10](#) in the Appendix).

We also control for a set of economic and demographic variables that can confound the relationship between electoral systems and repression. First, we include three variables that indicate the level of economic

<sup>10</sup> Our dataset shows that among 85 unique electoral authoritarian regimes, and only 8 of them (or 9%) experienced electoral system changes between PR and plurality/majority: Algeria, Kazakhstan, Kyrgyzstan, Madagascar, Morocco, Russia, Togo, and Venezuela. They each changed their electoral systems only once. Among them, Madagascar and Venezuela switched from PR to plurality/majority; the rest switched from plurality/majority to PR.

<sup>11</sup> [Table A1](#) in the Appendix tabulates the authors’ classification of electoral systems adopted by authoritarian regimes for their regularly-held national legislative elections in each year. As alternative measures, we also use institutional variables from the Database on Political Institutions (DPI) and find the same substantive results. In our analysis, plurality systems can take place in single member and multi-member districts. We control for district magnitude in one of the robustness checks and find consistent results.

<sup>9</sup> In one of our robustness tests, we use similar variables created by the Varieties of Democracy project ([Coppedge et al., 2016](#)) and the results are similar.

development: *GDP per capita*, *per capita economic growth rate*, and *per capita oil exports*.<sup>12</sup> We lag these variables by one year. The modernization theory suggests that more developed countries are more likely to witness elections and other signs of democratic transition. Meanwhile, autocrats in wealthy nations – often endowed with natural resources – do not need to employ broad repressive tactics against their citizens (Ross, 2012). Instead, regimes can use resource rents to provide patronage and distribute clientelistic goods to alleviate anti-regime sentiments and acquire incumbency advantage in non-democratic elections (Smith, 2004; Mahdavi, 2015). Second, we control for *population size* because dictators may find it relatively comfortable to tolerate limited participation and easy to control a small population without the need for repression. Existing studies have suggested that small countries are less likely to see the use of large-scale broad repression as they are less prone to intra-state conflicts (Fearon and Laitin, 2003). Lastly, provided that more diverse countries are more prone to internal conflicts, which often involve state-sponsored repression, we include the index of ethnolinguistic fractionalization (*ELF index*) from the Ethnic Power Relations Dataset (Cederman et al., 2010). Prior research has also discussed the adverse effect of ethnic diversity on regime stability, which in turn can shape constitutional design (Lijphart, 1999).

We also consider several political confounders. First, we include three dummy variables to control for different types of authoritarian regimes – *party*, *military*, and *personalist* – as defined by Geddes et al. (2014). The omitted category is the monarchy. As shown in prior studies, authoritarian regimes usually differ regarding their organizational ability to control rents and co-opt opposition members during domestic conflicts that likely involve repression. For instance, by comparing different forms of authoritarian governments, Fjelde (2010) concludes that military regimes are more likely to encounter internal conflicts than their party counterparts who possess stronger institutional capabilities to resist challenges against the authorities.<sup>13</sup> We have also controlled for the ratings of institutional autocracy from the Polity Project since one may argue that the dependent variables we have chosen to adopt measure the level of democracy or autocracy rather than repression.<sup>14</sup> It is important to point out that the classification of different authoritarian regimes is not a function of national legislative elections. Instead, as highlighted by Geddes et al. (2018), each regime is defined by the type of groups that seized the state power and created the authoritarian regimes. Moreover, we include prior *leader turnovers* from the Archigos data (Goemans et al., 2009), considering that a leadership change often creates political upheavals and uncertainty that may invite the use of broad repression (Ritter, 2014) or induce major policy and constitutional changes (Treisman, 2015). Finally, we control for *colonial experiences*. As discussed by Porta et al. (1999) and Acemoglu et al. (2021), colonial pasts may leave a footprint on governance, including institutional choices and government repression, in the present period.

#### 4.2. Model specification

We define our baseline model as follows.

$$y_{it} = \alpha + \beta(\text{Legislative election})_{it} + \mathbf{X}_{it}\gamma_x + \mathbf{C}_i\gamma_c + \tau_t + \epsilon_{it} \quad (1)$$

where  $y_{it}$  refers to a repression outcome observed in country  $i$  in year

$t$ . The vectors  $\mathbf{X}_{it}$  and  $\mathbf{C}_i$  include the control variables that vary and do not vary by years respectively. We also include year fixed effects,  $\tau_t$ , to address the time-varying unobserved effects.<sup>15</sup> Our baseline estimator is ordinary least squares (OLS).<sup>16</sup> We include cluster standard errors by country to account for within-country error correlations. The coefficient of interest is  $\beta$ . In other models, we replace the explanatory variable, *legislative election*, with other explanatory dummies that indicate the type of electoral systems in use. Table A2 in the Appendix presents the summary statistics of the variables discussed above. In Table A3, we present the correlation matrix of the control variables.

#### 4.3. Main results

In Table 1, we present the estimated correlates of broad repression in authoritarian regimes. The dependent variables are normalized Freedom House scores on civil liberties (odd columns) and press freedom (even columns). Here we only show the estimated coefficients of our main variables and present the full regression in the Appendix (Table A4). In Models 1 and 2, we compare electoral autocracies with their counterparts with no national legislative elections. In Models 3 and 4, we compare authoritarian regimes that adopt PR and their non-electoral counterparts. Models 5 and 6 compare P/M electoral autocracies with non-electoral ones. Consistent with existing works that argue authoritarian elections reduce the need for state repression, we show that elections are associated with less broad repression.

Now that we have established the negative link between elections and repression in autocracies, we move to test the effects of electoral institutions (Hypothesis 1). As shown in Models (7) and (8), electoral authoritarian regimes, autocracies that adopt P/M demonstrate a higher level of broad repression than PR ones. Additionally, according to Models (3)–(6), when compared with non-electoral autocracies, the size of PR coefficients is nearly twice as large as the size of P/M ones. More specifically, based on the coefficients from the same table, on average PR systems are associated with more than one standard deviation reduction in autocratic repression of press freedom and civil liberties. Overall, our results show that electoral institutions matter, and PR elections are much more effective than P/M in reducing mass repression.

Moreover, we examine the effects of district magnitudes, to rule out an alternative hypothesis that our results supporting H1 might be driven by district magnitudes rather than electoral systems. In Table 2, we now use different district magnitudes, rather than PR and P/M, as explanatory variables, using civil liberties (odd columns) and press freedom (even columns) as dependent variables. Models 1–4 show that both single-member district (SMD) and multi-member district (MMD) coefficients are significant and negative when we compare them to non-electoral autocracies.<sup>17</sup> The results once again indicate that there is a negative link between elections and repression in autocracies. However, the difference between SMD and MMD systems appears insignificant when we focus on civil liberties (Model 5). The results suggest the difference between district magnitudes alone do not determine the autocrat's repression decisions. Rather, electoral systems and the rules of translating votes into seats are important determinants of repression

<sup>12</sup> Many oil-rich countries around the world are monarchies in the Arabian Gulf with superficial legislatures, such as Saudi Arabia, where all members of its legislative body are appointed by the king. We control for oil because oil wealth enables generous handouts and thus reduce the need for broad-based repression.

<sup>13</sup> We follow Svoblik (2012), who questions the explanatory power of regime typology. We thus choose to use regime types as controls rather than our main explanatory variables.

<sup>14</sup> The polity score includes our key election-related independent variables. To avoid collinearity, we thus focus on the ratings of autocracy in our analysis.

<sup>15</sup> In the baseline model, we do not include country fixed effects because our main explanatory variable and controls for regime types and colonial legacy barely vary within individual regimes. However, given that there may exist additional country-specific idiosyncratic factors, including international pressure and previous history of democratic governments, which can drive both the choice of political institutions and the employment of broad repression, we conduct a robustness check that includes country fixed effects (see Table A15 in the Appendix). The substantive results are the same.

<sup>16</sup> We rerun the analysis with the ordered logit regression. The results are similar to those produced by OLS. See Table A7 in the Appendix.

<sup>17</sup> MMD systems include PR and certain plurality systems, such as block voting.

**Table 1**

Electoral systems and broad-based repression in dictatorships, 1990–2010. All models include controls and year fixed effects. We cluster the standard errors by country. The dependent variables for odd and even columns are the Freedom House ratings of civil liberties and press freedom, respectively. Full table is available in the Appendix.

	Election vs None		PR vs None		P/M vs None		PR vs P/M	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Legislative election (=1)	−0.746*** (0.125)	−0.670*** (0.147)						
PR (=1)			−1.138*** (0.203)	−1.085*** (0.177)			−0.668*** (0.243)	−0.699*** (0.179)
P/M (=1)					−0.639*** (0.128)	−0.556*** (0.157)		
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1244	1244	549	549	1024	1024	915	915

Note: \*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$ .

decisions and civil liberties.

#### 4.4. Robustness tests

We present the full results of our robustness in the Appendix (Section A4). In sum, our conclusion remains the same. First, we employ alternative estimation approaches, such as ordered logit regressions and regressions including random effects and lagged dependent variables.

Next, we consider alternative classification of electoral systems provided by Lijphart (1999). Using the updated NELDA dataset (Hyde and Marinov, 2012), we recode our explanatory variables by treating non-competitive elections the same as non-electoral autocracies. We also rerun the same analysis but only consider election years because the political logic of repression can differ when autocrats hold elections (Bhasin and Gandhi, 2013). We also try to exclude dictatorships that use mixed-members systems and those experiencing system changes since these countries may have been driven by omitted factors that cause both electoral reforms and the deployment of broad-based repression. We also conduct a cross-national regression because (1) many variables in the dataset do not vary a lot within individual countries and (2) we do not include country fixed effects in the main analysis.

Finally, in light of a work by Frantz et al. (2020), we include the degree of personalization and the spell of democracy – the number of years during which an authoritarian regime becomes a democracy. While we find that power personalization in authoritarian regimes are positively associated with repression, our main conclusion still holds.

#### 4.5. Substantiating causation

We carry out three additional tests to address the lack of exogenous variations in the explanatory variables. First, we conduct the same analysis but only include former colonies because many of these countries inherit the institutional choices of their colonial rulers.<sup>18</sup> Next, we conduct several matching estimations (Section A5 in the Appendix) as well as a series of sensitivity analysis to evaluate how the  $p$ -value statistics of our matching estimates change as we relax the assumptions that paired treated and control units with similar pre-treatment observed covariate values are nearly identical except for the treatment status (Rosenbaum, 2007; Keele, 2010). Finally, we employ instrumental-variable (IV) estimations (see Section A6). We instrument the presence of regular national legislative elections and the adoption of different electoral systems with three variables that measure the average proportions of electoral autocracies and two electoral systems in other countries from the same region (regional IV). The assumption is that these IVs will help to predict the presence of regular elections and the

electoral rules in use for that country. This assumption is plausible in the post-Cold War period, during which the international influence on regime transition is in particular salient (Way and Steven, 2010).<sup>19</sup> The results of our IV estimations are in Table 3, which show that only PR elections are associated with less autocratic repression. We present the full regression table in the Appendix.

In sum, we find that our main results are robust and lend support to the main hypotheses: electoral autocracies, in particular those using the PR systems, are associated with less repression against the general population.

### 5. Comparing plurality/majority and PR elections in authoritarian regimes

As theorized above, different rules matter in authoritarian elections as they create different electoral dynamics, which in turn shape the autocrat's decision to put mass media under surveillance and repress the freedom of speech and assembly of citizens. In this section, we test several distinctions that these two rules produce when elections take place in this section. In line with our main argument, we find that the proposed differential effects of electoral rules on the level of broad-based repression should speak to the effects of these systems on the presence of opposition groups in the legislature, the quality of elections, and the use of physical integrity violations – use of physical harm such as torture and imprisonment (Cingranelli and Richards, 2010; Bhasin and Gandhi, 2013; Frantz and Kendall-Taylor, 2014).

#### 5.1. Opposition participation and electoral integrity

Our theory suggests that PR rules will facilitate an inclusive electoral process with different parties or groups contesting in elections and winning seats. As elections become inclusive, moreover, we should expect that PR authoritarian elections are more tolerant toward the participation and representation of non-ruling political forces than plurality elections. That is, compared with plurality rules, elections under PR rules should be more likely to allow the opposition parties and their leaders to contest in elections. PR rules, in the same vein, should also be more likely to lead to a legislature of multiple parties. A multi-party national legislature has been considered by the literature as a key indicator of authoritarian political co-optation (Gandhi, 2008).

Second, given that the autocrat has the incentive to restrict civil liberties and media censorship to curb the influence of opposition parties and secure the dominance of inner-circle elites under plurality rules, these elections are less likely to be free and fair. Compared with PR

<sup>18</sup> As an alternative, we also restrict the sample to former British colonies (Table A19). The results are similar.

<sup>19</sup> A similar approach has been employed by several studies, including Miller (2015) and Bizzarro et al. (2018). We also conduct several diagnostic tests and can reject the null hypothesis that our IVs are weak at the conventional level of statistical significance ( $p < 0.05$ ).

**Table 2**

District magnitudes and broad-based repression in dictatorships, 1990–2010. All models include controls and year fixed effects. We cluster the standard errors by country. The dependent variables for odd and even columns are the Freedom House ratings of civil liberties and press freedom, respectively. Full table is available in the Appendix.

	SMD vs None		MMD vs None		MMD vs SMD	
	(1)	(2)	(3)	(4)	(5)	(6)
SMD (=1)	−0.567*** (0.161)	−0.501*** (0.157)				
MMD (=1)			−0.826*** (0.156)	−0.761*** (0.174)	−0.304 (0.234)	−0.346* (0.210)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	723	723	850	850	915	915

Note: \* $p < 0.1$ ; \*\* $p < 0.05$ ; \*\*\* $p < 0.01$ .

**Table 3**

Legislative electoral institutions and broad-based repression in dictatorships, 1990–2010: IV estimation.

	Election vs None		PR vs None		P/M vs None		PR vs P/M	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Legislative election (=1)	0.104 (0.177)	−0.074 (0.181)						
PR (=1)			−1.315*** (0.266)	−1.294*** (0.252)			−3.872** (1.742)	−4.124** (1.679)
P/M (=1)					0.555** (0.279)	0.277 (0.281)		
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1180	1180	521	521	960	960	879	879

Note: \* $p < 0.1$ ; \*\* $p < 0.05$ ; \*\*\* $p < 0.01$ .

racess, electoral irregularities should be more common in P/M races. In other words, among authoritarian regimes that allow regular national legislative elections, PR elections exhibit higher (perceived) fairness and integrity than their plurality counterparts do.

We test these implications (Hypotheses 2 and 3) with different dependent variables from the National Elections Across Democracy and Autocracy (NELDA) dataset (Hyde and Marinov, 2012) and the Varieties of Democracy (V-Dem) dataset (Coppedge et al., 2016). Both datasets are among the most comprehensive cross-national datasets, covering national elections and many different varieties of institutional features in both democratic and authoritarian states. In the following tests, we only focus on authoritarian regimes from the GWF dataset (Geddes et al., 2014) and those had elections between 1990 and 2010. Unlike the main analysis, however, each observation is country-election-year because the NELDA measures are only available for election years.

We focus on several binary variables from NELDA that capture the participation of opposition forces in elections. First, we consider a binary variable that indicates whether the opposition is permitted to participate in elections (*Allow*). We then consider a binary indicator that takes the value of 1 if the opposition is legal (*Legal*). We also include the binary variable, which notes whether the opposition leaders are not prevented from running by the regime (*Leader*). Finally, we consider another dichotomous indicator that takes the value of 0 if there were no widespread concerns that the electoral process would be rigged (*Fairness*).

We retrieve another two dependent variables from V-Dem. The first is a binary indicator for the presence of multiple legislative parties (*Multiparty*). The second is a continuous variable that measures the prevalence of voting irregularities in national elections. Voting irregularities are defined as any fraudulent acts such as voter ID duplication, ballot-stuffing, and false collation of votes. We multiple this variable by −1 so that a higher variable means fewer irregularities (*Integrity*).

We present the results in Table 4. All models include the same control variables and fixed effects as we have discussed above. We also cluster the standard errors by country. The unit of analysis is country-election-year. As hypothesized, elections under PR are indeed associated with the presence of opposition parties in both the elections and the national legislature. Moreover, PR rules are associated with higher perceived

electoral integrity and fairness.

## 5.2. Physical integrity violations

In the main analysis, we study the differential effects of legislative electoral systems on the use of broad repression in dictatorships. Here we consider whether electoral rules can affect the level of *physical* repression (Hypothesis 4). Unlike the broad restrictions on civil liberties and media freedom, the violation of physical integrity rights targets specific dissidents or opposition leaders (Cingranelli and Richards, 2010). Frantz and Kendall-Taylor (2014) study the use of both repressions in authoritarian regimes that introduce co-optative institutions. They show that political co-optation, through institutions such as political parties and representative legislatures, provides the autocrat with the informational advantage to target specific threats within the regime.

Based on our theory, PR-rule elections can inform the autocrat of different political interests, including those from the non-ruling political forces. It is thus likely that PR rules allow the autocrat to allocate regime resources to contain a small group of dissidents efficiently rather than oppressing the masses. In comparison, the plurality-rule elections provide him with the incentive to demonstrate their dominance and coercive capacity. While they may remain uninformed of their true popularity and unable to pinpoint the exact anti-regime forces within the regime, surveillance of the general population serves as a crucial survival instrument to curtail any popular movements against the regime. Repression in plurality electoral dictatorships, therefore, should be employed against both the general population and specific individuals as the autocrat seeks to prevent any potential threat of the elections becoming the momentum against him.

Empirically, if our argument is indeed in line with Frantz and Kendall-Taylor (2014), we should first observe greater physical repression in authoritarian regimes that allow regular legislative elections. Next, compared with their non-electoral and plurality counterparts, electoral dictatorships that adopt PR rules should exhibit more violations of physical integrity rights. While being associated with lower levels of restrictions on press freedom and civil liberties, PR-rule



**Table 4**

Participation of opposition in elections and electoral integrity in authoritarian elections. All models include control variables and year fixed effects. The standard errors are clustered by country.

	Allow (1)	Legal (2)	Leader (3)	Fairness (4)	Integrity (5)	Multiparty (6)
Proportional representation (=1)	0.136** (0.065)	0.155** (0.067)	0.206*** (0.060)	0.323*** (0.093)	0.718*** (0.233)	0.151** (0.070)
Source	NELDA	NELDA	NELDA	NELDA	V-Dem	V-Dem
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	244	244	244	244	235	244
Adjusted R <sup>2</sup>	0.144	0.238	0.154	0.194	0.121	0.346

Note: \*p<0.1; \*\*p<0.05; \*\*\*p<0.01.

**Table 5**

Electoral institutions and physical integrity violations in dictatorships. All models include control variables and year fixed effects. The standard errors are clustered by country.

	(1)	(2)	(3)	(4)
Natl legislative election (=1)	0.142*** (0.046)			
Proportional representation (=1)		0.270*** (0.053)		0.130** (0.062)
Plurality/majoritarian (=1)			0.107** (0.049)	
Controls	Yes	Yes	Yes	Yes
Observations	1181	521	961	880
Adjusted R <sup>2</sup>	0.161	0.321	0.199	0.188

Note: \*p<0.1; \*\*p<0.05; \*\*\*p<0.01.

elections will be correlated with higher levels of physical repression. Using the measure from the V-Dem dataset, we rerun the main analysis but now treat the violations of physical integrity as the outcome variable. The results are presented in Table 5. The findings support our conjecture that PR systems are associated with more targeted repression. The size of the PR coefficients is almost twice as large as the P/M coefficients.

### 5.3. Transparency

Our theoretical framework suggests that PR legislative elections are associated with less broad-based repression, including restrictions on media freedom and information. Thus, it is also likely for PR autocracies to be generally more open and transparent. Here, we test this implication (Hypothesis 5) by using three cross-national measures of transparency, all widely used by scholars broadly interested in a country's transparency. First, we consider the HRV Index. Developed by [Hollyer et al. \(2014\)](#), the HRV index employs item response theory (IRT) estimations to measure the degree of government transparency based on each country's sharing of its respective socioeconomic statistics to the World Bank's World Development Indicators (WDI). Second, we consult the index proposed by [Williams \(2015\)](#). Drawing from various existing global indices, he applies similar procedures used by Transparency International's Corruption Perceptions Index (CPI) to create an aggregate measure of transparency that jointly considers informational openness and political accountability.<sup>20</sup> However, as the political accountability component of the Williams Index includes the data from the Freedom House, the outcome of interest, we will only consider its first component, namely the combined index of informational openness in the following analysis. Third, we use the "transparent laws" (v2cltrnslw) variable from the Varieties of Democracy (V-Dem). The variable measures whether the laws are "clear, well publicized, coherent, relatively

stable from year to year, and enforced in a predictable manner." We also control for aid dependency, as the outcome measures might be explained by external pressure by international actors.

We present the results in Table 6.<sup>21</sup> In the first three models, we compare the degree of transparency in PR and non-electoral authoritarian regimes. In Models 4-6, we only include electoral dictatorships to examine whether autocracies that employ PR systems are indeed associated with more openness and better information flows. Regardless of the specific measures, we find that all coefficients of PR systems are positive and statistically significant in most models. While the coefficients here by no means provide definitive causal estimates, the findings in Table 6 lend support to one of the key empirical implications of the proposed argument.<sup>22</sup>

## 6. Conclusion

Prior research on the post-Cold War authoritarian regimes has provided a wealth of insights on how incumbents use co-optation or repression to strengthen their rule. Yet, the relationship between the two survival strategies has remained less clear. In this article, we show that not all non-democratic elections lead to the same repression outcomes. Bridging the literature on authoritarian politics and democratic electoral institutions, we examine the effects of electoral systems in dictatorships. On the one hand, proportional representation systems facilitate co-optation of opposition parties into the legislature. At the same time, these elections inform the dictator of diverse ideological preferences in the society and locate potential threats. The leader thus has incentives to repress particular dissidents rather than the general public. On the other hand, regimes that adopt plurality or majority rules have more at stake to win most votes in individual districts. To ensure an electoral victory, the autocrat relies on more broad-based repression to keep tabs on the general population as well as opposition elites.

Analyzing all authoritarian regimes between 1990 and 2010, we find that national legislative elections, only for those employing PR rules, are associated with lower levels of broad repression. Compared to plurality dictatorships, PR regimes show significantly less repression of civil liberties and press freedom. Consistent with our theoretical framework, we also provide evidence that PR dictatorships are more likely to have multiparty legislatures whereas plurality regimes are more likely to resort to voting irregularities than their PR counterparts. Lastly, we report that PR results in less broad-based repression because the information it generates allow the regime to instead deploy more focused repression.

This study adds to the literature that examines the relationship between co-optation and repression, which [Wintrobe \(1998\)](#) characterizes as the two fundamental tactics for any ruling elites that seek to maximize power. Our findings suggest that studying how elections – in particular,

<sup>20</sup> Unfortunately, the CPI, arguably the most popular measure of transparency, includes too many missing data for authoritarian regimes around the world.

<sup>21</sup> Full results are shown in Appendix Table A26.

<sup>22</sup> We also consider the upper and lower bounds of the HRV index and the results are similar.

**Table 6**  
Government transparency and elections in authoritarian regimes. All models include control variables and year fixed effects. The standard errors are clustered by country.

	PR vs None			PR vs P/M		
	HRV	Williams	Vdem	HRV	Williams	Vdem
	(1)	(2)	(3)	(4)	(5)	(6)
Proportional representation (=1)	0.782*** (0.214)	7.327*** (1.608)	0.984*** (0.266)	0.628** (0.311)	6.132*** (1.935)	0.368* (0.211)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	473	531	517	742	890	886
Adjusted R <sup>2</sup>	0.584	0.688	0.315	0.435	0.467	0.266

Note: \*p < 0.1; \*\*p < 0.05; \*\*\*p < 0.01.

electoral institutions – affect broad repressive tactics is essential for advancing our understanding of authoritarian politics. Perhaps more importantly, this article yields implications for those interested in the politics of non-democracies that not all authoritarian elections are equal. We have demonstrated that authoritarian institutional details, which many overlook, can have significant consequences on important political outcomes.

In future research, we hope to extend our analysis beyond legislative elections and examine executive elections. As authoritarian incumbents strive to maintain power, the rules guiding executive elections may play a considerable role in the decisions they make.<sup>23</sup> Furthermore, future research should explore the origins of authoritarian institutions (Pepinsky, 2014; Chang and Higashijima, 2023). Though this paper has empirically addressed the factors that may have shaped institutional choice, existing research lacks theoretical framework to shed light on this very important topic to better understand authoritarian politics. Finally, the effects of nominally democratic institutions on repression should be examined in the context of the recent rise of populism (Pudington and Tyler, 2017) and democratic backsliding (Littke and Meng, 2024) in authoritarian and hybrid regimes.

**CRedit authorship contribution statement**

**Chao-Yo Cheng:** Writing – original draft, Visualization, Validation, Project administration, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Yuree Noh:** Writing – review & editing, Writing – original draft, Validation, Investigation, Conceptualization.

**Declaration of competing interest**

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

**Data availability**

Data will be made available on request.

**Appendix A. Supplementary information**

Supplementary Information to this article can be found online at <https://doi.org/10.1016/j.electstud.2024.102791>.

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<sup>23</sup> Note that in the 85 unique authoritarian regimes in our dataset, only 9 (11%) hold executive elections. We also control for the existence of executive elections, and our results remain robust (see Appendix Table A21).

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