

Autocratic Elections: Stabilizing Tool or Force for Change? *

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December 9, 2015

Abstract

Do elections reduce or increase the risk of autocratic regime breakdown? We address this contested question by distinguishing between election *events* and the *institution* of elections. We argue that elections stabilize autocracies in the long term, but at the price of short-term instability. Elections are conducive to regime survival in the long run because they improve capacities for co-optation and repression, but produce short-term instability because they serve as focal points for regime opposition. Drawing on data from 1946–2008 and 259 autocracies, we find clear evidence that elections increase the short-term probability of regime failure. The estimated effect is retained, for example, when accounting for the endogeneity of autocratic elections – this is vital, since some autocrats may (not) hold elections because of perceived effects on regime survival. We also find that elections stabilize autocratic regimes in the medium- to long-term, despite their destabilizing immediate effects. These temporal effect-patterns are present for both executive and legislative elections, and are very robust, for example, to using different measures, control variable strategies, and estimation techniques. However, both the effect-patterns are much clearer for multi-party autocratic elections than completely uncontested elections.

*The authors would like to thank Jessica Weeks, XX XX XX, as well as participants at the 2014 Annual Meeting of European Political Science Association, the 2015 Norwegian Political Science Association meeting, and the 2015 Annual Meeting of the International Studies Association. Nygård's work on this project was partially funded by the Research Council of Norway grant # 217995.

1 Introduction

Elections are a hallmark of democracy. But, a large, and growing, share of dictatorships worldwide also regularly hold elections (Miller, 2013), while employing a range of tactics to ensure these elections are not truly contested (see, e.g., Levitsky and Way, 2010; Schedler, 2006, 2013). This pattern has encouraged a rapidly expanding literature on the causes and effects of autocratic elections. Two closely related questions are at the core of this literature; why do some dictatorships hold elections, and how do elections, in turn, affect regime survival? The answers to the latter question are strikingly mixed, as many prominent studies underline the stabilizing effects of autocratic elections, whereas others highlight their de-stabilizing effects. Elections may allow dictators to co-opt rivals (Gandhi, 2008), gain legitimacy (Schedler, 2002), deter the opposition (Magaloni, 2006), and learn about regime (and opposition) strength and standing in the broader population (Little, 2012). Yet, they may also cause the downfall of autocrats. The regime might lose at the ballot box to a coordinated opposition (Bunce and Wolchik, 2010), or elections can trigger protests (Beaulieu, 2014), popular revolutions (Tucker, 2007), and coup d'états (Wig and Rød, 2014).

Building on these different insights – but making a critical distinction between the short-term and long-term effects of autocratic elections – we present an encompassing argument that helps clarify this fascinating issue. Autocratic elections alleviate opposition collective action problems, and are therefore detrimental for regime survival *in the short-term*. But, electoral institutions also facilitate other processes that bolster the repressive and co-optive capacities of autocratic regimes that are relevant for regime survival *in the longer run*. Thus, we argue that while election *events* are destabilizing just before or after an election, the *institution* of elections stabilize autocracies in the long-term.

Elections held more than 30 years ago in two neighboring countries illustrate this dual nature of autocratic elections. On July 4 1982, presidential and legislative elections were held in Mexico, which was then an autocracy ruled by the Institutional Revolutionary Party (PRI). The presidential election was, as widely expected, won by the PRI with 74.4% of the vote, with the runner-up, the National Action Party (PAN), capturing only 16.4%. This was only one among many elections where different opposition parties were allowed to compete, and – in legislative elections – often gained non-trivial numbers of legislature seats. However, the PRI notoriously used these institutionalized elections to co-opt and deter their opponents, and they are widely considered a crucial component underlying the longevity of the PRI regime (e.g., Magaloni, 2006). Indeed, with the central role of the Mexican case in the literature, the experiences of the PRI regime have arguably

helped shape the more general notion of elections as stabilizing tools for autocrats (for reviews, see below and Gandhi and Lust-Okar, 2009). Nevertheless, in the same year (March 7 1982), an election was held across the border, in Guatemala. The election was, as expected, won by the hand-picked regime candidate, General Rodríguez. The Guatemalan security services explicitly anticipated the *weeks following election day* to carry increased risks to the military regime (see Wig and Rød, 2014), and widespread allegations of electoral fraud then also ensued, setting off a spiral of protest and violence threatening the country with civil war. On March 23, a group of officers instigated a coup to ‘restore order’, removing the incumbent dictator Lucas Garcia and consolidating power.

These two cases illustrate our argument. In Mexico, the 1982 election was part of the larger electoral-institutional framework that contributed to consolidating PRI’s rule over the long-term by allowing for more effective co-optation and repression of regime opponents. In Guatemala, the 1982-election initiated a process involving opposition collective action that eventually ended the regime. In PRI-Mexico, elections brought long-term stability, while in Guatemala the 1982-election triggered regime breakdown.

The most important contribution of this paper is empirical; we provide the first comprehensive large-n tests explicitly distinguishing between long-term and short-term effects of elections on autocratic regime durability. Drawing on data from 259 autocratic regimes (from 115 countries; 1946–2008), we find clear, and very robust, evidence that elections destabilize autocratic regimes in the short-term, but correspond with increased survival probability after the turbulent post-election period has passed. In line with our theoretical expectations, further tests show that this pattern is much clearer for multi-party autocratic elections than for uncontested elections.

Our large-n analysis thus provides novel and robust evidence on the short- and long-term effects of elections on regime breakdown. Granted, the time dynamics that we identify parallel those identified for how time since regime inception affects chances of breakdown. Bienen and van de Walle (1991, 1992) document that the risk of a leader losing power, especially in dictatorships, declines over time, and similar results are found in more recent work on regime consolidation (Svolik, 2008, 2015). However, we identify short- and long-term effects of elections on regime breakdown *net of* regime age/duration, suggesting a separate relevant dynamic from that of time since a regime’s inception. While our conclusion on the destabilizing short-term effect mirrors those of some previous in-depth case studies, for example on how elections contributed to the Color Revolutions in post-Soviet states, it contrasts with other such studies as well as prominent theoretical arguments highlighting the pre-dominantly stabilizing impact of elections.

Our analysis also contributes to the literature by explicitly addressing the endogeneity of electoral institutions. We recognize that holding an election is, at least sometimes, partly a function of strategic calculations made by the autocrat. For example, a dictator may be hesitant to adopt elections if his position is already precarious (and he thus strongly prioritizes reducing short-term threats), or he may consider elections (costly) tools for survival and try to adopt them exactly when perceiving grave threats. In other words, holding elections could be endogenous to regime stability. However, elections might also result from more exogenous forces, such as external pressure to hold elections by powerful international actors.¹ In our empirical strategy, we exploit this latter fact, using the international diffusion of elections to instrument for elections in a given country, to account for the possibility that elections are (partly) endogenous. Even when accounting for this (and controlling for direct effects of regime breakdowns in neighboring countries), we find that autocratic elections (likely) cause increased probability of regime failure in their immediate aftermath. While threats to causal inference always remain, in particular when relying on observational data, we still consider this fairly strong evidence of a short-term destabilizing effect of elections.

After presenting relevant literature in Section 2, we specify our argument on how the effect of elections on regime break down changes over time in Section 3. We present and discuss the data in Section 4, and the empirical analysis in Section 5.

2 Literature review

Although different dictators can be motivated by different combinations of objectives (Wintrobe, 1998), a key goal for many, if not most, is to remain in power (Bueno de Mesquita et al., 2003). Thus, autocrats and their close allies will evaluate their actions and policy choices based on whether they enhance or reduce their survival chances. Decisions on whether to hold elections or not – and on whether these elections should allow for multiple parties being represented – should not be qualitatively different (although, naturally, such choices may have to be taken under strong institutional and other constraints). This is reflected in the literature; various explanations of autocratic elections presume elections are held because dictators *believe* elections will help them retain power (see also Gandhi and Lust-Okar, 2009). The literature has further assessed *why* elections may stabilize autocracies, and various studies suggest that elections stabilize autocracies by affecting *co-optation*, *legitimacy*, or *information*.

The co-optation rationale is highlighted by several authors proposing that elections and electoral

¹External factors, for example, played an important part in driving elections in Africa in the 1990s, see e.g., Bratton and van de Walle (1997).

institutions neutralize groups that could otherwise pose a threat to the regime (Geddes, 2006; Gandhi and Przeworski, 2006, 2007; Gandhi, 2008; Magaloni, 2006, 2010; Magaloni and Kricheli, 2010; Svobik, 2010; Wright, 2011; Wright and Escriba-Folch, 2012; Boix and Svobik, 2013). Co-optation through electoral institutions can be targeted at (external) opposition actors (e.g., Gandhi and Przeworski, 2007), and potential threats within the regime (e.g., Boix and Svobik, 2013). Elections can be used to co-opt threats directly – by offering opposition groups and individuals performing well in elections spoils through legislature seats and other channels of influence (Gandhi and Przeworski, 2006, 2007) – or more indirectly – by boosting the *credibility* of autocrats’ promises to share power (Magaloni and Wallace, 2008; Svobik, 2012; Boix and Svobik, 2013). Such strategies may, however, require effective institutional apparatuses for successful implementation, and Seberg (2015) reports that elections only stabilize autocracies in high-capacity states.

Others focus on legitimacy, stressing that elections, even when far from free and fair, provide authoritarian regimes with measures of popular acceptance and recognition of their authority (e.g., Schedler, 2002; Levitsky and Way, 2010). Although multi-party autocratic elections are rigged, the fact that opposition parties are competing might provide authoritarian regimes with some legitimacy. Even (non-competitive) elections without opposition parties may serve a legitimizing role, as noted in the early literature on Soviet elections (see Karklins, 1986, 449). Election-induced legitimacy can also enhance the regime’s international standing, and, for instance, increase aid flows and other benefits from outside actors (see Van de Walle, 2002; Beaulieu and Hyde, 2009), which, in turn, can be used for bolstering regime survival.

Finally, a large literature highlights how elections entail mechanisms for sending and receiving informative signals between the regime and its opponents (Zaslavsky and Brym, 1978; Karklins, 1986; Magaloni, 2006; Gandhi and Przeworski, 2007; Wright, 2008; Cox, 2009; Blaydes, 2011; Fearon, 2011; Malesky, 2011; Cheibub, Hays and Savun, 2012; Little, 2012; Wig and Rød, 2014; Miller, 2014). More specifically, elections allow for sending signals of *strength* or *weakness*. This, in turn, enables more efficient bargaining, which could potentially help the regime and its potential opponents avoid costly armed conflicts. For example, mobilizing supporters and the security apparatus on a national scale around election time sends a costly signal of regime strength. By rolling out an impressive electoral campaign machinery and whipping up popular support, the regime credibly signals to (1) the opposition that armed confrontations are futile, and to (2) internal elites that coups will be opposed by numerous supporters. Furthermore, allowing the opposition to compete and organize in elections – albeit under tight control – enables regimes to gauge and update assessments of opposition strength, subsequently allowing for adjusting and targeting concessions and

repressive measures (see Little, 2012). Further, Miller (2014) details how multi-party autocratic elections allow citizens to credibly signal dissatisfaction, and reports that ruling parties respond to negative electoral shocks by, for instance, increasing education and social welfare spending.²

In sum, elections – and particularly multi-party elections – may help *stabilize* autocracies through co-opting opposition, boosting domestic and international legitimacy, and through providing informative signals on the relative power between the regime and opposition. Indeed, various studies on *electoral institutions*, such as legislatures and parties, point to stabilizing net effects. Gandhi and Przeworski (2007) find that autocracies that ‘institutionalize sufficiently’ (i.e., have the predicted number of parties given opposition strength) are more durable. Magaloni and Wallace (2008) find that autocracies with parties last longer, and cite this as evidence for a stabilizing effect of autocratic elections. Svobik (2012) and Boix and Svobik (2013) report that *legislatures* increase autocratic survival prospects. These results corroborate the stabilizing-elections proposition. But, three issues – all of which are addressed in our empirical analysis – remain.

First, these contributions do not directly study elections, but associated phenomena such as legislatures and parties (but, see Seeberg, 2015). This is problematic, since the presence of such institutions also tap into other factors, such as opposition organization (opposition parties) or how institutionalized power-sharing arrangements are (legislatures). Second, these studies – as is true for almost all existing studies in this field (Pepinsky, 2014) – fail to deal sufficiently with elections being endogenous to pressures against the regime, and the subsequent choices made by autocrats. Although, it is common to control for other variables affecting regime durability, this does not adequately address endogeneity concerns. Third, these studies do not distinguish between the long-term and short-term effects of elections on regime durability.

Then again, there is no consensus on whether or not elections, *on net*, stabilize autocracies. Hadenius and Teorell (2007) find that multi-party autocracies are less durable than other autocracies (see also Teorell, 2010). There is also a literature highlighting that autocratic elections may induce democratization more specifically (e.g., Hadenius and Teorell, 2007; Brownlee, 2009; Miller, 2012, 2013). For example, Lindberg (2006) – studying the Sub-Saharan African context – highlights that holding repeated elections, although manipulated and lacking in competitiveness, may induce norms and learning that are conducive to substantive democratization in the longer run. Further, there is a large statistical literature on how inconsistent regimes – i.e. those mixing autocratic and democratic institutions – are less durable than purely democratic *and* purely autocratic regimes (Gurr, 1974; Gates et al., 2006; Epstein et al., 2006; Goldstone et al., 2010; Knutsen and

²In non-competitive elections, vote abstention can serve as such a signal (see, e.g., Karklins, 1986).

Nygård, 2015), and more often experience civil war (Hegre et al., 2001; Goldstone et al., 2010). One common way to mix autocratic with nominally democratic institutions is through introducing multi-party elections, with a minimum semblance of competition, in otherwise autocratic regimes. However, Knutsen and Nygård (2015) show that such institutional combinations, captured by the concept of ‘Competitive Authoritarian’ regimes (Levitsky and Way, 2002, 2010), do not explain why mixed regimes, in general, are more fragile than both democracies and autocracies. Likewise, Brownlee (2009) does not find that Competitive Authoritarian regimes are particularly unstable – or stable – autocracies, and Brownlee (2007) does not find any clear net effect of elections in autocracies on regime stability.³

Why do these results not point clearly to a stabilizing effect of autocratic elections, given the arguments reviewed above? The answer is, simply, that there are countervailing mechanisms through which elections – and, again, particularly multi-party elections – may destabilize autocracies. Wig and Rød (2014) find that autocratic elections in which the opposition displays strength substantially increase the risk of post-election coups. A strong opposition performance in a multi-party autocratic election signals a non-negligible probability of a successful popular revolt, inducing elites to instigate preemptive coups. Further, Cederman, Gleditsch and Hug (2013) demonstrate that elections increase the risk of ethnic civil wars. More generally, violence, including repression by the regime to counter potential threats, tends to increase around elections (Davenport, 1997; Hafner-Burton, Hyde and Jablonski, 2014). Elections are also often followed by (potentially regime-challenging) protests (Beaulieu, 2014), and even threats of such collective action may induce autocrats to abstain from (obviously) manipulating elections, or to leave office should they lose (Magaloni, 2010). Experimental studies report that elections make individuals more likely to engage in various forms of collective action (including contentious collective action such as protests and riots; see Baldwin and Mvukiyehe, 2015), and case studies, for instance on the fairly recent Color Revolutions, indicate that anti-regime protests following (flawed) autocratic elections have been instrumental in bringing regimes down (Thompson and Kuntz, 2004; Tucker, 2007; Bunce and Wolchik, 2010; Levitsky and Way, 2010; Baev, 2011).

³However, Schedler (2013) reports evidence that the more particular strategies that regimes employ to retain power depend on whether they are ‘Hegemonic’ or ‘Competitive’, with the former relying more heavily on brute repression and electoral fraud and the latter on subtler strategies such as media censorship.

3 The dynamic effects of elections on autocratic survival

Elections may impact on the survival chances of autocratic regimes through different channels. Some seemingly carry a negative effect on autocratic survival, and others a positive. Hence, the current lack of consensus on whether elections have a *net* positive or negative effect on autocratic regime survival is understandable. Seeberg’s (2014) results show a positive net association between elections and survival, but only when the regime exerts strong control over the economy or presides over states with high administrative capacity. However, there is another important factor conditioning the effect of autocratic elections, about which the previous literature has been insufficiently clear, namely the passage of *time*. We expect that autocratic elections are dangerous to the regime in the immediate proximity of elections. But, if the regime is capable of ‘riding out the storm’, regime survival will be bolstered long-term. We test this empirically, but first provide the argument motivating the analysis.

As we detail below, our expectations stem from the observation that the election-related mechanisms that supposedly de-stabilize regimes work with a short time-lag, and most stabilizing mechanisms with far longer lags. Figure 1 foreshadows our implications, by summing up the expected temporal dynamic. The left panel shows how the *current* probability of a regime breakdown – in a *hypothetical* regime – increases close to election day, and is very high immediately thereafter, before falling to below its initial level. This is compared to a counterfactual regime without elections, and a constant probability of breakdown. The right panel reports the resulting differences between these two regimes in cumulative probabilities of having broken down before or at a particular date. If the ‘break-even point’ is not too far removed from the election, even moderately patient regimes might prefer holding elections, despite their short-term destabilizing effect.

3.1 Short-term instability

The discussion above pointed towards a group of mechanisms through which elections may reduce autocratic survival prospects. Importantly, we note that these were all related to elections improving the (short-term) prospects for the opposition to organize anti-regime collective action. Rigorous lab- and field experiments have indeed shown that elections induce individuals to participate in various types of collective action, and ‘contentious’ collective action in particular (see, e.g., Baldwin and Mvukiyehe, 2015), and this could pose a threat to autocratic regimes. Let us elaborate:

Autocratic regimes may persist, for instance through employing repression or threatening physical violence, even if widely unpopular among citizens. This is, in large part, due to the difficulty

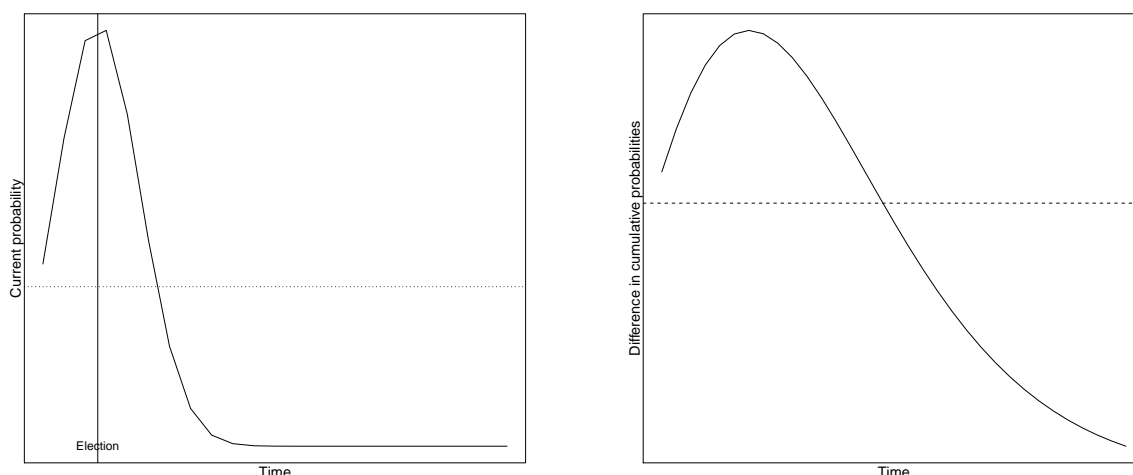


Figure 1: Expected dynamic effect of autocratic election on regime survival. Current probabilities of regime breakdown for regimes with and without election (left) and difference in cumulative probabilities (regime with election – regime without election) (right). The flat line in the left panel simulates the regime without election, and the flat line in right panel represents the ‘break-even point’ for the cumulative probabilities (i.e., when the difference in cumulative probabilities equals 0).

for regime opponents to organize effective collective action (e.g., Kuran, 1989). It is virtually impossible for any single opposition member to impact on incumbent survival prospects, unless effectively coordinating with other individuals. Such coordination is made difficult by the repression of freedoms of speech, media and association in autocracies (Møller and Skaaning, 2013), disabling opposition members to assemble or engage in necessary communication. Further, not only the probability of success hinges on coordination – acting in large crowds also reduces the probability of individuals being detected and punished by the regime (DeNardo, 1985; Weede and Muller, 1998; Tullock, 2005).

Hence, overcoming collective action problems is perhaps *the* critical task to solve for potential challengers in order to effectively contest autocratic regimes through revolutionary uprisings (Acemoglu and Robinson, 2006). Coup d’états may be related to *less difficult* collective action problems, due to smaller numbers of instigators and tighter bonds between them (Houle, 2009). Nevertheless, organizing successful coups also requires co-operation, coordination and impeccable timing from all involved actors (see Luttwak, 1968). Hence, both coups and revolutions, to paraphrase Kuran (1989), need a ‘spark’ for ‘the prairie fire’ to start. Acemoglu and Robinson (2006) highlight that economic crises may serve as such sparks, and revolutions (Knutsen, 2014), coups (Powell, 2012), regime-elite splits (Reuter and Gandhi, 2011), and regime breakdowns (Przeworski and Limongi,

1997; Kennedy, 2010) are, empirically, more frequent immediately after economic crises.

However, qualitative-historical case studies highlight that holding elections may also serve as sparks (e.g., Tucker, 2007; Levitsky and Way, 2010). This is why elections may destabilize autocratic regimes in the short term. First, elections constitute easily identifiable ‘focal points’ around which expectations of different opposition actors – who are otherwise not able to freely communicate – can converge. When ‘first movers’ among the opposition are able to coordinate, a collective action logic may generate a further snowballing effect (Kuran, 1989; Lohmann, 1994), as both the probability of success increases and the cost of participation decreases in the number of participants. For example, Beissinger (2002, 86) notes that the 1989 electoral campaign in the Soviet Union ‘became a lightning rod for oppositional mobilization’, and thus played a critical role in undermining the communist party and precipitating the regime’s breakdown. Similarly, Tucker (2007) highlights how such mechanisms were vital in explaining the Color Revolutions in Serbia, Ukraine, Georgia and Kyrgyzstan in the early 2000s, focusing on the role of major electoral fraud (see also Thompson and Kuntz, 2004):

For once, the entire country is experiencing the same act of abuse simultaneously; in the language of the collective action literature, major electoral fraud provides an obvious focal point for action. People no longer have to choose whether to react alone. Especially as crowds grow, individuals know that they will only be one of many, many people protesting, and thus much less likely to be punished individually (Tucker, 2007, 541).

In certain instances, elections also provide an extra boost to opposition collective action through revealing information about the regime’s inherent weakness (Kuran, 1995). This may change the opposition members’ assessments of costs and benefits involved in challenging the regime – and, importantly, also the expectations on how others view these costs and benefits. As Pop-Eleches and Robertson (2011, 6–7) put it,

authoritarian regimes are generally low information environments with few reliable sources of information on the strength of current incumbents and their opponents. Periodic elections, however, provide the incumbent leadership, other key domestic elites and members of the opposition with the opportunity to update information on the relative strength of the incumbent coalition and alternatives. When the new information reveals unanticipated regime weakness (or opposition strength), it can lead to serious challenges to the status quo.

Potential challengers updating their information on the regime’s weakness after authoritarian elections is one reason why regime-altering actions are more likely in the wake of elections. Sometimes – because of the regime misjudging opposition strength or because of crafty opposition strategies – authoritarian incumbents even lose elections outright, despite employing different measures for rigging them (see Bunce and Wolchik, 2010; Howard and Roessler, 2006; Magaloni, 2010). This sends a clear signal of regime weakness, thus lowering expected costs of challenging the incumbent, while increasing the incumbent’s expected costs of fighting back (Cheibub, Hays and Savun, 2012). More generally, Beaulieu (2014) details how elections are frequently followed by election-related protests. This increases risks of regime breakdown, either because the protests develop into a popular revolution, or through spurring a coup d’état, which becomes more likely in the presence of protests (Powell, 2012). Elections, in sum, provide different government challengers with time-limited ‘windows of opportunity’ for changing the regime.

It also follows that elections engendering *better* opportunities for opposition collective action should induce more short-term instability. Hence, competitive autocratic elections (i.e., elections with multiple parties and a minimum measure of contestation) should be more destabilizing than non-competitive. Still, one might expect even uncontested or perfectly rigged (and thus largely uninformative) authoritarian elections – given their political nature and, importantly, their time-limited character – to sometimes serve as focal points, enabling individuals to gather and contest the regime. This is one reason why our baseline empirical models include all types of autocratic elections, including uncontested. If anything, this should attenuate results, biasing against our hypothesis. Additional tests, separating between multi-party and other autocratic elections, confirm this.

3.2 Long-term stability

If elections function as triggers of instability, why do so many autocrats (at least consent to) hold elections in the first place? Are these autocrats simply ill informed, or even irrational? As the literature review indicated, this is not necessarily the case. Rather, there are likely important *long-term benefits* on regime survival from holding autocratic elections. Elections allow autocrats to obtain information about threats (enabling more effective repression or co-optation over the coming years), help build organizational capacity to further mitigate threats, and improve regime legitimacy. We propose that one common feature of these mechanisms is that they relate to the longer term capabilities to mitigate regime threats.

First, because they reveal information about where opposition strongholds are located and

where resources are most effectively employed, contested (Magaloni, 2006; Blaydes, 2011) – but also, to some extent, uncontested (Karklins, 1986; Malesky, 2011) – autocratic elections may improve opportunities both for targeted co-optation and targeted repression. Elections often culminate in distributing seats in (multi-party) legislatures. These legislatures provide a forum for negotiation, and a mechanism through which the opposition (or even mavericks within the ruling party) can achieve policy concessions and positions over the coming 4-5 year period (Gandhi, 2008). Legislatures also provide incumbents with a venue for revealing credible information to the entire ruling coalition, for instance about the true state of the economy (Myerson, 2008), and for monitoring and sanctioning delegate behavior (thereby incentivizing relevant political actors to keep in line with the regime, see Malesky, Schuler and Tran, 2012). Further, the willingness to hold elections sends a credible signal that the autocrat does not intend to fully monopolize power, particularly when elections involve filling legislature seats with opposition-party candidates (or providing different ruling-party factions with their independent power bases). This reduces the incentives of different actors to work for overthrowing the autocrat, thereby reducing probability of regime change over the coming years (Magaloni and Wallace, 2008; Svobik, 2012; Boix and Svobik, 2013).

Second, conducting successful authoritarian elections requires building organizational capacity (Magaloni, 2006), as organizing such elections involves activating and co-ordinating numerous pro-regime actors within the party, the bureaucracy, and the security apparatus (see also, e.g., Zaslavsky and Brym, 1978). Elections may thus function as training or capacity building devices, where different regime actors make concerted efforts to improve co-optive or repressive capabilities. There is no reason to expect that such increases in capacity should be reverted shortly after the election is over.

Third, the long-term survival of regimes also depends on the inherent preferences of citizens (and other relevant actors, such as neighboring states and major powers), concerning whether, and how intensively, they favor alternative regimes over the incumbent. This determines how much effort and resources these potential enemies would willingly expend to bring the regime down. If the regime is largely construed as ‘legitimate’ within the population, or at least within vital supporting groups, the regime needs to employ less effort and resources to retain power. Elections – especially if they are not unequivocally identified as manipulated – may increase domestic and international legitimacy (Schedler, 2002, 2006), thereby improving long-term survival capacity.⁴

How to properly measure the long-term effect of elections is, of course, a difficult issue; should

⁴However, even the regularly held local Soviet elections, where the sole Communist Party candidate routinely obtained 99% of the vote, was considered by the party as ‘legitimizing the leadership in the mass mind’ (Jacobs, 1970, 62).

we measure time since the last election, time since the regime’s first election, or is the cumulative number of elections held more appropriate? The answer depends, in part, on what theoretical mechanisms we believe are more relevant. For instance, the signalling effects should likely dissipate after a handful of years and particularly after a new election (which provides a new signal) is held. In contrast, the building-of-organizational-capacity mechanism could linger on for longer. Thus, we experiment with alternative measures below, although ‘time since last election’ is our baseline measure.

In sum, we propose that holding elections will increase the probability of an autocratic regime breaking down close to the election, but bolster survival probability in the years ahead. The latter effect may even be so strong that it dominates the increased short-term risk, inducing many dictators to consider elections important tools for retaining power. More precisely, then, whether an autocrat has the incentives to hold elections or not depends on how much he values the long-run increase in survival probability versus the short-run reduction. In other words, it hinges on the autocrat’s ‘discount factor’, i.e., how willing he is to postpone future benefits for current gain. We will deal more thoroughly with foresighted autocrats having incentives to hold elections in some contexts, but not in other, below. These considerations imply that elections do not occur randomly in autocracies, further implying that empirically estimating the *causal effects* of elections requires a more elaborate identification strategy than investigating the correlation between them. Below, we adjust for the endogenous selection of elections when estimating its short-term and long-term effects. If our argument is correct, we expect autocratic elections to increase the probability of *regime breakdown* in the short-term, but increase it in the long-term, also when adjusting for the fact that elections take place in particular contexts where the autocratic regime may be more or less entrenched in power.

4 Data

Our argument addresses the calculations and decisions that the ruler and central supporters make to perpetuate their stay in power. Whether the current ruling elite is replaced by an opposition that subsequently holds free and fair elections, *or* by an opposition that institutes a new dictatorship is less relevant here. What mainly counts from the current ruling elite’s point of view is the chance of being replaced and not *who* replaces them. We are consequently concerned with how autocratic elections affect the longevity of the current ‘ruling coalition’ (Svolik, 2012). This means that we cannot rely on the typical strategy of coding regime changes from (changes in) democracy

measures (see, e.g., Przeworski et al., 2000; Kennedy, 2010; Teorell, 2010). For many purposes, this is a sensible strategy, and we do, indeed, find that our results are robust when employing a measure drawing on changes in the Polity Index. Yet, such measures do not capture all relevant instances of what we would theoretically construe as regime changes (Svolik, 2012), leaving out changes between distinct regimes that happen to be considered about equally undemocratic (such as the Shah and Ayatollah in Iran in 1979; see also Geddes, Wright and Frantz, 2014).

Instead, we employ the recent dataset on authoritarian regimes from Geddes, Wright and Frantz (2014). With some exceptions (for example on the coding of some newly independent countries) these authors follow Przeworski et al. (2000) and Cheibub, Gandhi and Vreeland (2010) when separating democracies from autocracies. Hence, our regime observations are, per definition, regimes not holding *truly* contested elections where the opposition has a decent probability of obtaining power (through constitutional turnover) after defeating incumbents at the ballot box. The observations in our sample are either regimes not holding elections (our results are, however, robust to excluding these from the sample), or regimes holding various types of elections (and we further distinguish them below) that are not free and fair. Separating autocracies according to who controls access to offices and policy-making, Geddes et al. distinguish between autocratic monarchies, single-party-, military-, and personalist regimes. However, their coding of *regime failures*, which we employ as our dependent variable, captures autocratic regime failures resulting in democratization, changes between the different *types* of autocracies, *and* changes between regimes, with different ruling coalitions, of the same ‘autocracy type’. One example of the latter is the replacement of the (Personalist) Mobutu regime in Zaire/Congo in 1997 by the (Personalist) Kabila regime. Hence, our dependent variable accounts for the distinct identity of a regime’s ruling coalition, which corresponds with our theoretical argument and captures different relevant types of regime breakdowns.

For elections, we rely on the National Elections Across Democracy and Autocracy (NELDA) dataset (Hyde and Marinov, 2012). These data include extensive information on all national legislative and executive elections events globally, covering 1945–2011. We test our hypotheses using different specifications, both regarding estimation technique, the modeling of temporal effect-patterns, and what *type of autocratic elections* (e.g., multi-party vs completely uncontested; legislative vs executive) we include. For our baseline models, we simply register whether there was an executive election (both direct and indirect), as coded by NELDA, in a given year, employing country-year as unit. We create two decay functions, allowing us to separate long-term from short-term effects. Both decay functions register proximity of an election, but the effects dissipate at different

speeds. The short-term version (*ElecShortTerm*) is operationalized as $2^{-\left(\frac{\text{years since election}}{1}\right)}$, while the long-term effect (*ElecLongTerm*) is $2^{-\left(\frac{\text{years since election}}{8}\right)}$. The effect of an election as measured by *ElecShortTerm* is reduced to 25% of original size after two years, and 3% after five years. In contrast, *ElecLongTerm*'s effect remains at 84% after two years and 65% after five years.

However, we test several alternative decay-function specifications for both the short- and long-term effects (see Appendix Table A.6). We also test a simpler dummy-variable set up, coding dummies for election years and for regimes having held elections within the past 5 years, to capture, respectively, short-term and long-term effects. Following the discussion in Section 3.2, we also try out very different ways of capturing the (longer-term) impact of historically having had electoral institutions in place.

We control for different variables that expectedly affect regime durability and correlate with elections in our baseline models:⁵ These include log GDP per capita from Maddison (2007); income level may impact on autocratic regime survival (e.g., Kennedy, 2010), but also the capacity to organize elections. We further control for one-year (lagged) growth in GDP per capita; economic crises, as elections, expectedly reduce short-term survival probability through serving as focal points for opposition collective action (Acemoglu and Robinson, 2006). We also control for alternative sources of co-optation and effective repression, which expectedly impact on regime durability and the necessity of organizing elections. Natural resource revenues are particularly helpful for autocratic regimes with ambitions of staying in power; such revenues may more easily be monopolized than other types of income, and be utilized for co-optation purposes or for investing in repressive capacity (Ross, 2001; Bueno de Mesquita and Smith, 2009). We therefore include $\frac{\text{Oil+gas+coal+metals revenues}}{GDP}$, from Haber and Menaldo (2011). Military size is a traditional proxy for repressive capacity. Yet, large militaries may sometimes pose a threat by being a source of instigators for coup d'états. Regardless, we control for $\frac{\text{military personnel}}{\text{population}}$ from the Correlates of War Project's National Material Capabilities Dataset, version 4.0 (Singer, 1988). Autocracies likely survive shorter in neighborhoods dominated by democracies (Gleditsch, 2002), and we control for average regional Polity score in the region, using the eightfold regional classification from Miller (2013). Some models also include region dummies (from Miller, 2013). We account for time dependence and control for regime age – older regimes more likely endure also over the coming years than younger, less consolidated regimes (e.g., Svobik, 2012) – by including *regime duration*, *regime duration*² and *regime duration*³, following Carter and Signorino (2010). In most models, we also

⁵Appendix Section A.1 provides tables and figures with descriptive statistics for all variables.

control for region- and decade-fixed effects.⁶

To assess robustness, we test more parsimonious models dropping, for instance, the military size or regime duration variables (which might induce post-treatment bias if they are partly consequences of elections). We also test more extensive models controlling, for instance, for the regime type dummies from Geddes, Wright and Frantz (2014) to account for potential biases induced by dissimilar survival probabilities in different types of autocracies (e.g., Geddes, 1999). Our results are robust to such changes, as discussed below and elaborated on in Appendix Section A.2.

5 Empirical analysis

Baseline models

Various descriptive statistics (see Appendix Section A.1) suggest that elections could be very destabilizing in the short term. For instance, whereas only 10% of the almost 4000 autocratic country-years in our full sample are election years, the corresponding number for the 199 regime breakdowns is 35%. Still, such patterns may exist for various reasons. Indeed, the most precise statement of the main predictions from our argument is that elections should be observed to accompany increased short-term risk of regime breakdown and reduced long-term risk, also when controlling for confounders *and* when the endogeneity of elections is accounted for.

Yet, we start out with our simple baseline specification, a logit model with the regime failure dummy from Geddes et al. as dependent variable, incorporating the election decay functions and controls listed above as independent variables. Since regime breakdown is the dependent variable, positive coefficients imply a positive association with breakdown (and thus negative association with regime survival). Our results are very similar for Cox proportional hazard survival models (see Appendix Section A.3), but we employ the logit as baseline since it is easily extended to the Generalized Additive Models (GAM) and IV-probit models employed later.

Table 1 displays this baseline specification (Model 1), run on 3893 observations from 115 countries for 1946–2008 (199 regime failures; see Appendix Table A.3 for a list and Figure A.1 for their frequency over time). As expected, the short-term decay function, *ElecShortTerm*, is negative and

⁶Although we also robustness test models using countries' *level* of democracy (which varies quite a lot also within the set of regimes categorized as autocracies), we do not include this in our baseline. Level of democracy arguably affects regime durability (Knutsen and Nygård, 2015). However, extant democracy measures are endogenous to the existence of elections. Thus, controlling for democracy risks inducing post-treatment bias. Still, we present robustness test below controlling for domestic democracy level, and this does not affect the results.

with a p-value far below 0.01. This suggests that the time right after an election is clearly associated with higher risk of regime failure. Meanwhile, *ElecLongTerm* is positive, and precisely estimated with a logit coefficient of 0.93 and standard error of 0.37. Hence, the hypothesized pattern exists in the data. The period right after an election is associated with increased risk of regime failure, while the risk declines substantially over time. If Model 1's estimates are correct, elections – and the time that has elapsed after the most recent election – are substantively important in explaining autocratic breakdown. When holding all other variables in Model 1 at their means, the point estimates indicate that *risk of regime breakdown is 5 times higher during election years*, compared to when the last election was five years ago. Hence, Model 1 indicates that autocrats trade off short-term instability for long-term stability when holding elections.

Regarding our controls, the results are also mostly as expected. Autocratic regimes are more likely to fail in democratic regions, and less likely at higher income levels and growth rates. A larger military is associated with lower probability of regime failure, whereas the resource dependence result is less clear.

In Model 2, we introduce an alternative, simpler specification for separating long-term from short-term effects. Model 2 drops the decay functions and rather includes a dummy scored 1 if the autocracy experiences an election-year, and another dummy registering whether elections were held within the past five years. Although the latter dummy, proxying for the long-term effect, falls below conventional levels of statistical significance, basically the same pattern emerges in Model 2: The risk of regime failure clearly increases in election years, while the risk is at least not increased by having experienced an election in any of the five prior years. Also in this model, the short-term effect has $p < 0.01$ and is substantively large: When setting all other variables to their means, Model 2 predicts the probability of regime failure is 7 times higher during election years than in non-election years.

Models 3–8 exemplify that neither the regime-destabilizing short-term result (in particular) nor the stabilizing long-term result are highly contingent on the particular specification chosen. Model 3 (4) shows that the results are basically unchanged when adding geographic region dummies (from Miller, 2013), and decade dummies to Model 1 (2). Model 5 (6) adds a democracy index (SIP from Gates et al., 2006) to Model 3 (4), and, if anything, the results become even stronger.⁷ Notably, also the 5-year dummy turns statistically significant ($p < 0.01$) in Model 6.

⁷SIP draws heavily on indicators from the Polity Project, but also on participation indicators from Vanhanen (2000). SIP is preferred to the more conventional Polity Index in this setting because it avoids using indicators that are clearly endogenous to processes of political instability (see Vreeland, 2008), and to Freedom House's measures partly for similar reasons and partly because of longer time series.

Table 1: Logit models on short- and long-term effects of elections on regime failure; 1946–2008

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Executive elections only							
							Incl. non-executive elect.	
Proximity to election / 1	2.108*** (0.304)		2.202*** (0.316)		2.411*** (0.377)		2.328*** (0.385)	
Proximity to election / 8	-0.931** (0.374)		-1.407*** (0.425)		-2.053*** (0.528)		-2.495*** (0.743)	
Election year		1.696*** (0.197)		1.681*** (0.200)		1.706*** (0.234)		1.473*** (0.201)
Election prior 5 years		-0.097 (0.192)		-0.285 (0.207)		-0.521** (0.261)		-0.487 (0.305)
Region Polity score	2.568*** (0.461)	2.593*** (0.468)	4.774*** (0.934)	4.711*** (0.934)	3.931*** (1.142)	3.751*** (1.140)	3.421*** (1.138)	3.398*** (1.141)
ln(GDP per capita)	-0.227*** (0.100)	-0.227*** (0.101)	-0.522*** (0.140)	-0.530*** (0.141)	-0.774*** (0.171)	-0.762*** (0.172)	-0.759*** (0.168)	-0.768*** (0.170)
GDP per capita growth	-0.030*** (0.009)	-0.031*** (0.009)	-0.025*** (0.009)	-0.027*** (0.010)	-0.002 (0.012)	-0.005 (0.012)	-0.001 (0.012)	-0.001 (0.012)
Military size	-0.284** (0.131)	-0.263** (0.128)	-0.264* (0.148)	-0.257* (0.146)	-0.352* (0.195)	-0.333* (0.188)	-0.327* (0.190)	-0.343* (0.191)
Resource dependence	-0.006 (0.008)	-0.007 (0.008)	-0.0003 (0.008)	-0.00003 (0.008)	0.009 (0.008)	0.009 (0.009)	0.009 (0.008)	0.010 (0.008)
Duration	-0.049*** (0.016)	-0.050** (0.023)	-0.035** (0.016)	-0.030* (0.017)	-0.041** (0.019)	-0.033* (0.019)	-0.036* (0.019)	-0.032* (0.019)
Duration ²	0.001** (0.0004)	0.001** (0.001)	0.001** (0.0003)	0.001** (0.0004)	0.001* (0.0004)	0.001 (0.0004)	0.001* (0.0004)	0.001 (0.0004)
Duration ³	-0.00000 (0.00000)	-0.00000 (0.00001)	-0.00000 (0.00000)	-0.00000 (0.00000)	-0.00000 (0.00000)	-0.00000 (0.00000)	-0.00000 (0.00000)	-0.00000 (0.00000)
Democracy level (SIP)					2.504*** (0.338)	2.438*** (0.337)	2.446*** (0.350)	2.369*** (0.350)
Constant	-1.588** (0.712)	-1.868*** (0.716)	0.320 (1.156)	-0.149 (1.151)	2.489* (1.455)	1.654 (1.430)	2.808* (1.445)	1.834 (1.406)
Region dummies			Y	Y	Y	Y	Y	Y
Decade dummies			Y	Y	Y	Y	Y	Y
Observations	3,893	3,893	3,893	3,893	3,710	3,710	3,710	3,710
Log Likelihood	-705.133	-695.581	-688.357	-680.153	-501.341	-496.338	-501.723	-495.351
Akaike Inf. Crit.	1,432.266	1,413.162	1,422.715	1,406.306	1,050.683	1,040.675	1,051.447	1,038.703

*p<0.1; **p<0.05; ***p<0.01.

Logit regressions with Geddes-Wright-Frantz (GWF, 2014) regime failure as dependent variable

Finally, Model 7 (8) replicates Model 5 (6) when also including non-executive elections (thus capturing also ‘mid-term’ legislative elections in Presidential systems). The mechanisms detailed in the theoretical discussion arguably suggest that presidential elections are more destabilizing, short-term, than mid-term elections in Presidential systems. Since the executive is the most powerful actor in most autocracies, executive elections should be particularly salient events that are conducive to serving as focal points. It might also be easier for the opposition to coordinate around one candidate standing against an (unpopular) incumbent autocrat, than around many candidates (or parties) running on different platforms. However, the results are robust to including non-executive elections, except for the 5-year dummy in Model 8 (again) barely turning statistically insignificant at conventional levels (see Appendix Section A.2 for Models 1–4 including non-executive elections, and a further discussion on why these are not included in our favored specifications). In a later section, we present further evidence suggesting that executive and legislative elections, surprisingly, do not seem to systematically differ in terms of their short- and long-term effects on regime breakdown. However, we sum up this section by noting that autocratic elections, in general, are related to lower risk of regime breakdown in the long term, but higher risk of breakdown in the short term.

Robustness tests and extensions

We subjected these findings to various robustness tests, and also probed whether they hold up when only considering certain types of elections. While some particularly interesting tests are presented in Table 2, most tests are reported and discussed at greater length in the Online Appendix. For example, the results are retained when using alternative estimation techniques, including Cox survival models, or alternative decay functions to capture the short- and long-term effects. Jackknife estimations show that the results are stable when omitting individual countries from the sample.

Moreover, the results are not sensitive to the particular set of control variables used (as also suggested by Table 1). The results are, for example, retained when dropping military size, resource dependence or the duration controls from the regression, or when rather adding controls, such as urbanization, foreign aid dependence, public spending, or trade openness. Model 1 in Table 2 presents a regression including dummies capturing the type of autocratic regime (all models in Table 2 make adjustments to Model 3, Table 1). The data on regime type is also drawn from Geddes, Wright and Frantz (2014). Given the literature on how different *types* of autocracies, such as monarchies and military regimes, systematically differ in terms of regime longevity (e.g., Geddes, 1999; Hadenius and Teorell, 2007) – and their differential propensities for holding elections – Model

Table 2: Robustness tests: Logit models on short- and long-term effects of elections on regime failure; 1946–2008

	Control reg. type	Alternative long-term measures		Multi-party elec. only	Excl. democratiz.
	(1)	(2)	(3)	(4)	(5)
Proximity to election / 1	2.111*** (0.321)	1.547*** (0.209)	1.944*** (0.280)	3.629*** (0.768)	0.633 (0.435)
Proximity to election / 8	-1.242*** (0.441)			-4.371*** (1.011)	-0.089 (0.553)
Sum of elections held		-0.078** (0.039)			
Time since first election			-0.636** (0.306)		
Region Polity score	5.319*** (0.948)	4.693*** (0.944)	1.659 (1.496)	5.936*** (1.580)	3.470*** (1.340)
ln(GDP per capita)	-0.423*** (0.145)	-0.555*** (0.141)	-0.524** (0.235)	-0.706*** (0.244)	-0.707*** (0.192)
GDP per capita growth	-0.027*** (0.010)	-0.025*** (0.010)	-0.083*** (0.016)	0.020 (0.020)	-0.028** (0.012)
Military size	-0.169 (0.155)	-0.212 (0.141)	-0.294 (0.226)	0.064 (0.280)	-0.290 (0.209)
Resource dependence	-0.002 (0.009)	-0.0005 (0.008)	-0.007 (0.013)	0.010 (0.014)	0.001 (0.010)
Duration	0.010 (0.017)	-0.022 (0.016)	-0.070 (0.045)	-0.096* (0.050)	-0.022 (0.021)
Duration ²	0.0002 (0.0003)	0.001 (0.0003)	0.002 (0.002)	0.003 (0.002)	0.0004 (0.0004)
Duration ³	-0.00000 (0.00000)	-0.00000 (0.00000)	-0.00002 (0.00002)	-0.00002 (0.00002)	-0.00000 (0.00000)
Party regime	0.821 (1.147)				
Personalist regime	1.688 (1.165)				
Military regime	2.572** (1.161)				
Monarchy	0.210 (1.122)				
Constant	-2.841* (1.659)	-0.168 (1.142)	1.825 (2.251)	3.305 (2.108)	1.414 (1.584)
Region dummies	Y	Y	Y	Y	Y
Decade dummies	Y	Y	Y	Y	Y
Observations	3,893	3,893	1,611	547	3,801
Log Likelihood	-661.667	-691.804	-311.425	-204.211	-443.812
Akaike Inf. Crit.	1,377.334	1,429.609	668.851	454.423	933.623

*p<0.1; **p<0.05; ***p<0.01.

Logit regressions with Geddes-Wright-Frantz (GWF; 2014) regime failure as dependent variable

1 is an important robustness test. While we, for instance, replicate the finding that monarchies are less prone to break down than military regimes, controlling for type of autocratic regime barely changes our core results.

Another potential issue relates to how we measure the long-term effect of elections. As suggested in Section 3.2, proximity to the *last* election should properly capture important long-term mechanisms related to the regime signaling strength and obtaining information about the opposition. However, other long-term mechanisms, such as elections building organizational capacity, are less tightly linked to the last election, and is perhaps better captured by measures on the regime's entire electoral-institutional history. Hence, we constructed and tested different such measures, and Models 2 and 3 in Table 2 exemplify that the stabilizing long-term effect is retained when doing

so. In Model 3, we substitute the long-term decay function with a count variable on the number of elections held under the autocratic regime. In Model 4, we rather include a variable capturing the time passed since the regime held its first election. Both measures display a negative coefficient that is statistically significant at conventional levels. A long history of electoral institutions thus seems to stabilize autocracies, in line with our argument, whereas the destabilizing short term effect of autocratic elections is retained also in these models.⁸

As shown in the Appendix, the results also hold up when, for instance, omitting all autocratic regimes that do not hold elections from the sample; when excluding elections held under a previous regime; or, when omitting young ($\leq 4years$) – and thus often particularly fragile (Svolik, 2012) – regimes. Further, we control for the regime’s first election potentially having particular effects on survival (for example, opposition actors may need to learn from previous election experiences before effectively challenging the regime; see, e.g., Beissinger, 2002), but our results are retained.

We noted that our theoretical argument should pertain more strongly to multi-party autocratic elections than elections where only a single party or candidate runs. Model 4, Table 2 shows results for a model only counting *de jure* contested elections from NELDA as elections.⁹ Indeed, while the standard errors increase, both coefficients increase substantially in size (cf. Model 3, Table 1; the short-term coefficient by more than 60 percent, and the long-term coefficient more than triples). Importantly, both coefficients remain clearly distinguishable from zero. We return to the differential effects of contested and uncontested autocratic elections in the next section.

We also tested models employing alternative operationalizations of the dependent variable. For instance, the results hold up when employing an alternative regime change measure based on changes to the Polity Index (see Appendix Table A.5). The short-term effect often also holds up when excluding all autocratic regime breakdowns associated with subsequent democratization (as operationalized by GWF), while the long-term effect retains its sign but often loses statistical significance. However, in Model 5, Table 2, neither the short-term coefficient ($t = -1.5$) nor the long-term coefficient ($t = 0.2$) is significant at conventional levels. Whereas the theoretical rationale for not counting instances of democratization as autocratic regime breakdowns is unclear, we note that this substantially reduces the number of such breakdowns, making it more difficult to

⁸In the Appendix, we report models jointly including, e.g., the count variable on number of elections *and* the long-term decay function, and both variables are consistently negatively signed and sometimes statistically significant at conventional levels. One interpretation, in line with our comprehensive theoretical argument, is that the different proposed long-term mechanisms (pertaining mainly to time since last election *or* to the entire electoral-institutional history) operate simultaneously.

⁹A contested election is here operationalized as an election where multiple parties are technically legal. Non-legal barriers may, however, still make elections *de facto* uncontested.

obtain precise estimates. Furthermore, the t-values of the coefficients are far larger in alternative specifications excluding regime breakdowns associated with democratization. For example, when dropping the region and decade dummies, the t-values of the short- and long-term coefficients change to 4.9 and -2.4, respectively (see Model 7, Appendix Table A.17).

As an extension of our analysis, we report and briefly discuss one finding of particular interest to democracy scholars in Appendix Section A.6. This relates to models employing *democratization* as the dependent variable, but otherwise retaining our set-up. Similarly to the models investigating all regime changes, they show clear destabilizing short-term- and stabilizing long-term effects of autocratic elections. While there are issues with these particular tests, which we discuss in the appendix, autocratic elections thus *seem to* increase the probability of democratization in their immediate aftermath, but reduce it in the longer run, at least when employing the categorical coding of democratization events from Geddes et al. (2014).¹⁰

Checking for more complex temporal patterns

In Table 1 we defined how to measure the long- and short-term effects of elections *a priori*, using pre-specified decay functions or a dummy-variable setup. However, regime failure might be a more complex function of proximity to an election than what these operationalizations allow for; *other* functional specifications may yield better fits to the data, including patterns that go against our theoretical argument. To more inductively test this, we fit Generalized Additive Models (GAMs) that place no *a priori* restrictions on what shape the effect of election proximity on regime failure can have. GAMs use model-selection algorithms to find the function that yields the best fit to the data, with the fewest number of parameters (see, e.g., Hastie and Tibshirani, 1990; Hastie, Tibshirani and Friedman, 2009). In this model we therefore essentially let the data decide how proximity to an election relates to regime failure.

More specifically, GAMs allow for non-linearities in effects by fitting loess regression curves or spline curves with two or more degrees of freedom. This allows effects to vary for different values on the independent variables, enabling the detection of nuanced patterns in the data. Following Wood (2006), we define our GAM thus:

$$g(\mu_i) = f(\text{TimeSinceElection}_i) + \mathbf{X}_i\beta + \epsilon_i \quad (1)$$

¹⁰This does not necessarily preclude the possibility that such elections may induce gradual liberalization in autocracies (see discussions in Lindberg, 2006, 2013; Bogaards, 2013).

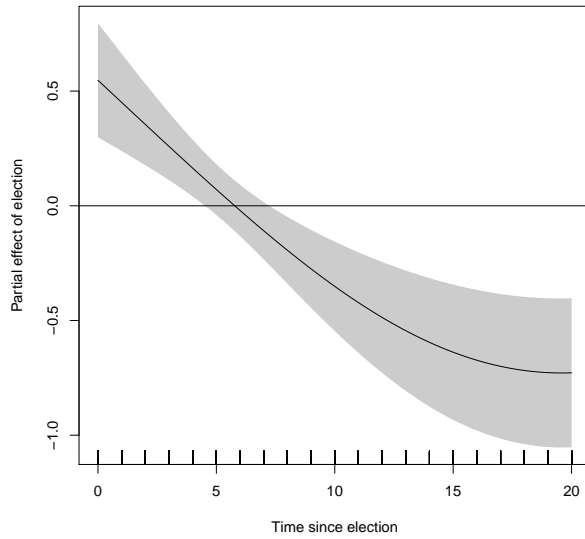


Figure 2: Years since election and the effect of election on regime failure, estimated from a GAM model with 4 degrees of freedom for years since election.

with

$$\mu_i \equiv \mathbb{E}(Y_i) \text{ and } Y_i \sim \text{some exponential family distribution}$$

where i indexes countries. $f(\text{TimeSinceElection}_i)$ is the smoothed effect of time since last election, \mathbf{X} is a n by k matrix of data, β is a k by 1 vector of (linear) parameters to be estimated, ϵ is a n by 1 vector of disturbances.

Since interpreting coefficients for variables of interest from GAMs is complicated, we graph the main result on the temporally varying effect of elections (the estimates are provided in Appendix Table A.7). Figure 2 thus shows how the effect of an election on risk of regime failure depends on time since an election (measured in years), based on the GAM including the same controls as Model 1, Table 1 (with 4 degrees of freedom for time since election).¹¹

Intriguingly, also this model yields the expected pattern, and does so very clearly. The effect on regime failure is positive and large right after an election, while turning negative as time goes by. More specifically, this model estimates that the long-term stabilizing effect will dominate the reduced survival chances stemming from the short-term effect after about six years, indicating that even autocratic regimes with a modestly long time horizon could benefit from holding elections. The estimated ‘break-even point’ varies somewhat with the model specification. For example, an

¹¹More specifically, it is estimated using three Markov Chain Monte Carlo (MCMC) chains, each run for 250 000 iterations, with the first 15 000 discarded as burn-in. Standard diagnostics from Heidelberg and Welch (1983), Raftery and Lewis (1992), and Geweke (1992) all suggest convergence.

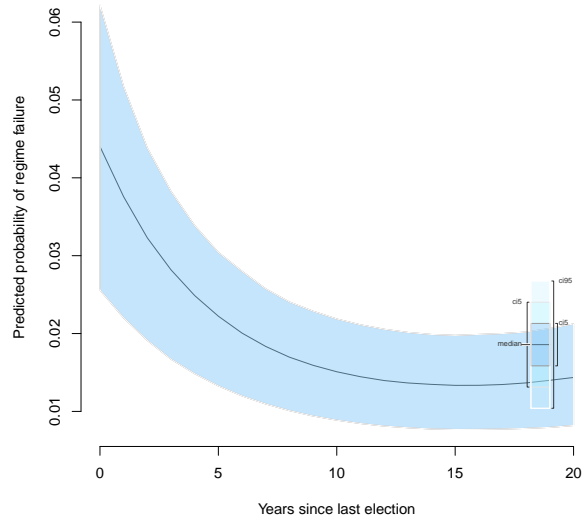


Figure 3: Predicted probability of regime failure (based on GAM in Figure 2) for autocracy holding election at $t = 0$ and with mean score on all other variables. Years since election on x-axis.

otherwise similar GAM model including also non-executive elections suggests that it is closer to four years than six (see Appendix Figure A.7) In any case, these results help explain the ‘Paradox of authoritarian elections’ (Seeberg, 2015), related to why autocrats gamble on holding elections at all, given the many regimes that have fallen in the immediate proximity of such elections.

To further illustrate the GAM results, Figure 3 shows the predicted probability of regime failure over time since last election, based on the model in Figure 2. The predicted probabilities were calculated by setting all other variables at their mean, and then simulating from the posterior density (Imai, King and Lau, 2014). The highest probability of regime failure (> 0.04) is in the election year, and the probability then falls rapidly – the risk of regime failure is almost reduced by a factor of three after 7 years – before slowly leveling out.

In sum, also when we let the data ‘decide’ the functional form, we find our hypothesized pattern. This is also very robust to making different changes to the GAM. For instance, Appendix Figure A.5 shows the same estimated effect-pattern for a model including decade and region dummies.

As discussed in previous sections, these results may, however, mask interesting variation since we are jointly including quite different *kinds* of elections. Most importantly, the argument behind the increased short-term probability of breakdown highlighted the role of elections in serving as focal points for *opposition coordination* of collective action. Although even completely uncontested elections may serve as such focal points – due to the time-limited and political nature of election events – the short-term effect should be stronger for multi-party elections with some contestation.

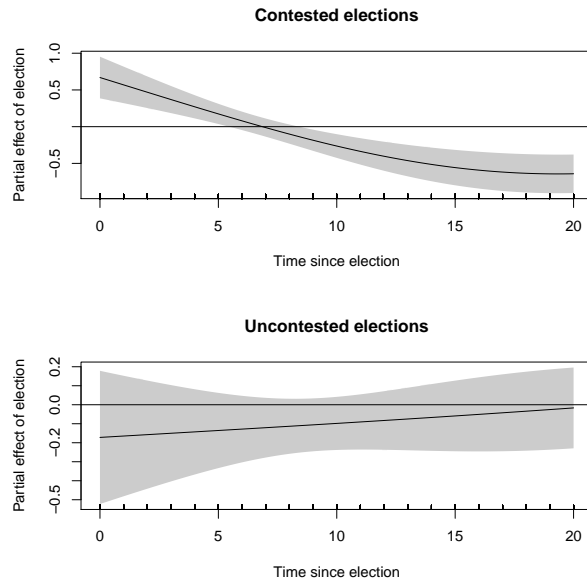


Figure 4: Years since election and effect of election on regime failure; contested vs. uncontested elections

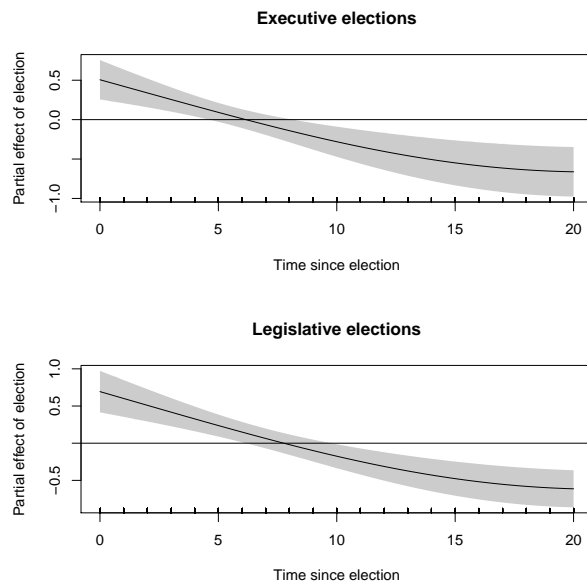


Figure 5: Years since election and effect of election on regime failure; executive vs. legislative elections

Further, we also expect the long-term stabilizing effect to be clearer after multi-party elections, because some long-term mechanisms – such as using elections as devices for gathering information about opposition strongholds, allowing for more effective repression and co-optation – should be more prominent when there is some contestation.

Hence, we again distinguish (*de jure*) contested from uncontested autocratic elections using NELDA data. Figure 4 shows the effects of proximity to contested (upper panel) and uncontested

elections (lower panel) from GAM models otherwise similar to that above. The effects we detected for the aggregated analysis is recovered only for contested elections, while proximity to an uncontested election does not have the same hypothesized effect-pattern. There are far fewer uncontested than contested elections, meaning it is hard to estimate the effect of uncontested elections precisely. Yet, there are strong empirical indications that our theorized dynamic effect on regime survival operates only for contested elections.

Finally, we use the GAM set-up to distinguish between executive and legislative elections. When discussing our baseline results in Table 1, we noted that executive elections might expectedly be *more* destabilizing, short-term, than (purely) legislative elections. To assess this, Figure 5 shows the effects of proximity to an election for executive (upper panel) and legislative elections (lower panel), respectively. Perhaps surprisingly, the two effects are strikingly similar, and replicate the overall pattern. Both executive and legislative elections are associated with increased short-term probability of regime breakdown and reduced long-term probability. However, we admit that it is quite hard, in practice, to separate the effects of executive and legislative elections in our country-year setup, since they normally are held concurrently. For example, 98 % of all presidential elections are held contemporaneously as a legislative election. Hence, we regard the results embedded in Figure 5 only as suggestive evidence on the similarities between executive and legislative elections.

However, the fact that legislative and presidential elections are often held together may not be due to coincidence, or even to concurrent elections reducing administrative costs. Rather, if our theoretical argument is correct, and autocrats *suspect* the short-term destabilizing effects of elections, they have strong incentives to not arrange elections every year or second year. It would be preferable to simultaneously organize different elections at *one point in time* to avoid *multiple* high-risk time periods. Holding concurrent elections, say, every fifth year still allows autocrats to reap the long-term stabilizing effects of elections, while limiting the ‘undesirable’ effects related to elections serving as focal points for opposition coordination around election day.

Addressing endogeneity

The results presented this far clearly suggest that autocratic elections correlate with higher probability of regime breakdown in their immediate aftermath, and a lower probability after some years have passed. However, we cannot plausibly infer that autocratic elections *cause* short-term instability and long-term stability. The reason is, simply, that choices related to holding elections – both concerning whether the regime should implement (or discontinue) the *institution of elections*, and regarding the *timing of particular elections* – may be endogenous to (unobserved) factors affecting

the stability of the regime in question (see Pepinsky, 2014). As discussed above, elections are held due to a combination of dictators' strategic calculations relating to domestic stability, and external influences, such as international pressure. Dictators who have beliefs regarding the stabilizing or de-stabilizing effects of elections may systematically attempt to hold (or postpone) elections in some situations. For example, if many dictators *think* that elections are stabilizing (both short- and long term), they may systematically try to hold elections exactly when their position in power is strongly threatened, which might, in turn, generate the observed pattern that elections are immediately followed by regime breakdowns. Although the regularized intervals (4-5 years) with which elections are held in many autocracies should mitigate the influence of this alternative mechanism, we want to exclude it, and other sources of endogeneity bias, in order to investigate the causal impact of elections more stringently.

Thus, we run Instrumental Variables Probit (IV-probit) models, treating (proximity to) autocratic elections as endogenous. To produce consistent estimates of the causal effects of elections, we must identify instruments that are both fairly strongly correlated with the endogenous independent variable, *and* not directly related to probability of regime failure. To achieve this, we exploit the widely recognized fact that elections can result from outside (international) forces. Drawing inspiration from the literature on how regimes and particular institutions impact on economic outcomes (Persson and Tabellini, 2003; Knutsen, 2011; Huber, Ogorzalek and Gore, 2012; Acemoglu et al., 2014) we construct different instruments tapping variation among neighboring countries, and globally, in the propensity of autocracies to hold elections.

While *some* of the variation in autocratic elections is likely due to strategic choices, not *all* is. To achieve identification, we aim to capture such non-strategic variation with our instruments. The underlying notion is that variation in terms of neighboring countries (and perhaps globally over time) holding autocratic elections correlate with the probability that a given autocracy will hold an election. This is because of different kinds of institutional spill-over effects from neighbors or regional powers (such as non-strategic emulation stemming from various cognitive heuristics, see Weyland, 2005), or because of international-political trends affecting the 'typical' institutional make-up of autocracies. Further, these international sources of variation in whether elections are held (domestically) should not impact *directly* on the durability of the autocracy in question, once controlling for the other covariates (but, we discuss and adjust for one caveat related to regime breakdowns in neighboring regimes below). Thus, our IV-probit models add the controls from above, including region and decade dummies to account for unobserved region and time-specific factors that might both affect durability and correlate with our instruments.

More specifically, the instruments in our baseline specification is the number of elections in the neighborhood in a given year; a dummy scoring ≥ 1 election in the neighborhood; number of autocracies in the neighborhood; share of autocracies in the neighborhood with an election this year; share of autocracies in the neighborhood with an election the last 5 years; and, share of autocracies globally with an election the last 5 years. We conducted various sensitivity tests related to adjusting the particular set of instruments, for instance dropping each instrument *seriatim* from the baseline model, and the results turn out very robust to making such adjustments (see Appendix Section A.5).

The first-stage regressions for the IV-probit models in Table 3 are reported in Appendix Table A.11, and they show that, alongside some of the instruments, neighborhood polity score and some region dummies are clear determinants of holding elections.¹² Table 3 shows the second-stage results, and Model 1 uses the same set of controls as Model 4 in Table 1. The dummy registering whether an election was held during that particular year is endogenous.¹³ A Sargan overidentification test indicates that the exclusion restriction is valid – the null-hypothesis that the error term is uncorrelated with the instruments cannot be rejected at any conventional levels ($p=.78$). This specification should thus generate fairly consistent estimates of the short-term effect of autocratic elections on regime failure. The estimated causal effect from Model 1 clearly indicates that holding an election increases probability of regime failure in that particular year, as the election-year dummy is positive and has $t=6.3$.

Despite the reassuring results from the overidentification test, one might, on more theoretical

¹²Due to the under-developed character of specification tests for IV-probit models, we follow standard practice and conduct all specification tests on structurally similar 2SLS models. The F-values for the excluded instruments turn out to be only moderate, for instance 3.5 for Model 1, which might yield concerns of weak-instrument bias. Yet, calculations of the maximal potential bias from the Stock-Yogo weak ID test critical values (for instance, $F=5.1$ for 30% maximal IV relative bias for Model 1) suggest that the IV-probit models should still be clearly less biased than our baseline models. In this regard, we note that the short-term coefficients for our (less biased) IV-probit models are much larger than those from equivalent single-equation Probit models. This *could*, for example, reflect that many autocratic regimes tend to organize elections at points in time when they are better entrenched in power.

¹³We also tested biprobit models, since the endogenous independent variable (and the dependent) is binary. These results produce even stronger support for our hypotheses than the IV-probit models, and, for example, clearly identify the expected short-term effect of elections. In the equation set modeling election year as endogenous, the t-value for the election year variable (when regime failure is dependent variable) is 8.3. For the biprobit model treating election in the past 5 years as endogenous, the t-value for this dummy is -2.8.

Table 3: Second-stage IV-probit results, with short-term variables as endogenous

	(1)	(2)	(3)	(4)	(5)	(6)
Election year	3.265*** (0.520)	3.287*** (0.635)	3.503*** (0.508)			
ElecShortTerm				3.563** (1.517)	3.567* (1.707)	3.368 (2.214)
Election past 5 years	-0.685*** (0.131)	-0.688*** (0.151)	-0.744*** (0.125)			
ElecLongTerm				-2.496** (1.125)	-2.493** (1.238)	-2.379 (1.584)
Region polity score	1.468** (0.698)	1.523** (0.759)	1.458* (0.778)	2.015** (0.833)	2.006** (0.873)	2.261* (0.984)
ln(GDP per capita)	-0.160** (0.0741)	-0.166** (0.0810)	-0.158* (0.0819)	-0.197** (0.0926)	-0.201** (0.0991)	-0.230** (0.111)
GDP per capita growth	-0.0110** (0.00437)	-0.00958** (0.00458)	-0.00946** (0.00472)	-0.0123** (0.00498)	-0.0110** (0.00511)	-0.0129** (0.00551)
Military size	-0.0802 (0.0590)	-0.0653 (0.0587)	-0.0535 (0.0543)	-0.0849 (0.0727)	-0.0682 (0.0719)	-0.0664 (0.0757)
Resource dependence	0.000352 (0.00282)	0.000287 (0.00287)	0.000229 (0.00268)	0.000485 (0.00333)	0.000374 (0.00338)	0.000797 (0.00355)
Regime duration	-0.0181** (0.00841)	-0.0168** (0.00850)	-0.0234* (0.0136)	-0.0280*** (0.00752)	-0.0269*** (0.00784)	-0.0380** (0.0154)
Regime duration ²	0.000360* (0.000212)	0.000340* (0.000179)	0.000738 (0.000457)	0.000428** (0.000170)	0.000407** (0.000182)	0.00101* (0.000601)
Regime duration ³	-0.000001 (0.000002)	-0.000001 (0.000001)	-0.000006 (0.000004)	-0.000001 (0.0000009)	-0.000001 (0.0000009)	-0.000008 (0.000005)
Neighboring instability		0.216 (0.191)	0.258 (0.215)		0.128 (0.217)	0.205 (0.263)
Neighb. instab. past five yrs			-0.00213 (0.0965)			0.00266 (0.120)
Region dummies	Y	Y	Y	Y	Y	Y
Decade dummies	Y	Y	Y	Y	Y	Y
N	3263	3164	3098	3263	3164	3098
Countries	108	108	108	108	108	108
Sargan p-value	.78	.99	.97	.16	.58	.37

Notes: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors in parentheses.

IV-probit models; second-stage results with GWF regime failure as dependent variable, and Election Year and ElecShortTerm as endogenous independent variables. Share and numbers of dictatorships that hold elections – in the particular year *and* over past 5 years – among neighbors and globally – as well as number of elections and of autocracies in neighborhood are instruments. First-stage results are reported in Appendix Table A.11. Sargan tests are conducted on structurally similar 2SLS models.

grounds, still suspect that the exclusion restriction is violated. The reason is that we have not excluded the potential causal pathway:

Neighbor country autocratic election → *Neighbor country instability* → *Domestic instability* → *Domestic autocratic election*

Hence, Model 2 controls for a proxy of regional instability – the share of (other) autocracies in the region that broke down in the given year – to exclude this causal pathway from driving our result. The high t-value of the election year dummy is retained in Model 2 (t=5.2), and the Sargan test p-value turns even larger (p=.99), as we would expect when controlling for the additional channel. In Model 3, we add another control measuring the share of autocracies in the neighborhood that experienced regime failure over the past 5 years, to further ensure that we exclude the above-described alternative causal pathway. However, this only strengthens our results (t=6.9; Sargan-test p-value=.97).

Models 4–6 show equivalent IV-probit models to those discussed, but substituting the election

year dummies with the variables measuring election proximity using decay functions. *ElecShortTerm* is considered as endogenous in Models 4–6, and also these models report a positive short-term causal effect on autocratic breakdown. The t-values are generally lower in these specifications – although only Model 6 shows $t < 2$ – but the coefficients remain sizeable.¹⁴

In sum, also when accounting for potential endogeneity biases we find that elections are dangerous for autocratic regimes in the short run. The clear correlation between being in an election year and regime breakdown thus likely reflects a causal effect of elections, and is not simply a result of autocrats opting, or being pressured, to hold elections only in particular situations, for example when their survival is severely threatened.

Appendix Table A.10 shows similar IV-probit models, but where the long-term, rather than short-term, effect of elections is modeled as endogenous. These models basically replicate the sign identified in the logit models above; elections *seem* to stabilize autocracies in the long run.¹⁵ However, this estimated long-term effect on regime breakdown is not as robust as the short-term effect, with t-values varying between -2.7 and -1.0. More specifically, whereas *ElecLongTerm* is insignificant at conventional levels, the 5-year dummy is always statistically significant at least at 10%. Hence, while we consider it likely that there is also a long-term stabilizing effect, we can only clearly identify the destabilizing short-term causal effect of elections.

6 Conclusion

Observant readers of newspapers – with no knowledge of the political science literature on autocratic elections – might wonder why non-democratic leaders hold elections at all. Elections are often immediately followed by large-scale popular protests, violence and coup attempts, as illustrated by recent elections in countries as different as Egypt and Venezuela. The simple answer that we propose is that many autocratic regimes – at least those that are not too myopic – accept this increased short-term risk of being ousted in exchange for an improved grip on power in the long run. Elections affect the survival of autocratic regimes through various mechanisms. But, whereas many stabilizing mechanisms expectedly work with a quite long time-lag, the destabilizing – related to elections serving as focal points for opposition collective action – are more immediate.

¹⁴The Sargan tests indicate that the exclusion restriction holds also in these models, although the p-value is lower (.16) in Model 4, which does not control for neighboring instability, than in Models 5 (p=.58) and 6 (p=.37).

¹⁵The Sargan-tests never lead to rejecting the null at 5% in any of these six models either, and the F-values for the excluded instruments are moderately sized (generally around 5–6).

Our empirical analysis finds strong support for these propositions, leading to new, more nuanced insights into how autocratic elections affect regime breakdown. Our analysis leaves no doubt that autocratic elections are associated with an increased probability of regime breakdown in their immediate aftermath. Notably, our further analysis indicates that this correlation is not solely due to autocrats systematically opting to hold elections whenever their regime is threatened (for instance, because of a vocal, organized opposition demanding political liberalization). There is seemingly a causal effect of elections on autocratic breakdown in the short-term. However, if the regime is able to survive the immediately increased risk, our analysis also provides indications that elections help stabilize autocracies in the longer run.

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