AUTOCRATIC ELECTIONS
Stabilizing Tool or Force for Change?

By CARL HENRIK KNUTSEN,
HÅVARD MOKLEIV NYGÅRD, and TORE WIG*

INTRODUCTION

ELECTIONS are a hallmark of democracy. Nevertheless, a large share of dictatorships worldwide regularly holds elections while employing a range of tactics to ensure that these elections are not truly contested.[1] This pattern has spawned a large literature on the causes and consequences of autocratic elections, with two closely related questions at its core: Why do some dictatorships hold elections, and how do autocratic elections affect regime survival? The answers to the latter are strikingly mixed. Many prominent studies underline the stabilizing effects of autocratic elections, whereas others highlight their destabilizing effects. Elections may allow dictators to co-opt rivals, gain legitimacy, deter opposition, and learn about regime/opposition strength and standing in the broader population,[2] yet they may also cause the downfall of dictatorships. The regime might lose at the ballot box to a coordinated opposition,[3] or elections can trigger protests, popular revolutions, and coups d'état.[4]

Building on these insights—but making a critical distinction between elections as *events* and the *institution* of elections—we present an encompassing argument that clarifies this fascinating issue. We emphasize that autocratic elections alleviate opposition collective-action

[1] See, e.g., Miller 2015b; Levitsky and Way 2010; Schedler 2006; Schedler 2013.
[2] See, respectively, Gandhi 2008; Schedler 2002; Magaloni 2006; Little 2012.
[3] Bunce and Wolchik 2010.
[4] See, respectively, Beaulieu 2014; Tucker 2007; Wig and Rød 2016.

problems and are therefore detrimental for regime survival *in the short term*. But electoral institutions also facilitate processes that bolster the repressive and co-optive capacities of autocratic regimes, possibly enhancing survival *in the long run*. Although election events are destabilizing just before or after an election, these destabilizing mechanisms do not operate in the long term and are countervailed by other stabilizing effects of electoral institutions.

Elections held more than thirty years ago in two neighboring countries illustrate this double-edged nature of autocratic elections. On July 4, 1982, general elections were held in Mexico, which was then ruled by the Institutional Revolutionary Party (Partido Revolucionario Institucional, PRI). The presidential election was won, as expected, by the PRI with 74.4 percent of the vote, while the runner-up, the National Action Party, captured only 16.4 percent. This was only one among many elections in which different opposition parties were allowed to compete and they often gained numerous seats in legislative elections, but the PRI notoriously used these institutionalized elections to co-opt and deter opponents. Indeed, electoral institutions are widely considered a crucial component behind the longevity of the PRI regime.[5]

In March 1982, a presidential election was held across the Mexican border in Guatemala. One plausible interpretation of Guatemalan history is that this election contributed to the immediate downfall of the regime. The election was won as expected by the regime's handpicked candidate, Angel Anibal Guevara.[6] The Guatemalan security services explicitly anticipated the weeks following election day to carry increased risks for the military regime. Widespread allegations of electoral fraud did ensue and set off a spiral of protest and violence that threatened the country with civil war.[7] On March 23, military officers instigated a coup to "restore order," removing the incumbent dictator Lucas Garcia, whereafter they consolidated power.

These two cases exemplify our argument. In Mexico, the 1982 election was part of the larger electoral-institutional framework that contributed to consolidating the PRI's rule over the long term by allowing more effective co-optation and repression. In Guatemala, the 1982 election may have spurred a process involving opposition collective action, eventually inducing a coup. In PRI Mexico, elections brought

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[5] For example, Magaloni 2006. On the central role of PRI-Mexico in the literature, see Gandhi and Lust-Okar 2009. These experiences have arguably helped shape the more general notion of elections as stabilizing tools for autocrats.

[6] Demarest 2002.

[7] Wig and Rød 2016.

long-term stability, whereas in Guatemala the 1982 election may have triggered regime breakdown. But a second plausible interpretation of events in Guatemala is that the 1982 election had little direct effect on the breakdown. The coalition backing the incumbent was perhaps vulnerable even before the election—Garcia's decision to handpick Guevara may have stirred up internal opposition within the army.[8] Consequently, we cannot know that the election, as such, induced the coup. Rather, the election could merely have followed a wider process of instability ending in breakdown. If so, this possibility highlights a crucial threat to pinpointing the causal effects of elections, namely, that elections are partly endogenous to regime instability. We treat this issue explicitly in our empirical analysis, and find support for the hypothesized short-term effect of elections on regime breakdown even when accounting for elections being endogenous.

Our explanation for this persistent result emphasizes the role of elections in amplifying the potential for coups and popular revolutions stemming from election-triggered coordination and mass mobilization. The central ingredient is information. Interactions between dictators, their supporting coalitions, and the opposition are bedeviled by information problems.[9] Incumbents may be unsure of the opposition's strength and resolve, while the opposition faces internal collective-action problems arising from citizens' inability to signal to each other when and for how long they are willing to mobilize against the regime.[10] We suggest that elections alleviate these information issues by serving as coordination devices. Elections are focal points, allowing diverse challengers to organize around one mass event (the election). Electoral mobilization, in turn, can trigger an information cascade, wherein the opposition can signal strength and resolve. This can result in (1) the opposition initiating a revolution by building on its election-triggered coordination, (2) the nonincumbent elite staging a coup by drawing on popular support from the recently mobilized opposition, or (3) the dictator's former support coalition staging a coup to preempt (1) or (2).[11]

The main contribution of this paper is empirical. We provide the first comprehensive large-N tests that explicitly distinguish between long-term and short-term effects of elections on autocratic regime durability. Using data from 259 autocratic regimes (in 115 countries from 1946 to 2008), we find robust evidence that elections destabilize these

[8] Millett 1985, 109.
[9] Myerson 2008; Svolik 2012.
[10] Kuran 1995; Weingast 1997.
[11] See also Casper and Tyson 2014; Wig and Rød 2016.

regimes in the short term, but the stabilizing aspects of electoral insti-
tutions likely serve as a countervailing impetus as time passes. Accord-
ingly, we find no evidence that elections destabilize regimes in the long
run. To the contrary, we find some, admittedly less robust, evidence
that elections correspond with increased survival probability after the
turbulent postelection period has passed. Corroborating our theoreti-
cal expectations, further tests show that this pattern is much clearer for
multiparty autocratic elections than it is for uncontested elections. The
identified time dynamics parallel those uncovered for how time since
regime inception affects regime breakdown. Henry Bienen and Nicolas
van de Walle document that the risk of a leader losing power, especially
in dictatorships, declines over time,[12] and similar results are found in
more recent work on regime consolidation.[13] We identify short- and
long-term effects of elections on regime breakdown *net* of regime age/
duration, suggesting a separate relevant dynamic. While our conclu-
sion about the destabilizing short-term effect mirrors those of some
previous in-depth case studies—for example, on elections and the color
revolutions in post-Soviet states—it contrasts with other studies and
prominent theoretical arguments that highlight the predominantly sta-
bilizing impact of elections.

Our analysis addresses the endogeneity of electoral institutions.
Holding elections are, at least sometimes, a function of autocrats'
strategic calculations. For example, autocrats may hesitate to adopt
elections if their position is already precarious, inducing a negative se-
lection bias whereby unstable regimes are less likely to hold elections.
Conversely, dictators may consider elections to be costly tools for sur-
vival and adopt them only when perceiving grave threats, inducing the
opposite bias. In both eventualities, elections are endogenous to regime
stability. But elections may also result from more exogenous forces,
such as external pressure by powerful international actors to hold elec-
tions.[14] We exploit this latter fact by using the international diffusion
of elections to instrument for elections in a given country. But even
when doing so, we find that autocratic elections likely cause increased
probability of regime failure in their immediate aftermath. Since our
instrumental-variables design is no panacea, we evaluate its sensitivity
to identifying assumptions, estimating how big the endogeneity bias
must be for our results to disappear. The short-term destabilizing effect
is very robust to such potential confounding, whereas the long-term

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[12] Bienen and van de Walle 1991; Bienen and van de Walle 1992.
[13] Svolik 2012; Svolik 2015.
[14] As in Africa in the 1990s; see Bratton and van de Walle 1997.

stabilizing effect is far less robust. Although threats to causal inference remain, we consider this to be the most convincing large-N evidence to date of a short-term destabilizing effect of elections. Interestingly, when studying only democratizing regime changes, we also find some suggestive evidence that autocratic elections reduce the probability of democratization in the short term but may increase it in the long term.

After presenting the relevant literature, we specify our argument on how the effect of elections on regime breakdown changes over time. We then present and discuss the data and the empirical analysis. Our analysis finds that elections make autocracies more likely to break down in the short term but not in the long term, and several specifications suggest that elections correspond with increased regime stability in the long run.

LITERATURE REVIEW

Although different dictators can be motivated by different objectives, a key goal for many, if not most, is to remain in power,[15] so autocrats and their allies will evaluate their actions and policy choices based on whether they enhance or reduce their survival chances. Decisions as to whether or not to hold elections—and whether or not these elections should allow for multiple parties—should not be qualitatively different from each other (although such choices are often taken under strong institutional and other constraints). Thus, explanations of autocratic elections presume that elections are held because dictators believe elections help them retain power.[16] The literature has further assessed why elections may stabilize autocracies, and various studies suggest that they do so by affecting *co-optation, legitimacy,* or *information.*

Several scholars propose that elections and electoral institutions neutralize groups that could otherwise pose a threat to the regime.[17] Co-optation through electoral institutions can target external opposition actors and potential threats within the regime.[18] Elections can be used to co-opt threats directly, by offering well-performing opposition groups and individuals spoils through legislature seats,[19] or indirectly,

[15] Wintrobe 1998; Bueno de Mesquita et al. 2003.
[16] Gandhi and Lust-Okar 2009.
[17] Geddes 2006; Gandhi and Przeworski 2006; Gandhi and Przeworski 2007; Gandhi 2008; Magaloni 2006; Magaloni 2010; Magaloni and Kricheli 2010; Svolik 2010; Wright 2011; Wright and Escriba-Folch 2012; Boix and Svolik 2013.
[18] See, respectively, Gandhi and Przeworski 2007; Boix and Svolik 2013.
[19] Gandhi and Przeworski 2006; Gandhi and Przeworski 2007.

by boosting the credibility of autocrats' promises to share power.[20] But such strategies may require effective institutional apparatuses for successful implementation, and Merete Seeberg reports that elections stabilize autocracies only in high-capacity states.[21]

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.[22] Although multiparty autocratic elections are rigged, openly competing opposition parties might provide authoritarian regimes with some legitimacy in the wider population, and even elections without opposition parties may serve a legitimizing role, as noted in studies of Soviet elections.[23] Election-induced legitimacy can also enhance the regime's international standing and, for instance, increase aid flows and other benefits from outside actors,[24] which can be used to bolster regime survival.

Elections entail different mechanisms for sending and receiving informative signals.[25] Elections signal regime strength or weakness to potential challengers, enabling more efficient bargaining between the regime and opposition to avoid costly armed conflicts. For example, mobilizing both supporters nationwide and the security apparatus 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 (2) the internal elite that coups will be opposed by numerous supporters. Further, allowing the opposition to compete and organize in elections (albeit under tight control) enables regimes to gauge opposition strength and thereby adjust and target concessions and repressive measures more efficiently.[26] Multiparty autocratic elections also allow citizens to credibly signal dissatisfaction, and ruling parties often respond to negative electoral shocks by increasing education and social spending.[27]

Indeed, various studies on electoral institutions, such as legislatures and parties, point to stabilizing net effects. Jennifer Gandhi and Adam

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[20] Magaloni and Wallace 2008; Svolik 2012; Boix and Svolik 2013.

[21] Seeberg 2015.

[22] For example, Schedler 2002; Levitsky and Way 2010.

[23] Karklins 1986, 449.

[24] van de Walle 2002; Beaulieu and Hyde 2009.

[25] Zaslavsky and Brym 1978; Karklins 1986; Magaloni 2006; Gandhi and Przeworski 2007; Wright 2008; Cox 2009; Blaydes 2011; Fearon 2011; Malesky and Schuler 2011; Cheibub and Hays 2015; Little 2012; Wig and Rød 2016; Miller 2015a.

[26] Little 2012.

[27] Miller 2014. In noncompetitive elections, vote abstention can serve as a signal; see Karklins 1986.

Przeworski find that autocracies that "institutionalize sufficiently" (that is, have the predicted number of parties given opposition strength) are more durable.[28] Beatriz Magaloni and Jeremy Wallace find that autocracies with parties last longer, and they cite this observation as evidence of a stabilizing effect of elections.[29] Carles Boix and Milan Svolik report that legislatures increase the prospects of survival for autocracies.[30] These results corroborate the stabilizing-elections proposition. But three issues remain, all of which are addressed in our empirical analysis.

First, these contributions do not directly study elections but rather associated phenomena such as legislatures and parties.[31] This approach is problematic, since these institutions also tap into other factors, such as opposition organization (opposition parties) or how institutionalized the power-sharing arrangements (legislatures) are. Second, these studies—and almost all existing ones in this field—fail to deal sufficiently with elections being *endogenous* to (unobserved) pressures against the regime and with the subsequent choices made by autocrats.[32] Third, these studies do not distinguish between the long- and short-term effects of elections on regime durability.[33]

There is no consensus on whether elections on the whole stabilize autocracies. Axel Hadenius and Jan Teorell find that multiparty autocracies are less durable than other autocracies.[34] Several studies find that autocratic elections may induce democratization.[35] For instance, Staffan Lindberg highlights that holding repeated elections, although manipulated and lacking in competitiveness, may eventually induce learning and the formation of norms conducive to substantive democratization.[36] Moreover, inconsistent regimes—those mixing autocratic and democratic institutions—are shorter lived than consistently democratic *or* consistently autocratic regimes,[37] and they experience civil war more frequently.[38] One common way to mix autocratic with nominally democratic institutions is through the introduction by autocracies of multiparty elections with a minimal semblance of competition, but Carl

[28] Gandhi and Przeworski 2007.
[29] Magaloni and Wallace 2008.
[30] Boix and Svolik 2013; Svolik 2012.
[31] But see Seeberg 2015.
[32] Pepinsky 2014.
[33] But see Schuler, Gueorguiev, and Cantu 2013.
[34] Hadenius and Teorell 2007; Teorell 2010.
[35] For example, Hadenius and Teorell 2007; Brownlee 2009; Miller 2012; Miller 2015b.
[36] Lindberg 2006.
[37] Gurr 1974; Gates et al. 2006; Epstein et al. 2006; Goldstone et al. 2010; Knutsen and Nygård 2015.
[38] Hegre et al. 2001; Goldstone et al. 2010.

Henrik Knutsen and Håvard Nygård show that such "competitive authoritarian" institutional combinations do not explain why mixed regimes, in general, are more fragile.[39] Similarly, Jason Brownlee does not find that competitive authoritarian regimes are particularly unstable or that there is any clear net effect of autocratic elections on regime stability.[40]

Given the research reviewed above, why don't our results clearly point to a stabilizing effect of autocratic elections? There are countervailing mechanisms through which elections—particularly multiparty elections—may destabilize autocracies. Empirically, autocratic elections in which the opposition displays strength substantially increase the risk of postelection coups.[41] Strong opposition performance in a multiparty autocratic election signals a nonnegligible probability of a successful popular revolt, inducing the elite to instigate preemptive coups. More generally, the risk of violence, including civil war and repression by the regime to counter potential threats, increases around election time.[42] Elections are also often followed by potentially regime-challenging protests,[43] and threats of such collective action may lead autocrats to abstain from (obviously) manipulating elections or to leave office should they lose.[44] Experimental studies report that elections make individuals more likely to engage in various forms of collective action,[45] and case studies, for instance on the fairly recent color revolutions, indicate that antiregime protests following (flawed) autocratic elections have been instrumental in bringing regimes down.[46]

The Dynamic Effects of Elections
on the Survival of Autocracies

Research suggests that elections could affect the survival chances of autocratic regimes through different channels. Some elections appear to have a negative effect on autocratic survival; others, a positive one. The

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[39] Knutsen and Nygård 2015. On competitive authoritarianism, see Levitsky and Way 2002 and Levitsky and Way 2010.

[40] See, respectively, Brownlee 2009 and Brownlee 2007. However, Schedler 2013 finds that the more particular strategies regimes employ to retain power are either hegemonic or competitive, with the former relying more on repression and electoral fraud, and the latter on subtler strategies, such as media censorship.

[41] Wig and Rød 2016.

[42] Cederman, Gleditsch, and Hug 2013; Davenport 1997; Hafner-Burton, Hyde, and Jablonski 2014.

[43] Beaulieu 2014.

[44] Magaloni 2010.

[45] This includes contentious collective action, such as protests and riots; see Baldwin and Mvukiyehe 2015.

[46] Thompson and Kuntz 2004; Tucker 2007; Bunce and Wolchik 2010; Levitsky and Way 2010; Baev 2011.

current lack of consensus on the net effect of elections is therefore understandable. The effect may well be conditional. Seeberg finds a positive net association between elections and autocratic survival, but only in high-capacity states.[47] But there is another important factor conditioning the effect of autocratic elections, about which the previous literature has not been clear, namely, the passage of time.[48] We expect that autocratic elections are dangerous to regimes in their immediate proximity, but if the regime can ride out the storm, its survival will be bolstered long term. We test this empirically but first provide the argument motivating the analysis.

Our expectations stem from the observation that the election-related mechanisms that supposedly destabilize regimes should work with a short time lag and concern the electoral event, whereas most stabilizing mechanisms should work with far longer lags. Figure 1 foreshadows our implications by displaying the expected temporal dynamic. Panel (a) shows how the *current* probability of breakdown in a hypothetical regime spikes close to election day and is very high immediately thereafter, before falling below its initial level. This regime is compared to a counterfactual regime without elections and with a constant probability of breakdown. Panel (b) reports the resulting differences between these two regimes in cumulative probabilities of having broken down before or at a particular date. If the time after which the short-term effect is outweighed by the long-term effect is not too far removed from the election, even moderately patient regimes may prefer holding elections despite their short-term destabilizing effect.

SHORT-TERM INSTABILITY

The discussion above points to a cluster of mechanisms through which elections may reduce the survival prospects of an autocratic regime. We note that these mechanisms are all related to elections improving the short-term prospects for the opposition to organize antiregime collective action, which increases the chances of successful revolutions or coups. Lab and field experiments show that elections induce individuals to participate in various types of collective action, including contentious kinds,[49] and that such action could endanger autocratic regimes.

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[47] Seeberg 2014.

[48] One notable exception is Schuler, Gueorguiev, and Cantu 2013, which makes a similar theoretical distinction between the short- and long-term effects of elections, and while their design and empirical analysis differ from ours on several accounts, their results mainly point in the same direction as our core results.

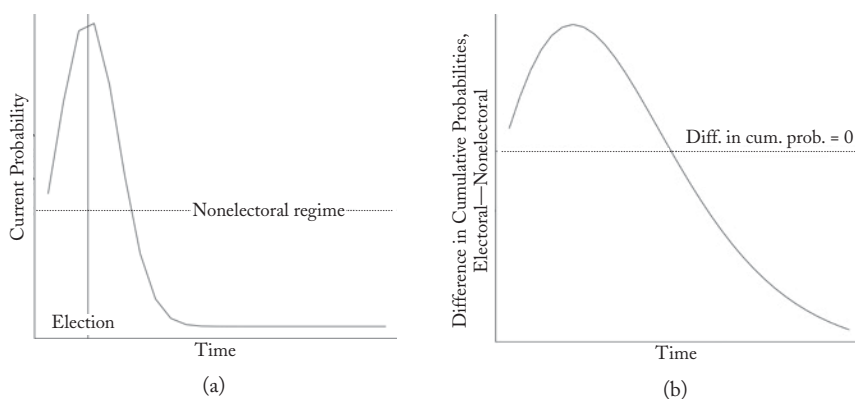[49] For example, Baldwin and Mvukiyehe 2015.

FIGURE 1

EXPECTED DYNAMIC EFFECT OF AUTOCRATIC ELECTION ON REGIME SURVIVAL[a]

[a] Current probabilities of regime breakdown for regimes with and without election (a) and difference in cumulative probabilities (regime with election − regime without election) (b). The flat dotted line in panel (a) simulates the regime without election, and the flat dotted line in panel (b) represents where the difference in cumulative probabilities equals 0.

Importantly, even manipulated elections can yield informative signals about the popularity and capacity of the incumbent regime and about the strength of opposition groups. Regarding the latter, the revelation of opposition strength can manifest itself in rallies, large electoral turnout, mass electoral protests, or riots. Further, elections in which incumbents perform worse than expected provide informative signals of regime popularity, which matters for reducing the different types of risks to the regime, including that of being ousted by a military coup.[50] Because the regime misjudges opposition strength or crafty opposition strategies, authoritarian incumbents sometimes lose elections outright, despite trying to rig them.[51] This clearly signals regime weakness, thereby lowering the expected costs of challenging the incumbent while increasing the incumbent's expected costs of fighting back.[52] More generally, elections are frequently followed by election-related protests.[53]

Widely unpopular autocratic regimes may persist simply because it is difficult for the regime's opponents to organize effective collective action.[54] It is virtually impossible for any single opposition member to

[50] For example, Nordlinger 1977.
[51] Bunce and Wolchik 2010; Howard and Roessler 2006; Magaloni 2010.
[52] Cheibub and Hays 2015.
[53] Beaulieu 2014.
[54] For example, Kuran 1989.

bring down an incumbent unless that member effectively coordinates with other individuals. Such coordination is made difficult in autocracies by restrictions on the freedoms of speech, media, and association,[55] which prevent dissidents from assembling and communicating. While coordination is crucial for success, it also affects the costs participants incur, since acting in large crowds reduces the chances of being detected and punished by the regime.[56]

Hence, collective-action problems are perhaps *the* critical obstacles to overcome for effectively contesting autocratic regimes through revolutionary uprisings.[57] Coups d'état may be related to less difficult collective action problems, because they require fewer instigators who have tighter bonds between them.[58] Nevertheless, organizing successful coups also requires cooperation and impeccable coordination from all involved actors, which may include officers from various groups in the armed forces as well as party and other elite groups.[59] Hence, not only revolutions but also coups may, to quote Timur Kuran, require a "'spark' for the prairie fire" to start.[60] Economic crises can serve as such sparks,[61] but elections can also serve as focal points,[62] as suggested by various case studies.[63] Elections constitute easily identifiable focal points around which the expectations of different opposition actors, who otherwise cannot freely communicate, can converge. When first movers among the opposition can coordinate, a collective-action logic may generate further snowballing because the probability of success increases and the cost of participation decreases as the number of participants grows.[64] Mark Beissinger notes that the 1989 electoral campaign in the Soviet Union "became a lightning rod for oppositional mobilization," and thus undermined the Communist Party and precipitated regime breakdown.[65] Similarly, Joshua Tucker, focusing on the role of major electoral fraud, highlights how such mechanisms were vital in the color revolutions in Serbia, Ukraine, Georgia, and Kyrgyzstan in the early 2000s:

[55] Møller and Skaaning 2013a.
[56] DeNardo 1985; Weede and Muller 1998; Tullock 2005.
[57] Acemoğlu and Robinson 2006.
[58] Houle 2009.
[59] Luttwak 1968.
[60] Kuran 1989.
[61] Empirically, revolutions, coups, regime-elite splits, and regime breakdowns spike immediately after economic crises; see, respectively, Knutsen 2014; Powell 2012; Reuter and Gandhi 2011; Przeworski and Limongi 1997; Kennedy 2010.
[62] For example, Fearon 2011.
[63] For example, Tucker 2007; Levitsky and Way 2010; Baev 2011.
[64] Kuran 1989; Lohmann 1994.
[65] Beissinger 2002, 86.

For once, the entire country is experiencing the same act of abuse simultane-
ously; 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.[66]

In certain instances, elections provide an extra boost to opposition
collective action by revealing information about the regime's inherent
weakness.[67] This information may change opposition members' assess-
ments of the costs and benefits of challenging the regime—and, impor-
tantly also changes the expectations on how others view those costs and
benefits. Grigore Pop-Eleches and Graeme Robertson note that

authoritarian regimes are generally low information environments with few re-
liable sources of information on the strength of current incumbents and their
opponents. Periodic elections, however, provide the incumbent leadership, other
key domestic elite and members of the opposition with the opportunity to up-
date information on the relative strength of the incumbent coalition and alter-
natives. When the new information reveals unanticipated regime weakness or
opposition strength, it can lead to serious challenges to the status quo.[68]

Even if elections trigger mass mobilization, this fact offers an incom-
plete account of how they trigger regime breakdown. How can we pos-
tulate a *causal* effect of the election itself when the regime's weakening
may precede its decision to hold an election? In some cases elections
have coincided with or even followed a regime collapse despite seeming
to have played no independent causal role. Examples are the elections
following the breakdowns of the Argentinean military regime after the
failed Falklands War and the negotiated transition and subsequent ref-
erendum on the Pinochet regime in Chile.[69]

Elections can have causal effects on breakdown either by spurring
popular revolts or by triggering coups. First, election-induced mobi-
lization can prompt a revolution when new information about regime
weakness and opposition strength revealed by the electoral mobiliza-
tion encourages opposition groups to mount a full-blown insurgency.
Second, protests can trigger coups if they reveal crucial information
that incentivizes potential coup plotters to act.[70] Electoral mobilization

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[66] Tucker 2007, 541. See also Thompson and Kuntz 2004.

[67] Kuran 1995.

[68] Pop-Eleches and Robertson 2011, 6–7.

[69] McCoy and Hartlyn 2009, 59–60. In our empirical tests, we investigate the sensitivity of our
results to the inclusion of such cases.

[70] Casper and Tyson 2014; Wig and Rød 2016.

may inform military officers and others about public opinion, and coup plotters are presumably less hesitant to overthrow an unpopular incumbent than a popular one.[71] Potential coup plotters among the elite may decide that removing an unpopular dictator experiencing postelectoral mass uprisings is preferable to risking a full-blown popular revolution. Witnessing electoral mass mobilization, coup plotters will, as noted, also update their beliefs concerning the regime's popularity and act because they believe they have strong popular support in their endeavors, which lowers the expected costs of staging a coup. In sum, elections provide different government challengers with time-limited windows of opportunity for changing the regime.

Our argument also implies that elections should also more strongly induce short-term regime instability in contexts with a greater scope for opposition collective action. Hence, competitive autocratic elections (that is, multiparty elections), with a minimum of competition, should be more destabilizing than noncompetitive ones. But even uncontested or perfectly rigged elections—given their political nature and, importantly, their time-limited character—might serve as focal points enabling individuals to coordinate and challenge the regime. In our baseline analysis we therefore include uncontested elections. Doing so should attenuate the results, biasing against our hypothesis. Additional tests that separate multiparty elections from other autocratic elections corroborate this expectation.

LONG-TERM STABILITY

If elections trigger instability, why do many autocrats consent to hold them? Are they simply ill informed, or even irrational? As the literature review indicates, not necessarily. Rather, autocratic elections are associated with different mechanisms that have one common feature, namely, that they may boost the regime's long-term capabilities of mitigating threats. More specifically, we identify three mechanisms that could have long-term benefits for regime survival.

First, because they reveal information about where opposition is located, contested (but also to some extent, uncontested) autocratic elections may improve opportunities for targeted co-optation *and* targeted repression.[72] Regarding targeted co-optation, elections can provide valuable information about the areas in which regimes may gain the most from distributing private goods and services, as well as local

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[71] Nordlinger 1977.
[72] Magaloni 2006; Blaydes 2011; Karklins 1986; Malesky and Schuler 2011.

public goods and services, to obtain support.[73] Elections also often culminate in distributing seats in multiparty legislatures, which provide a forum for negotiation and a mechanism through which the opposition (or even ruling-party mavericks) can achieve policy concessions and positions in the coming years.[74] Legislatures provide incumbents with venues for revealing credible information to the ruling coalition (for example, about the true state of the economy),[75] and for monitoring and sanctioning delegate behavior (thereby incentivizing political actors to follow the regime).[76] Further, the willingness to hold elections credibly signals 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 independent power bases. This signal reduces the incentives of different actors to work toward overthrowing the regime.[77]

Second, regimes must build organizational capacity to conduct successful authoritarian elections. Organizing elections involves activating and coordinating numerous proregime actors within the party, the bureaucracy, and the security apparatus.[78] Elections can function as training or capacity-building devices by which different regime supporters improve co-optive or repressive capabilities, and such increases in capacity should not be reversed shortly after the election.

Third, the long-term survival of regimes depends on whether and how intensively citizens and other relevant actors, such as neighboring states and major powers, inherently prefer alternative regimes over the incumbent. This preference determines how much effort and how many resources these potential enemies would willingly expend to remove the regime. If the regime is largely construed as legitimate, it can employ less effort and fewer resources to retain power. Elections—especially if they are not unequivocally identified as manipulated—may increase domestic and international legitimacy, thereby improving long-term survival capacity.[79]

Properly measuring the long-term effect of elections is difficult. Should we measure time since the last election, time since the regime's

[73] Blaydes 2011.

[74] Gandhi 2008.

[75] Myerson 2008.

[76] Malesky, Schuler, and Tran 2012.

[77] Magaloni and Wallace 2008; Svolik 2012; Boix and Svolik 2013.

[78] Magaloni 2006. See also Zaslavsky and Brym 1978.

[79] Schedler 2002; Schedler 2006. However, the Soviet Communist Party even considered local elections in which the sole party candidate routinely obtained 99 percent of votes as "legitimizing the leadership in the mass mind." Jacobs 1970, 62.

first election, or the cumulative count of elections held? The answer depends in part on which theoretical mechanisms we believe are more relevant. For instance, signaling effects should dissipate after a handful of years and particularly after the next election, which provides a new signal. In contrast, the mechanism of building organizational capacity could last longer. Thus, we test alternative measures, although *time since last election* is our baseline.

In sum, autocratic elections may increase the probability of regime breakdown near an election but bolster regime survival in the years ahead. The latter effect may even dominate the increased short-term risk, inducing many dictators to consider elections as tools for retaining power. Whether or not autocrats have incentives to hold elections then depends on how much they value the long-term increase in survival probability versus the short-term reduction (that is, the autocrat's "discount factor"). Below, we deal more thoroughly with foresighted autocrats having incentives to hold elections in some contexts but not in others. These considerations imply that elections do not occur randomly in autocracies, further indicating that empirically estimating the causal effects of elections requires more elaborate identification strategies. If our argument is correct, autocratic elections should increase the probability of regime breakdown in the short term but increase it in the long term, when one accounts for the fact that elections potentially take place in particular contexts where regimes are more or less entrenched in power.

DATA

Our argument addresses the calculations and decisions the ruler and central supporters make to perpetuate their stay in power. It is less relevant to them whether the current ruling elite is replaced by an opposition that subsequently holds free and fair elections *or* by an opposition instituting a new dictatorship. What mainly counts from the current ruling elite's perspective are the chances of being replaced, not who replaces them. Consequently, we are concerned with how autocratic elections affect the longevity of the current ruling coalition,[80] so we avoid the typical strategy of coding regime changes on the basis of changes in democracy measures.[81] For many purposes, this approach is sensible, and our results are, indeed, robust to employing a measure drawing on changes

[80] Svolik 2012.
[81] See, e.g., Przeworski et al. 2000; Kennedy 2010; Teorell 2010.

in the Polity2 index. Yet such measures do not capture all the relevant instances of what we theoretically construe as regime changes, and they leave out changes between distinct regimes that are about equally undemocratic, such as the Shah's and the Ayatollah's in 1979 Iran.[82]

Instead, we use the recent data set on authoritarian regimes from Barbara Geddes, Joseph Wright, and Erica Frantz.[83] With some exceptions (for example, for some newly independent countries), these authors follow Adam Przeworski and colleagues when separating democracies from autocracies.[84] Thus, our regime observations are, per definition, regimes not holding truly contested elections in which the opposition has a fair chance of winning power (through constitutionally mandated turnover) after defeating incumbents at the ballot box. Our sample includes regimes not holding elections (but our results are robust to excluding these regimes) and regimes holding various kinds 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, Wright, and Frantz distinguish between autocratic monarchies and single-party, military, and personalist regimes.[85] Crucially, their coding of *regime failures* (our dependent variable) captures failures resulting in democratization, changes between different types of autocracies, and changes between regimes of the same autocracy type but with different ruling coalitions, such as the (personalist) Kabila regime, which replaced the (personalist) Mobutu regime in Zaire (now the Democratic Republic of the Congo) in 1997. 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.[86]

For elections, we rely on the National Elections across Democracy and Autocracy (NELDA) data set.[87] These data include extensive infor-

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[82] Svolik 2012. See also Geddes, Wright, and Frantz 2014.

[83] Geddes, Wright, and Frantz 2014.

[84] Przeworski et al. 2000; Cheibub, Gandhi, and Vreeland 2010.

[85] Geddes, Wright, and Frantz 2014.

[86] Naturally, ensuring reliable regime coding is difficult because it is hard to precisely measure who controls decision making and who constitutes the ruling coalition. Hence, questionable decisions will occur despite coders' best efforts. Sometimes it is unclear whether a new ruler has a sufficiently distinct coalition to constitute a *new regime*. For example, it can be particularly hard to ascertain whether a coup constitutes a regime change or not; often the coup makers will introduce formal and/or informal changes regarding how policies and decision makers are selected, but in rare instances will introduce only a minor change in an existing regime, such as replacing one puppet dictator with another. Illustratively, Geddes, Wright, and Frantz 2014 do not code Guatemala 1982, which is discussed in the introduction, as regime change. (Our results remain stable when we recode Guatemala 1982 to a regime change.)

[87] Hyde and Marinov 2012.

mation on all national legislative and executive elections globally, covering 1945–2011. We test an array of specifications, varying the model of temporal effect patterns and the *type* of autocratic election (for example, multiparty versus completely uncontested, or executive only versus all elections). For our baseline models, we register whether an executive election, as coded by NELDA, occurred that year. We discuss the theoretical reasons for expecting clearer effects from executive elections below, but the main reason for including only executive elections in the baseline is methodological. Separating long-term from short-term effects is harder when using our measurement strategy and including nonexecutive elections, which magnifies multicollinearity issues. But even our baselines capture many legislative elections, since they are often concurrent with executive ones, and our results are robust to including all nonexecutive elections.

To model the short- and long-term effects of elections, we create two decay functions. Decay functions are widely used in economics and physics to model processes in which effects dissipate at varying rates,[88] and have also been used in political science.[89] Decay functions are given by $N_t = N_{t-1} 2(\frac{-t}{\tau})$, where t is time, and τ is the average time it takes for the effect to halve, which is conventionally called the half-life parameter. We specify two functions with different half-life parameters, allowing us to differentiate long-term from short-term effects. Both decay functions register the proximity of an election in years, but the effects halve at different speeds. The short-term version (*ElecShortTerm*) is operationalized as $2-(\frac{years\ since\ election}{1})$, while the long-term (*ElecLongTerm*) is $2-(\frac{years\ since\ election}{8})$. The effect of an election as measured by *ElecShortTerm* is reduced to 25 percent of its original magnitude after two years, and 3 percent after five years. In contrast, the effect of *ElecLongTerm* remains at 84 percent after two years and 65 percent after five years. We test several alternative decay-function specifications, varying the half-life parameters (see Table A.14 in the supplementary material[90]). We also test a simpler dummy-variable specification, coding dummies for election years and for regimes having held elections within the past five years to capture, respectively, short-term and long-term effects.

The theoretical framework laid out above does not offer specific expectations for the exact *functional form* of the relationship between time since an election and the risk of regime breakdown. To ensure that

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[88] For a textbook treatment, see Serdyuk, Zaccai, and Zaccai 2007.
[89] For example, Hegre et al. 2001.
[90] Knutsen, Nygård, and Wig 2016.

our results are not an artifact of the decay- or dummy-variable setup, we test additional specifications. These include models that assume *no* specific functional form, both models using an extended lag structure ($t-1$ to $t-10$) of the election marker, and flexible generalized additive models (GAMs).

We control for different variables that expectedly affect regime durability and correlate with elections,[91] including log GDP per capita,[92] because income level may impact not only autocratic regime survival,[93] but also the capacity to organize elections. We further condition on one-year (lagged) GDP per capita growth, because, like elections, economic crises expectedly reduce the short-term survival probability by serving as focal points for opposition collective action.[94] We also control for alternative sources of co-optation and effective repression, which expectedly have an impact on regime durability and the necessity of organizing elections. Natural resource revenues are particularly helpful for autocrats who want to stay in power because such income is more easily monopolized than other revenues and can be used for co-optation or for investing in repressive capacity.[95] We therefore include $\frac{oil+gas+coal+metals\ revenues}{GDP}$.[96] Military size is a traditional proxy for repressive capacity, yet large militaries may sometimes nurse instigators for coups d'état. Regardless, we control for $\frac{military\ personnel}{population}$.[97] Autocracies likely survive for shorter times in neighborhoods dominated by democracies, and we control for the average regional polity score.[98] We account for time dependence and control for regime age (younger regimes are typically more fragile[99]) by including *regime duration, regime duration²*, and *regime duration³*.[100] We also control for region- and decade-fixed effects in most models and for democracy level in some models.[101]

To assess robustness, we test models without certain variables—for instance, military size or regime duration—although this might induce posttreatment bias if they are in part consequences of elections. We also test more extensive models controlling, for example, for the regime

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[91] Knutsen, Nygård, and Wig 2016, section A.1 displays descriptive statistics for all variables.

[92] From Maddison 2007.

[93] For example, Kennedy 2010.

[94] Acemoğlu and Robinson 2006.

[95] Ross 2001; Bueno de Mesquita and Smith 2009.

[96] From Haber and Menaldo 2011.

[97] From Singer 1988.

[98] Gleditsch 2002. We employ the eightfold regional classification from Miller 2015b.

[99] Svolik 2012.

[100] Following Carter and Signorino 2010.

[101] Level of democracy arguably affects regime durability; Knutsen and Nygård 2015. But democracy measures are endogenous to holding (even autocratic) elections; controlling for democracy thus risks inducing posttreatment bias.

dummies from Geddes, Wright, and Frantz, to further mitigate omitted variable bias.[102]

EMPIRICAL ANALYSIS

BASELINE MODELS

Descriptive statistics (see section A.1 of the supplementary material[103]) suggest that elections could be very destabilizing in the short term. Whereas only 10 percent of the almost 4,000 autocratic country-years in our full sample are executive-election years, 35 percent of the 199 regime breakdowns are. (Counting all elections, the respective numbers are 22 percent and 50 percent.) Still, such patterns may exist for various reasons, and we try different models to test more stringently for any relationship.

We start out with a simple baseline specification: a logit model with the regime-failure dummy from Geddes, Wright, and Frantz as the dependent variable[104] and the election decay functions and controls listed above as independent variables. Positive coefficients imply a higher probability of regime breakdown (negative association with regime survival). These results are very similar to those we obtain with Cox proportional hazard survival models, but we employ the logit as baseline since it is easily extended to the GAM and instrumental variable probit (IV-probit) models employed later.

Table 1 displays this baseline specification (model 1), which was run on 3,893 observations from 115 countries for 1946–2008 (199 regime failures, listed in Table A.3 of the supplementary material[105]). As expected, the short-term decay function, *ElecShortTerm*, is negative and has a p-value far below 0.01. Meanwhile, *ElecLongTerm* is positive and precisely estimated with a logit coefficient of 0.93 and a standard error of 0.37. As hypothesized, the period right after an election is associated with an increased risk of regime failure and the risk declines substantially over time. If the estimates from model 1 are correct, the time elapsed after the most recent election is substantively important in explaining autocratic breakdown. When holding all other variables in model 1 at their means, the point estimates indicate that the *risk of regime breakdown is five times higher during election years* than it is five years

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[102] Geddes, Wright, and Frantz 2014.
[103] Knutsen, Nygård, and Wig 2016.
[104] Geddes, Wright, and Frantz 2014.
[105] Knutsen, Nygård, and Wig 2016.

after the last election. 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 to do so at higher income levels and growth rates. A larger military is associated with a lower probability of regime failure, whereas the result for resource dependence is less clear.

Model 2 introduces an alternative, simpler specification for separating long-term from short-term effects. It drops the decay functions and includes a dummy scored as 1 if the autocracy experiences an election year, and another dummy scored as 1 if elections were held within the past five years. While the point estimate has the expected sign, the second dummy is statistically insignificant and does not yield support for the expected long-term effect. In contrast, the short-term effect has $p < 0.01$ and is substantively large. When setting all other variables to their means, model 2 predicts that the probability of regime failure is seven times higher during election years than in nonelection years. In sum, the risk of regime failure clearly increases in election years, while at the least, the risk is not increased by having experienced an election in the past five years.

Models 3–8 exemplify that the regime-destabilizing short-term result is robust and that the stabilizing long-term result appears in many plausible specifications. Models 3 and 4 show that the results are basically unchanged when region and decade dummies are added. Models 5 and 6 further add a democracy index,[106] and the results become even stronger. Notably, the five-year dummy also becomes statistically significant ($p < 0.01$) in model 6. Finally, models 7 and 8 replicate models 5 and 6 when also including nonexecutive elections. The mechanisms detailed in the theoretical discussion on short-term effects suggest that presidential elections are more destabilizing in the short run than midterm elections. Since the executive is the most powerful actor in most autocracies, executive elections should be particularly salient events and conducive to serve as focal points. The opposition might also find it easier to coordinate around one candidate standing against an unpopular incumbent autocrat than around many candidates or parties running on different platforms. But the results are robust to the inclusion of nonexecutive elections, except for the five-year dummy in model 8

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[106] Scalar Index of Polities (SIP) from Gates et al. 2006 draws on measures of executive recruitment and executive constraints from polity and participation indicators from Vanhanen 2000. SIP is preferred to the Polity2 index here because it avoids using indicators that are clearly endogenous to processes of political instability; see Vreeland 2008.

TABLE 1
LOGIT MODELS ON SHORT- AND LONG-TERM EFFECTS OF ELECTIONS ON REGIME FAILURE, 1946–2008[a]

	Executive Elections						All Elections	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ElecShortTerm	2.108***		2.202***		2.411***		2.328***	
	(0.304)		(0.316)		(0.377)		(0.385)	
ElecLongTerm	-0.931**		-1.407***		-2.053***		-2.495***	
	(0.374)		(0.425)		(0.528)		(0.743)	
Election		1.696***		1.681***		1.706***		1.473***
		(0.197)		(0.197)		(0.234)		(0.201)
Election five year		-0.097		-0.285		-0.521**		-0.487
		(0.192)		(0.207)		(0.261)		(0.305)
Region Polity	2.568***	2.593***	4.774***	4.711***	3.931***	3.751***	3.421***	3.398***
	(0.461)	(0.468)	(0.934)	(0.934)	(1.142)	(1.140)	(1.138)	(1.141)
ln(GDP per capita)	-0.227**	-0.227**	-0.522***	-0.530***	-0.774***	-0.762***	-0.759***	-0.768***
	(0.100)	(0.101)	(0.140)	(0.141)	(0.171)	(0.172)	(0.168)	(0.170)
GDP per capita growth	-0.030***	-0.031***	-0.025***	-0.027***	-0.002	-0.005	-0.001	-0.001
	(0.009)	(0.009)	(0.009)	(0.010)	(0.012)	(0.012)	(0.012)	(0.012)
Military size	-0.284**	-0.263**	-0.264*	-0.257*	-0.352*	-0.333*	-0.327*	-0.343*
	(0.131)	(0.128)	(0.148)	(0.146)	(0.195)	(0.188)	(0.190)	(0.191)
Resource dependence	-0.006	-0.007	-0.0003	-0.00003	0.009	0.009	0.009	0.010
	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.009)	(0.008)	(0.008)
Duration	-0.049***	-0.050**	-0.035*	-0.030*	-0.041**	-0.033*	-0.036*	-0.032*
	(0.016)	(0.023)	(0.016)	(0.017)	(0.019)	(0.019)	(0.019)	(0.019)

| | Executive Elections | | | | All Elections | | | |
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Duration^2	0.001**	0.001	0.001**	0.001	0.001*	0.001	0.001*	0.001
	(0.0004)	(0.001)	(0.0003)	(0.0004)	(0.0004)	(0.0004)	(0.0004)	(0.0004)
Duration^3	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	(0.00000)	(0.00001)	(0.00000)	(0.00000)	(0.00000)	(0.00000)	(0.00000)	(0.00000)
Democracy level (SIP)					2.504***	2.438***	2.446***	2.369***
					(0.338)	(0.337)	(0.350)	(0.350)
Constant	-1.588**	-1.868***	0.320	-0.149	2.489*	1.654	2.808*	1.834
	(0.712)	(0.716)	(1.156)	(1.151)	(1.455)	(1.430)	(1.445)	(1.406)
Region dummies			yes	yes	yes	yes	yes	yes
Decade dummies			yes	yes	yes	yes	yes	yes
Observations	3893	3893	3893	3893	3710	3710	3710	3710
Log likelihood	-705.133	-695.581	-688.357	-680.153	-501.341	-496.338	-501.723	-495.351
Akaike information criterion	1432.266	1413.162	1422.715	1406.306	1050.683	1040.675	1051.447	1038.703

*p < 0.1, **p < 0.05, ***p < 0.01; standard errors in parentheses

[a] Logit regressions with Geddes–Wright–Frantz regime failure as dependent variable. Geddes, Wright, and Frantz 2014.

(again) barely being statistically insignificant at 10 percent (see section A.2 of the supplementary material for models 1–4, including nonexecutive elections[107]). Results become slightly stronger when including nonexecutive elections only for regimes without executive elections, such as former communist regimes, where including nonexecutive elections does not present the same collinearity issues for separating short- and long-term effects. Below we present further evidence suggesting that executive and legislative elections surprisingly do not seem to systematically differ on short- or long-term effects. We sum up this section by noting that in general, autocratic elections are related to lower risk of regime breakdown in the long term (although this finding is not entirely robust) and are clearly related to a higher risk of breakdown in the short term.

As an extension, we also note one finding of particular interest to democracy scholars, and it relates to models employing *democratization* as the dependent variable but otherwise retaining our design. We report and discuss these models in more detail in section A.6 of the supplementary material,[108] but the pattern of the results is analogous to what we find when studying all types of autocratic regime breakdowns, not only those preceding a democratic regime. More specifically, the coefficients of these models also suggest a clear destabilizing short-term effect and a stabilizing long-term effect of autocratic elections. Although there are methodological issues with these tests, which are mainly related to the low number of democratization events included, as discussed in section A.6, autocratic elections seem to correspond with a higher probability of democratization in their immediate aftermath but a lower one in the long run, at least when employing the categorical coding of democratization events from Geddes, Wright, and Frantz.[109] This finding does not necessarily preclude the possibility that elections may induce gradual liberalization in autocracies over time,[110] and we note that more careful testing is needed before we can draw firm conclusions on exactly how the chances for democratization are affected by autocratic elections.

Robustness Tests and Extensions

We subject our main findings to various robustness tests (using autocratic regime breakdown as the dependent variable) and also probe whether these results hold up when considering only certain types of

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[107] Knutsen, Nygård, and Wig 2016.
[108] Knutsen, Nygård, and Wig 2016.
[109] Geddes, Wright, and Frantz 2014.
[110] See discussions in Lindberg 2006; Lindberg 2013; Bogaards 2013.

elections. Although some particularly interesting tests are presented in Table 2, most are reported in the supplementary material.[111] For example, the results are retained when using alternative estimation techniques, including Cox survival models. The results are robust to applying alternative parameters for the decay functions and to using quite different functional specifications to capture short- and long-term effects. While *ElecShortTerm* and *ElecLongTerm* correlate at .73, one might still be concerned that these coefficients are sensitive because of multicollinearity. We test specifications that drop either *ElecShortTerm* or *ElecLongTerm*, and they yield similar results only for *ElecShortTerm*. But the changed coefficient for *ElecLongTerm* is very likely due to omitted variable bias, because it now also captures the strong short-term effect right after elections. Reassuringly, *ElecLongTerm* retains its expected sign and significance when paired with the election year dummy.

Measuring regimes and their breakdown is inherently difficult since changes in informal rules and/or substantial change of the ruling coalition are difficult to observe. An instructive case is Guatemala in 1982 as noted in our introduction. This is not coded as a regime change in the Geddes, Wright, and Frantz data,[112] although we think that it could be given that the ruling coalition underwent a fairly substantial change.[113] To investigate whether our results withstand such sensitive coding, we test whether they are driven by cases in which the regime coding can be questioned or in which breakdown occurred close to elections, but in which in-depth studies suggest other causes of the breakdown.[114] The results are retained when notable cases are recoded or dropped and, more generally, jackknife estimations show that the results are stable when any individual country is omitted from the sample.

Our results are not sensitive to the particular controls included. For instance, including military size may induce posttreatment bias because autocratic regimes could increase military spending in election years if they anticipate the increased short-term risk to breakdown. But the results remain substantively similar when omitting military size. The results are also retained when we drop resource dependence or the duration controls or add controls such as urbanization, foreign aid dependence, public spending, or trade openness to account for potential omitted-variable bias. Model 1, Table 2 includes the autocratic-regime-type

[111] Knutsen, Nygård, and Wig 2016.
[112] Geddes, Wright, and Frantz 2014.
[113] The group in power changed from the Institutional Democratic Party to a group of junior military officers.
[114] We thank anonymous reviewers for highlighting potentially problematic cases.

TABLE 2

ROBUSTNESS TESTS: LOGIT MODELS ON SHORT- AND LONG-TERM EFFECTS OF ELECTIONS ON REGIME FAILURE, 1946–2008[a]

	Control Regime Type (1)	Alternative Long-Term Measures		Multiparty Election Only (4)	Excluding No Incumbent Runs (5)
		(2)	(3)		
ElecShortTerm	2.103***	1.547***	1.944***	3.629***	1.512***
	(0.320)	(0.209)	(0.280)	(0.768)	(0.334)
ElecLongTerm	−1.223***			−4.371***	−0.776*
	(0.441)			(1.011)	(0.441)
Region Polity	5.290***	4.693***	1.659	5.936***	4.502***
	(0.946)	(0.944)	(1.496)	(1.580)	(0.965)
ln(GDP per capita)	−0.419***	−0.555***	−0.524**	−0.706***	−0.516***
	(0.144)	(0.141)	(0.235)	(0.244)	(0.146)
GDP per capita growth	−0.027***	−0.025***	−0.083***	0.020	−0.029***
	(0.010)	(0.010)	(0.016)	(0.020)	(0.010)
Military size	−0.164	−0.212	−0.294	0.064	−0.277*
	(0.154)	(0.141)	(0.226)	(0.280)	(0.155)
Resource dependence	−0.001	−0.0005	−0.007	0.010	−0.006
	(0.009)	(0.008)	(0.013)	(0.014)	(0.010)
Personalist	0.869***				
	(0.226)				
Military	1.759***				
	(0.255)				
Monarchy	−0.551				
	(0.427)				
Sum of elections held		−0.078**			
		(0.039)			
Time since first election			−0.636**		
			(0.306)		
Duration	0.011	−0.022	−0.070	−0.096*	−0.016
	(0.017)	(0.016)	(0.045)	(0.050)	(0.017)
Duration²	0.0002	0.001	0.002	0.003	0.0004
	(0.0003)	(0.0003)	(0.002)	(0.002)	(0.0004)
Duration³	−0.00000	−0.00000	−0.00002	−0.00002	−0.00000
	(0.00000)	(0.00000)	(0.00002)	(0.00002)	(0.00000)
Constant	−2.841*	−0.168	1.825	3.305	−0.105
	(1.659)	(1.142)	(2.251)	(2.108)	(1.207)
Region dummies	yes	yes	yes	yes	yes
Decade dummies	yes	yes	yes	yes	yes
Observations	3893	3893	1611	547	3893
Log likelihood	−661.886	−691.804	−311.425	−204.211	−634.725
Akaike information criterion	1375.771	1429.609	668.851	454.423	1315.450

* p < 0.1, ** p < 0.05, *** p < 0.01; standard errors in parentheses

[a] Logit regressions with Geddes-Wright-Frantz regime failure as dependent variable. Geddes, Wright, and Frantz 2014. Dominant party regime is reference category for regime dummies in model 1.

dummies from Geddes, Wright, and Frantz,[115] with dominant party regimes as the reference category (all models in Table 2 adjust on model 3 in Table 1). Given the literature on how different types of autocracies systematically differ in regime longevity and in their propensities for holding elections, model 1 is an important robustness test.[116] While we find that party regimes and monarchies are less prone to break down than personalist and military regimes, controlling for regime type barely changes our core results.

Another potential issue relates to how we measure the long-term effect of elections. As suggested above, proximity to the last election should properly capture important long-term mechanisms related to the regime's signaling its strength and obtaining information about the opposition. But other long-term mechanisms, such as elections building organizational capacity, are perhaps better captured by measures of the regime's entire electoral-institutional history. We construct and test different measures, and models 2 and 3 in Table 2 show that the stabilizing long-term effect is retained when doing so. Model 2 substitutes *ElecLongTerm* with a variable that counts the number of elections held under the autocratic regime. Model 3 includes a variable that captures the time since the regime held its first election.[117] Both measures display a negative coefficient that is statistically significant at 5 percent. A long history of electoral institutions therefore corresponds with regime stability, and the destabilizing short-term effect is robust.[118]

The supplementary material shows that results also hold up when omitting all autocratic regimes not holding elections,[119] when excluding elections held under a previous regime, or when omitting young (≤4 years old) regimes, which are often particularly fragile.[120] Further, we control for the regime's first election potentially having particular effects on survival,[121] and our results are retained.

As discussed, our argument should pertain more strongly to multi-party autocratic elections than to single-party or single-candidate elec-

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[115] Geddes, Wright, and Frantz 2014.

[116] For example, Geddes 1999; Hadenius and Teorell 2007.

[117] This model uses fewer observations because all regime years prior to first election are missing.

[118] Knutsen, Nygård, and Wig 2016 displays models jointly, including, e.g., the count of elections and *ElecLongTerm,* and both variables are consistently negative and sometimes significant. 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.

[119] Knutsen, Nygård, and Wig 2016.

[120] Svolik 2012.

[121] For example, opposition actors may need to learn from previous election experiences before effectively challenging the regime; e.g., Beissinger 2002.

tions. Model 4 in Table 2 shows results for a model that counts only de jure contested elections from NELDA as elections.[122] Indeed, while standard errors increase, both coefficients increase substantially in size (compare to model 3 in Table 1; *ElecShortTerm* rises by more than 60 percent and *ElecLongTerm* more than triples) and are clearly distinguishable from zero. We return to the differential effects of contested and uncontested autocratic elections below.

We test models employing alternative operationalizations of the dependent variable. Our results hold up when we employ a regime-change measure based on changes to the Polity2 index. Further, our baselines include regime changes associated with elections that choose a new government after a dictator agrees to step down and does not run, which could exaggerate the short-term effect. Examples are military regimes that voluntarily step down after some period of time[123] and arrange elections to select a new civilian government in an orderly manner. Although an autocrat's decision not to run in an election might stem from anticipating the dire consequences that could result from staying on and holding elections—meaning that they could be relevant instances of our argument—we did test models in which we either recoded such breakdown years or excluded all observations for regimes ending this way. To identify such instances, we use Geddes, Wright, and Frantz's coding of transition modes.[124] Model 5 in Table 2 is one model in which we recode only the breakdown year. *ElecShortTerm* remains sizeable and highly significant, and *ElecLongTerm* retains its expected sign and is weakly significant. More generally, all models that recode breakdown years associated with elections in which the incumbent did not run or that exclude all regime observations for regimes ending in this type of scenario reveal very large and robust short-term coefficients. As a result, our findings are not driven by elections being planned and held in regimes in which the incumbent, for some reason, has already decided to step down.[125]

[122] Operationalized as an election where multiple parties are technically legal. Nonlegal barriers may still make elections de facto uncontested.
[123] Geddes 1999.
[124] Geddes, Wright, and Frantz 2014.
[125] The short-term effect often, but not always, holds up also when excluding all autocratic regime breakdowns associated with subsequent *democratization* (as operationalized by Geddes, Wright, and Frantz 2014), while the long-term effect retains its sign but often loses statistical significance. We note that excluding democratization years substantially reduces the number of breakdowns, making it more difficult to obtain precise estimates, and that most autocratic breakdowns succeeded by democratization are relevant for our theoretical argument.

INVESTIGATING MORE COMPLEX TEMPORAL PATTERNS

Next we allow regime failure to be a more complex function of prox-
imity to an election. Critically, we examine potential functional form
specifications that could yield better fits to the data but possibly reveal
effect patterns that go against our theoretical argument.

To test this inductively, we fit flexible GAMs that place no a priori re-
strictions on what shape the effect of time since election has on regime
failure. The above specifications risk smoothing over *local* effects—rel-
evant spikes or declines in the risk of regime failure over time since
the election. GAMs are designed to uncover such patterns without com-
pletely abandoning parsimony. They strike a balance between fitting a
model that ignores all local effects, that is, estimates the global mean
effect, and a less efficient model with dummy variables for all different
values of the independent variables, which would uncover all local ef-
fects, but could severely over-fit to the data.

GAMs use model-selection algorithms to find the function that yields
the best fit to the data with as few parameters as possible,[126] essentially
letting the data decide how proximity to an election relates to regime
failure. More specifically, GAMs allow for nonlinearities in effects by fit-
ting Loess regression curves or spline curves with two or more degrees
of freedom. One way to think of this is as scatter-plot smoothing. Imag-
ine a scatter plot of two variables. A simple regression fits the straight
line that minimizes the sum of mean squared errors. This line captures
the general trend well, but glosses over potentially interesting local ef-
fects. Alternatively, one can fit a curve that perfectly follows every point
in the plot. This strategy, which is analogous to fitting a regression with
dummy variables for every independent variable value, will not uncover
general patterns but will find every nook and cranny of the relation-
ship. GAMs fit a line somewhere between these extremes, and its shape
depends on the degrees of freedom we allow for in the model-selection
algorithm. As degrees of freedom decrease, the GAM line increasingly
resembles the linear regression line. In the supplementary material,[127]
we report GAMs using different degrees of freedom, but our baseline
has four, thereby allowing the effect of time since election on regime
failure to *change direction* (that is, to varyingly increase or decrease) four
times.

Following Simon Wood,[128] we define our GAM as

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[126] Hastie and Tibshirani 1990; Hastie, Tibshirani, and Friedman 2009; Beck and Jackman 1998.
[127] Knutsen, Nygård, and Wig 2016.
[128] Wood 2006.

$$g(\mu_i) = f(TimeSinceElection_i) + X_i\beta + \varepsilon_i,$$

with

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

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

Since interpreting GAM coefficients is complicated, we graph the main result on the temporally varying effect of elections (estimates are in Table A.14 of the supplementary material[129]). Figure 2 shows how the effect of an election on risk of regime failure depends on time since an election (measured in years), on the basis of the GAM that includes similar controls to model 1, Table 1.

This model again returns the expected pattern. The effect on regime failure is positive and large immediately after an election, but turns negative as time passes. More specifically, this model estimates that the long-term stabilizing effect dominates the destabilizing short-term effect after about six years, indicating that even autocratic regimes with modestly long time horizons could benefit from holding elections. The estimated point in time after which the long-term effect dominates the short-term varies somewhat with the specification. For example, an otherwise similar GAM that also included nonexecutive elections suggests that it is closer to four years than to six, and GAMs allowing for more degrees of freedom also estimate that the time when the long-term effect starts dominating is closer to the election. Indeed, very flexible logit regressions that include dummies for all years from the election year to ten years after suggest that the main drop-off in the short-term effect happens from the election year to the next year. Without our putting too much trust in exact point estimates, these results help explain the "paradox of authoritarian elections,"[130] that is, why autocrats gamble on holding elections at all, given the many regimes that have fallen immediately after such elections.

Figure 3 shows the predicted probability of regime failure over time since the last election based on the GAM in Figure 2. The probability is calculated by setting all other variables to their respective means and then simulating from the posterior density.[131] The probability of regime

[129] Knutsen, Nygård, and Wig 2016.
[130] Seeberg 2015.
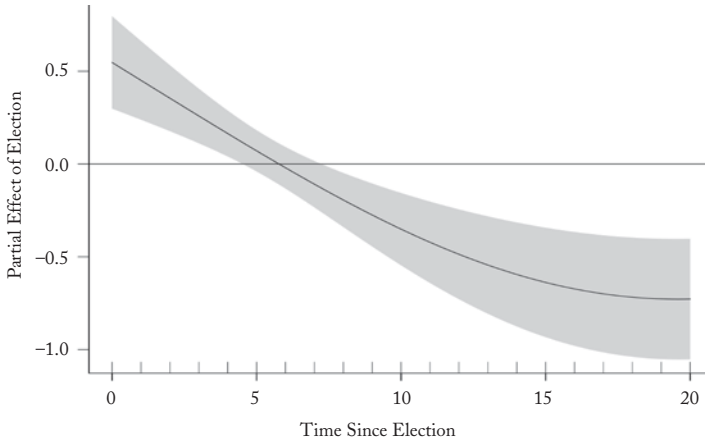[131] Following Imai, King, and Lau 2014.

FIGURE 2

YEARS SINCE ELECTION AND THE EFFECT OF ELECTION ON REGIME FAILURE[a]

[a] Estimated from a GAM model with four degrees of freedom for years since election.
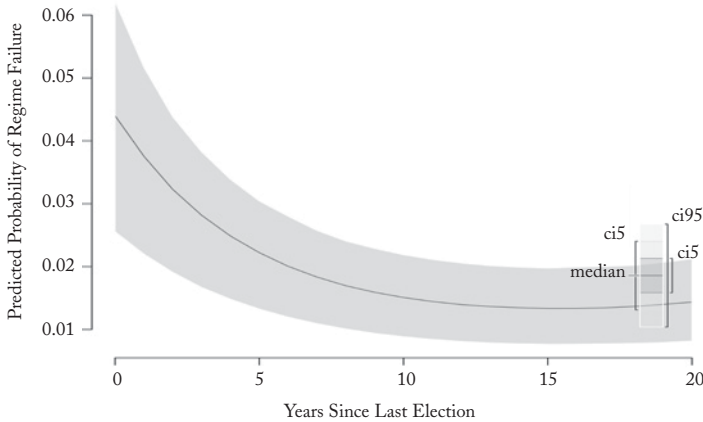

FIGURE 3

PREDICTED PROBABILITY OF REGIME FAILURE FOR AUTOCRACY HOLDING
ELECTION AT $t = 0$[a]

[a] Based on the GAM in Figure 2. All covariates held at their means.

failure is highest in the election year (>0.04) and thereafter falls rapidly
(the probability is reduced by a factor of almost three after seven years)
before slowly leveling out. In sum, even when letting the data "decide"
the functional form, we find our hypothesized pattern.[132]

[132] This is also robust to making different changes to the GAM, such as including decade and region
dummies.

But these results may mask interesting variation since we incorporate quite different kinds of elections. Most important, the argument behind the increased short-term probability of breakdown highlights the role of elections in serving as focal points for opposition coordination of collective action. Although 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 multiparty elections having some contestation. The long-term stabilizing effect should also be clearer after multiparty elections, because some long-term mechanisms (for example, those related to elections as devices for gathering information about opposition strongholds), 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 (a) and uncontested elections (b) from GAM models otherwise similar to the model used as the basis for Figure 2. The pattern detected for the aggregated analysis is recovered only for contested elections, while proximity to uncontested elections does not have the hypothesized effect pattern. There are far fewer uncontested than contested elections, making it harder to precisely estimate their effects. Yet there are strong empirical indications that our theorized dynamic effect on regime survival operates only for contested elections.

Last, we use the GAM design to distinguish between executive and legislative elections. We noted above that executive elections might expectedly be more destabilizing, short term, than purely legislative elections. To assess this, Figure 5(a) and (b) shows the results for executive and legislative elections. Perhaps surprisingly, the two effects are strikingly similar and replicate the overall pattern. Both executive and legislative elections are associated with increased short-term and reduced long-term probability of breakdown. But in practice it is quite hard to separate the effects of executive and legislative elections in our country-year design, since they are often held concurrently. For example, 98 percent of all presidential elections are held contemporaneously with a legislative election; hence, we regard the results embedded in Figure 5 only as suggestive evidence about the similarities between executive and legislative elections.

But the fact that legislative and presidential elections are often held at the same time may not be coincidental or even because concurrent elections reduce administrative costs. If our theoretical argument is correct and autocrats suspect the short-term destabilizing effects of elections, they have strong incentives not to arrange elections every year or every
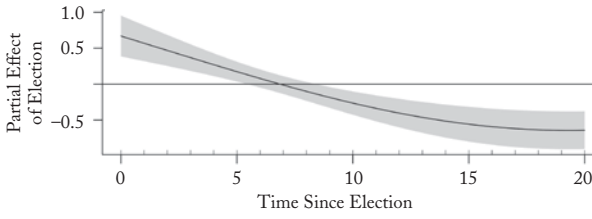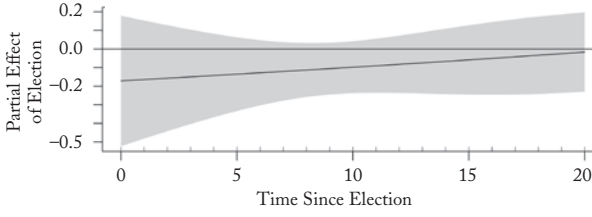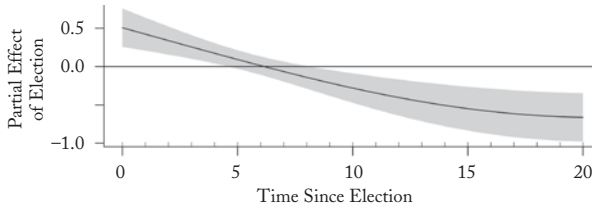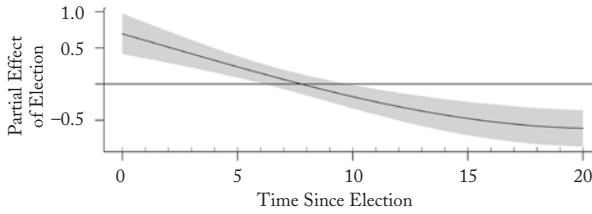
FIGURE 4

YEARS SINCE ELECTION AND EFFECT OF ELECTION ON REGIME FAILURE FOR
CONTESTED AND UNCONTESTED ELECTIONS

FIGURE 5

YEARS SINCE ELECTION AND EFFECT OF ELECTION ON REGIME FAILURE FOR
EXECUTIVE AND LEGISLATIVE ELECTIONS

second year. It would be preferable to organize different elections to be held simultaneously 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 undesirable effects related to several separate election events that serve as focal points for opposition coordination.

ADDRESSING ENDOGENEITY

On the basis of the results thus far, we cannot plausibly infer that autocratic elections cause short-term instability and long-term stability. The reason is that the choices related to holding elections—both concerning whether the regime should implement or discontinue the institution of elections, and the timing of particular elections—may be endogenous to unobserved factors that also affect regime stability.[133] Elections may be held due to a combination of dictators' strategic calculations relating to domestic stability and other factors, such as external influences or international pressure. Dictators who hold beliefs regarding the stabilizing or destabilizing 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 is threatened. This might, in turn, generate the observed pattern that elections are immediately followed by breakdowns. Although the regularized intervals (four or five years) of elections in many autocracies should mitigate this alternative mechanism, we want to exclude it and other sources of endogeneity bias to investigate more carefully the causal impact of elections.

We therefore run IV-probit models and treat proximity to autocratic elections as endogenous. To obtain consistent estimates of any causal effect, we must identify instruments that are fairly strongly correlated with the endogenous independent variable and not directly related to regime failure. To identify valid instruments for elections, we exploit the fact that elections can be partly driven by international forces. Drawing inspiration from the literature on how regimes and particular institutions affect economic outcomes,[134] we construct different instruments that tap variation among neighboring countries and globally in the propensity of autocracies to hold elections.

[133] Pepinsky 2014.
[134] Persson and Tabellini 2003; Knutsen 2011; Huber, Ogorzalek, and Gore 2012; Acemoğlu et al. 2014.

While some variation in autocratic elections is probably due to strategic choices, not all is. To achieve identification, we aim to capture such nonstrategic variation with our instruments. The underlying notion is that variation in neighboring and other autocracies holding elections relates to the probability that a given autocracy will hold one. This probability can come from different kinds of institutional spillover effects from neighbors or regional powers, such as nonstrategic emulation stemming from various cognitive heuristics,[135] or from international political trends affecting the typical institutional makeup of autocracies. Further, these international sources of variation in whether or not elections are held domestically should not directly impact the domestic regime's durability once the other covariates are controlled for. The IV-probit models therefore add the baseline controls, including region and decade dummies, to address unobserved region and time-specific factors that potentially affect durability and correlate with our instruments. There is one potential caveat with the exclusion restriction: the following causal pathway could induce correlation between our instruments and the dependent variable.

Neighbor autocratic election → Neighbor instability → Domestic instability → Domestic autocratic election

To exclude this pathway from contaminating our results, we test models that control for two proxies of regional instability: the share of other autocracies in the region that broke down that year and those that broke down during the past five years.

We first treat the short-term effect as endogenous, using IV-probit models with different instrument sets. Table 3 displays the second-stage results from ten such models, in which *Election year* is the endogenous regressor in odd-numbered models and *ElecShortTerm* is the regressor in the even-numbered ones. We discuss below why we put relatively more faith in models 7–10, but begin this discussion with the sparser models, 1 and 2. Models 1 and 2 include only one instrument that corresponds closely with the notion of neighborhood diffusion, namely, the share of a country's neighboring autocracies that hold elections in a given year (*NeighbShareElec*). *NeighbShareElec* has the expected positive sign in the first-stage (see Table A.26 in the supplementary material[136]), although it is only a moderately strong instrument.[137] The

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[135] Weyland 2005.

[136] Knutsen, Nygård, and Wig 2016.

[137] The t-values of *NeighbShareElec* are 3.3 (model 1) and 2.9 (model 2), and Cragg-Donald Wald F-statistics are, respectively, 11.5 and 9.0. Due to the underdeveloped specification tests for IV-probit

TABLE 3

SECOND-STAGE IV-PROBIT RESULTS ON REGIME FAILURE WITH ELECTION YEAR OR ELECSHORTTERM AS ENDOGENOUS REGRESSORS[a]

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Election year	2.202 (1.50)				1.873** (0.91)		1.744** (0.84)		1.961* (1.03)	
ElecShortTerm		3.443* (1.85)		2.350** (1.03)		2.194* (1.22)		2.585** (1.13)		2.841** (1.34)
Election past five years	−0.435 (0.35)		−0.347* (0.19)		−0.336 (0.22)		−0.331 (0.21)		−0.355 (0.24)	
ElecLongTerm		−2.455* (1.39)		−1.510** (0.76)		−1.380 (0.89)		−1.814** (0.85)		−1.841* (0.97)
Region Polity	2.041*** (0.77)	1.942** (0.85)	2.296*** (0.54)	2.336*** (0.53)	2.191*** (0.58)	2.199*** (0.57)	2.206*** (0.50)	2.210*** (0.51)	2.164*** (0.60)	2.043*** (0.63)
ln(GDP per capita)	−0.245*** (0.09)	−0.218** (0.11)	−0.227*** (0.07)	−0.225*** (0.07)	−0.234*** (0.07)	−0.232*** (0.08)	−0.261*** (0.07)	−0.251*** (0.07)	−0.234*** (0.07)	−0.218*** (0.08)
GDP per capita growth	−0.010** (0.00)	−0.009* (0.00)	−0.014*** (0.00)	−0.013*** (0.00)	−0.014*** (0.00)	−0.014*** (0.00)	−0.011** (0.00)	−0.010** (0.00)	−0.014*** (0.00)	−0.014*** (0.00)
Military size	−0.098 (0.07)	−0.084 (0.07)	−0.130* (0.07)	−0.126* (0.07)	−0.108 (0.07)	−0.108 (0.07)	−0.103 (0.07)	−0.098 (0.07)	−0.107 (0.07)	−0.100 (0.07)
Resource dependence	0.000 (0.00)	−0.000 (0.00)	0.001 (0.00)	0.000 (0.00)	0.001 (0.00)	0.001 (0.00)	0.000 (0.00)	−0.000 (0.00)	0.001 (0.00)	0.000 (0.00)
Duration	−0.014 (0.01)	−0.023*** (0.01)	−0.021*** (0.01)	−0.026*** (0.01)	−0.032** (0.02)	−0.036** (0.02)	−0.014 (0.01)	−0.021*** (0.01)	−0.032** (0.02)	−0.036** (0.02)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Duration^2	0.000	0.000**	0.000**	0.000***	0.001	0.001	0.000	0.000**	0.001	0.001*
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Duration^3	−0.000	−0.000	−0.000	−0.000*	−0.000	−0.000	−0.000	−0.000	−0.000	−0.000
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Neighboring instability					0.662**	0.663**			0.662**	0.614**
					(0.26)	(0.26)			(0.26)	(0.27)
Neighborhood instability					0.081	0.091			0.079	0.093
past five years					(0.12)	(0.12)			(0.12)	(0.12)
Region dummies	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Year dummies	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
N	3782	3782	3434	3434	3264	3264	3782	3782	3264	3264
Countries	112	112	112	112	112	112	112	112	112	112
Sargan p-value			.01	.01	.15	.16	.25	.26	.68	.64
Cragg–Donald Wald	11.5	9.0	12.0	10.7	9.4	8.9	32.9	27.0	21.4	18.0
F-statistic										

* p < 0.1, ** p < 0.05, *** p < 0.01; standard errors in parentheses

[a] IV-probit models; second-stage regressions with *Election year* and *ElecShortTerm* as endogenous independent variables and regime failure as dependent variable. All models include share of neighboring autocracies with election year as instrument. Models 3–10 also include share of autocracies globally with election year as instrument. Models 3–6 further include five extra instruments tapping neighboring and global environment in terms of autocratic elections. First-stage regressions are reported in Table A.21 of the supplementary material; Knutsen. Nygård, and Wig 2016.

relative weakness of the instrument induces high standard errors in the second-stage estimates. Thus, the t-values for the estimated effects on regime breakdown are only 1.5 for *Election year* and 1.9 for *ElecShortTerm*, despite the point estimates being far larger than the highly significant estimates from corresponding regular probit models.

Employing more instruments to increase first-stage predictive power may reduce uncertainty for the second-stage estimates. We therefore estimate models that include additional instruments created to capture exogenous institutional spillover effects from neighboring autocracies or other autocracies globally. Models 3–6 add six other such instruments.[138] Models 3 and 4 are otherwise similar to models 1 and 2, whereas models 5 and 6 also add the regional breakdown controls to identify valid instruments for elections to further relieve concerns about the exclusion restriction by blocking the above discussed potential causal pathway via regional instability. Indeed, both *Election year* and *ElecShortTerm* are significant (5 percent) in models 3 and 4, and *Election year* remains significant at 5 percent and *ElecShortTerm* at 10 percent when including regional instability controls in models 5 and 6. The clearer results relative to models 1 and 2 stem from reduced standard errors, because *Election year* and *ElecShortTerm* actually decrease slightly in size. Nonetheless, models 3–6 are not optimal specifications either: Sargan tests on the exclusion restriction yield p-values that are low or modestly high (Sargan p-values increase when controlling for the regional breakdown pathway in models 5 and 6, as expected). Further, Stock-Yogo weak identification tests still suggest that the instrument set is only modestly strong, and the first-stage regressions reveal that many instruments are statistically insignificant whereas others are negative in sign, contrary to expectations.

We next test specifications employing only instruments that consistently have the expected sign and are significant (at 5 percent) first-stage predictors of *Election year* and *ElecShortTerm* in models 1–6. Together with *NeighbShareElec*, the instrument measuring the share of autocracies

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models, we follow standard practice and conduct all specification tests on structurally similar two-stage least squares models. The relatively weak instruments might also yield concerns of weak-instrument bias. Yet, calculations of maximal potential bias, based on the critical values from the Stock-Yogo test for weak identification (e.g., F = 9.0 for 15 percent maximal IV relative bias for model 1) suggest that the IV-probit models should still be clearly less biased than our baseline models, given that the exclusion restriction holds; IV estimates are biased *toward* those yielded by ordinary least squares, in proportion to the weakness of the instrument.

[138] These are share of neighboring autocracies with elections in the past five years; number of elections in neighborhood in given year; dummy scoring more than one election in neighborhood; number of neighboring autocracies; share of autocracies globally with election year; share of autocracies globally with elections in the last five years.

globally with an election year satisfies these criteria.[139] Models 7 and 8 omit the neighboring instability controls, whereas models 9 and 10 include them. Indeed, models 7–10 outperform 1–6 on both instrument F-values and the Sargan test.[140] Hence, models 7–10 could provide us with consistent estimates of the short-term causal effect of elections on regime breakdown. Corroborating the main result from above, these models show substantially large and positive coefficients for both *Election year* and *ElecShortTerm*. Further, *Election year* is significant at 5 percent in model 7 and has p = 0.06 in model 9, whereas *ElecShortTerm* is consistently significant at 5 percent.

Regarding robustness, otherwise similar fixed-effects two-stage least squares models yield somewhat stronger results on the short-term effect of elections than IV-probit models, and so do more parsimonious IV-probit models that drop region and decade dummies,[141] yet the significance of the short-term effect depends on the exact subset of instruments. Moreover, the instruments are never very strong (suggesting the difficulty of predicting exactly when autocratic regimes hold elections) and it is, naturally, impossible to verify that the exclusion restriction is satisfied. Furthermore, IV models identify local average treatment effects, which means that we are identifying only the effect for autocracies whose elections are predicted by international trends and spillover effects. While we have no immediate grounds for believing so, these cases might not be representative of all electoral autocracies.

We should therefore not draw inferences that are too strong from the IV-probit results alone, although they go some way in alleviating concerns about the endogeneity biases driving the substantial short-term correlation between autocratic elections and regime collapse. To further assuage concerns that the IV-probit models do not adequately handle the "no-omitted-confounders assumption" underlying a causal interpretation, we perform causal sensitivity tests.[142] These simulate our baseline estimates under different omitted-variable or endogeneity scenarios and provide estimates of how big the confounding from

[139] Table A.25 in Knutsen, Nygård, and Wig 2016 shows similar models including a third instrument (more than one neighboring autocracy with election year), which is consistently positive and significant at 10 percent.

[140] Both instruments also remain positive, though the significance of *NeighbShareElec* is weakened compared to models 1–6.

[141] We also tested biprobit models for the dummy variable setup, since both the endogenous independent and dependent variables are binary. These models yield even stronger support for our hypotheses than do the IV-probit models.

[142] Blackwell 2014.

unobservables must be, in practice, for our estimates to become indistinguishable from zero. These tests (see the supplementary material[143]) indicate that such confounding must be related to positive selection (that is, more stable autocracies holding elections more frequently) and explain about 50 percent of the joint variance in treatment and outcome for the conclusion of a negative short-term effect to be incorrect. This finding further suggests that a causal short-term effect on regime breakdown is more likely than not.[144]

We also test IV-probit models in which the long-term, rather than short-term, effect of elections is modeled as endogenous. These models consistently replicate the sign identified by the logit models above, but the estimated long-term effect falls short of statistical significance in most specifications.[145] Table A.20 in the supplementary material reports IV-probit models based on instrumentation strategies analogous to the models in Table 3,[146] but in which the instruments measuring neighborhood and global share of autocracies with elections pertain to the past five years, which is theoretically more appropriate when instrumenting for the long-term effect. Although these models consistently report the expected sign, standard errors are large and the long-term coefficients are statistically insignificant. Hence, there is no clear evidence from our IV-probit models of a long-term causal effect of elections on regime stability.

CONCLUSION

Observant readers of newspapers who have no knowledge of the political science literature on autocratic elections may wonder why nondemocratic leaders hold elections at all. Elections are often immediately followed by large-scale protests, violence, and coup attempts, as illustrated by fairly recent events in countries as different as Egypt and Venezuela. The simple answer that we propose is that many autocratic leaders, at least those who are not too myopic, accept the increased short-term risk of being ousted in exchange for an improved grip on power in the long run. Autocratic elections affect regime survival through various mechanisms. Whereas many stabilizing mechanisms

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[143] Knutsen, Nygård, and Wig 2016.
[144] The same cannot be said for the long-term effect, as modest departures from the no-omitted-confounders assumption and negative selection (more unstable regimes hold more elections) generate null results.
[145] For instance, some IV-probit models using only a share of neighboring autocracies with an election year report statistically significant effects.
[146] Knutsen, Nygård, and Wig 2016.

expectedly work with quite a long time lag, the destabilizing mechanisms are more immediate.

Our empirical analysis provides nuanced insight into how autocratic elections affect regime breakdown. The analysis leaves no doubt that autocratic elections are associated with an increased probability of regime breakdown in their immediate aftermath. This result is robust to various specification changes, such as altering the set of control variables, measuring the time since an election in different ways, and including or excluding "questionable observations" such as regimes ending through an election in which the incumbent does not run. Our further analysis indicates that this correlation may not be 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 appears to be a causal effect of elections on autocratic breakdown in the short term. But if the regime is able to survive the immediately increased risk, our analysis also provides indications that elections are associated with autocratic regime stability in the long run, though the results are not as unequivocal.

Supplementary Material

Supplementary material for this article can be found at https://doi.org/S0043887 116000149.

References

Acemoğlu, Daron, and James A. Robinson. 2006. *Economic Origins of Dictatorship and Democracy.* New York, N.Y.: Cambridge University Press.

Acemoğlu, Daron, Suresh Naidu, Pascual Restrepo, and James A. Robinson. 2014. "Democracy Does Cause Growth." NBER Working Paper no. 20004. Cambridge, Mass.: National Bureau of Economic Research.

Baev, Pavel K. 2011. "A Matrix for Post-Soviet 'Color Revolutions': Exorcising the Devil from the Details." *International Area Studies Review* 14, no. 2: 3–22.

Baldwin, Kate, and Eric Mvukiyehe. 2015. "Elections and Collective Action: Evidence from Changes in Traditional Institutions in Liberia." *World Politics* 67, no. 4 (October): 690–725.

Beaulieu, Emily. 2014. *Electoral Protest and Democracy in the Developing World.* Cambridge, UK: Cambridge University Press.

Beaulieu, Emily, and Susan D. Hyde. 2009. "In the Shadow of Democracy Promotion: Strategic Manipulation, International Observers, and Election Boycotts." *Comparative Political Studies* 42, no. 3: 392–415.

Beck, Nathaniel, and Simon Jackman. 1998. "Beyond Linearity by Default: Generalized Additive Models." *American Journal of Political Science* 42, no. 2: 596–627.

Beissinger, Mark R. 2002. *Nationalist Mobilization and the Collapse of the Soviet State.* Cambridge, UK: Cambridge University Press.

Bienen, Henry, and Nicolas van de Walle. 1991. *Of Time and Power: Leadership Duration in the Modern World.* Palo Alto, Calif.: Stanford University Press.

———. 1992. "A Proportional Hazard Model of Leadership Duration." *Journal of Politics* 54, no. 3: 685–717.

Blackwell, Matthew. 2014. "A Selection Bias Approach to Sensitivity Analysis for Causal Effects." *Political Analysis* 22, no. 2: 169–82.

Blaydes, Lisa. 2011. *Elections and Distributive Politics in Mubarak's Egypt.* Cambridge, UK: Cambridge University Press.

Bogaards, Matthijs. 2013. "Reexamining African Elections." *Journal of Democracy* 24, no. 4: 151–60.

Boix, Carles, and Milan W. Svolik. 2013. "The Foundations of Limited Authoritarian Government: Institutions, Commitment, and Power-Sharing in Dictatorships." *Journal of Politics* 75, no. 2: 300–16.

Bratton, Michael, and Nicholas van de Walle. 1997. *Democratic Experiments in Africa: Regime Transitions in Comparative Perspective.* Cambridge, UK: Cambridge University Press.

Brownlee, Jason. 2007. *Authoritarianism in an Age of Democratization.* Cambridge, UK: Cambridge University Press.

———. 2009. "Portents of Pluralism: How Hybrid Regimes Affect Democratic Transitions." *American Journal of Political Science* 53, no. 3: 515–32.

Bueno de Mesquita, Bruce, and Alastair Smith. 2009. "Political Survival and Endogenous Institutional Change." *Comparative Political Studies* 42, no. 2: 167–97.

Bueno de Mesquita, Bruce, Alastair Smith, Randolph M. Siverson, and James D. Morrow. 2003. *The Logic of Political Survival.* Cambridge, Mass.: MIT Press.

Bunce, Valerie J., and Sharon L. Wolchik. 2010. "Defeating Dictators: Electoral Change and Stability in Competitive Authoritarian Regimes." *World Politics* 62, no. 1 (January): 43–86.

Carter, David B., and Curtis S. Signorino. 2010. "Back to the Future: Modeling Time Dependence in Binary Data." *Political Analysis* 18, no. 3: 271–92.

Casper, Brett Allen, and Scott A. Tyson. 2014. "Popular Protest and Elite Coordination in a Coup d'État." *Journal of Politics* 76, no. 2: 548–64.

Cederman, Lars-Erik, Kristian Skrede Gleditsch, and Simon Hug. 2013. "Elections and Ethnic Civil War." *Comparative Political Studies* 46, no. 3: 387–417.

Cheibub, José Antonio, Jennifer Gandhi, and James Raymond Vreeland. 2010. "Democracy and Dictatorship Revisited." *Public Choice* 143, no. 1-2: 67–101.

Cheibub, José Antonio, and Jude C. Hays. 2015. "Elections and Civil War in Africa." *Political Science Research and Methods*: 1–22. doi: 10.1017/psrm.2015.33.

Cox, Gary W. 2009. "Authoritarian Elections and Leadership Succession, 1975–2004." Paper presented at the annual meeting of the American Political Science Association, Toronto, September 3–6. At papers.ssrn.com/sol3/paperscfm?abstract_id=1449034, accessed August 19, 2016.

Davenport, Christian. 1997. "From Ballots to Bullets: An Empirical Assessment of How National Elections Influence State Uses of Political Repression." *Electoral Studies* 16, no. 4: 517–40.

Demarest, Geoffrey. 2002. "The Guatemalan Coup of 23 March 1982." *Small Wars and Insurgencies* 13, no. 3: 145–62.

DeNardo, James. 1985. *Power in Numbers. The Political Strategy of Protest and Rebellion.* Princeton, N.J.: Princeton University Press.

Epstein, David L., Robert Bates, Jack Goldstone, Ida Kristensen, and Sharyn O'Halloran. 2006. "Democratic Transitions." *American Journal of Political Science* 50, no. 3: 551–69.

Fearon, James D. 2011. "Self-Enforcing Democracy." *Quarterly Journal of Economics* 126, no. 4: 1661–1708.

Gandhi, Jennifer. 2008. *Political Institutions under Dictatorship.* Cambridge, UK: Cambridge University Press.

Gandhi, Jennifer, and Ellen Lust-Okar. 2009. "Elections under Authoritarianism." *Annual Review of Political Science* 12: 403–22.

Gandhi, Jennifer, and Adam Przeworski. 2006. "Cooperation, Cooptation and Rebellion under Dictatorships." *Economics and Politics* 18, no. 1: 1–26.

———. 2007. "Authoritarian Institutions and the Survival of Autocrats." *Comparative Political Studies* 40, no. 11: 1279–301.

Gates, Scott, Håvard Hegre, Mark P. Jones, and Håvard Strand. 2006. "Institutional Inconsistency and Political Instability: Polity Duration, 1800–2000." *American Journal of Political Science* 50, no. 4: 893–908.

Geddes, Barbara. 1999. "What Do We Know about Democratization after Twenty Years?" *Annual Review of Political Science* 2: 115–44.

———. 2006. "Why Parties and Elections in Authoritarian Regimes?" Revised version of a paper presented at the annual meeting of the American Political Science Association, Washington, D.C., August 31–September 3, 2005. At http://www.daniellazar.com/wp-content/uploads/authoritarian-elections.doc, accessed August 19, 2016.

Geddes, Barbara, Joseph Wright, and Erica Frantz. 2014. "Autocratic Breakdown and Regime Transitions: A New Data Set." *Perspectives on Politics* 12, no. 2: 313–31.

Gleditsch, Kristian S. 2002. *All International Politics Is Local: The Diffusion of Conflict, Integration, and Democratization.* Ann Arbor, Mich.: University of Michigan Press.

Goldstone, Jack A., Robert H. Bates, David L. Epstein, Ted Robert Gurr, Michael B. Lustik, Monty G. Marshall, Jay Ulfelder, and Mark Woodward. 2010. "A Global Model for Forecasting Political Instability." *American Journal of Political Science* 54, no. 1: 190–208.

Gurr, Ted Robert. 1974. "Persistence and Change in Political Systems, 1800–1971." *American Political Science Review* 68, no. 4: 1482–504.

Haber, Stephen, and Victor Menaldo. 2011. "Do Natural Resources Fuel Authoritarianism? A Reappraisal of the Resource Curse." *American Political Science Review* 105, no. 1: 1–26.

Hadenius, Axel, and Jan Teorell. 2007. "Pathways from Authoritarianism." *Journal of Democracy* 18, no. 1: 143–56.

Hafner-Burton, Emilie M., Susan D. Hyde, and Ryan S. Jablonski. 2014. "When Do Governments Resort to Election Violence?" *British Journal of Political Science* 44, no. 1: 149–79.

Hastie, Trevor, and Robert Tibshirani. 1990. *Generalized Additive Models.* London, UK: Chapman and Hall.

Hastie, Trevor, Robert Tibshirani, and Jerome Friedman. 2009. *The Elements of Statistical Learning: Data Mining, Inference, and Prediction.* New York, N.Y.: Springer.

Hegre, Håvard, Tanja Ellingsen, Scott Gates, and Nils Petter Gleditsch. 2001. "Toward a Democratic Civil Peace? Democracy, Political Change, and Civil War, 1816–1992." *American Political Science Review* 95, no. 1: 33–48.

Houle, Christian. 2009. "Inequality and Democracy: Why Inequality Harms Consolidation but Does Not Affect Democratization." *World Politics* 61, no. 4 (October): 589–622.

Howard, Marc Morjé, and Philip G. Roessler. 2006. "Liberalizing Electoral Outcomes in Competitive Authoritarian Regimes." *American Journal of Political Science* 50, no. 2: 365–81.

Huber, John D., Thomas K. Ogorzalek, and Radhika Gore. 2012. "Democracy, Targeted Redistribution and Ethnic Inequality." Working Paper. Columbia University. At http://polisci.columbia.edu/files/polisci/u86/huber%20et%20al%20inequalty.pdf, accessed September 29, 2016.

Hyde, Susan D., and Nikolay Marinov. 2012. "Which Elections Can Be Lost?" *Political Analysis* 20, no. 2: 191–210.

Imai, Kosuke, Gary King, and Olivia Lau. 2014. "logit.bayes: Bayesian Logistic Regression for Dichotomous Dependent Variables." At http://ftp.uni-bayreuth.de/math/statlib/R/CRAN/doc/vignettes/Zelig/logit.bayes.pdf, accessed August 19, 2016.

Jacobs, Everett M. 1970. "Soviet Local Elections: What They Are, and What They Are Not." *Soviet Studies* 22, no. 1: 61–76.

Karklins, Rasma. 1986. "Soviet Elections Revisited: Voter Abstention in Noncompetitive Voting." *American Political Science Review* 80, no. 2: 449–69.

Kennedy, Ryan. 2010. "The Contradiction of Modernization: A Conditional Model of Endogenous Democratization." *Journal of Politics* 72, no. 3: 785–98.

Knutsen, Carl Henrik. 2011. "Democracy, Dictatorship and Protection of Property Rights." *Journal of Development Studies* 47, no. 1: 164–82.

———. 2014. "Income Growth and Revolutions." *Social Science Quarterly* 95, no. 4: 920–37.

Knutsen, Carl Henrik, and Håvard Mokleiv Nygård. 2015. "Institutional Characteristics and Regime Survival: Why Are Semi-Democracies Less Durable Than Autocracies and Democracies?" *American Journal of Political Science* 59, no. 3: 656–70.

Knutsen, Carl Henrik, Håvard Mokleiv Nygård, and Tore Wig. 2016. Supplementary material. At https://doi.org/S0043887116000149.

Kuran, Timur. 1989. "Sparks and Prairie Fires: A Theory of Unanticipated Political Revolution." *Public Choice* 61, no. 1: 41–74.

———. 1997. *Private Truths, Public Lies: The Social Consequences of Preference Falsification.* Cambridge, Mass.: Harvard University Press.

Levitsky, Steven, and Lucan A. Way. 2002. "The Rise of Competitive Authoritarianism." *Journal of Democracy* 13, no. 2: 51–65.

———. 2010. *Competitive Authoritarianism: Hybrid Regimes after the Cold War.* Cambridge, UK: Cambridge University Press.

Lindberg, Staffan I. 2006. *Democracy and Elections in Africa.* Baltimore, Md.: Johns Hopkins University Press.

———. 2013. "Confusing Categories, Shifting Targets." *Journal of Democracy* 24, no. 4: 161–67.

Little, Andrew T. 2012. "Elections, Fraud, and Election Monitoring in the Shadow of Revolution." *Quarterly Journal of Political Science* 7, no. 3: 249–83.

Lohmann, Susanne. 1994. "Dynamics of Informational Cascades: The Monday Demonstrations in Leipzig, East Germany, 1989–91." *World Politics* 47, no. 1 (October): 42–101.

Luttwak, Edward. 1968. *Coup d'État: A Practical Handbook.* London, UK: Penguin Press.

Maddison, Angus. 2007. *Contours of the World Economy 1–2030 AD: Essays in Macro-Economic History*. Oxford, UK: Oxford University Press.

Magaloni, Beatriz. 2006. *Voting for Autocracy: Hegemonic Party Survival and Its Demise in Mexico.* Cambridge, UK: Cambridge University Press.

———. 2010. "The Game of Electoral Fraud and the Ousting of Authoritarian Rule." *American Journal of Political Science* 54, no. 3: 751–65.

Magaloni, Beatriz, and Ruth Kricheli. 2010. "Political Order and One-Party Rule." *Annual Review of Political Science* 13: 123–43.

Magaloni, Beatriz, and Jeremy Wallace. 2008. "Citizen Loyalty, Mass Protest and Authoritarian Survival." Paper presented at the conference "Dictatorships: Their Governance and Social Consequences," Princeton University, April 25–26.

Malesky, Edmund, and Paul Schuler 2011. "The Single-Party Dictator's Dilemma: Information in Elections without Opposition." *Legislative Studies Quarterly* 36, no. 4: 491–530.

Malesky, Edmund J., Paul Schuler, and Anh Tran. 2012. "The Adverse Effects of Sunshine: A Field Experiment on Legislative Transparency in an Authoritarian Assembly." *American Political Science Review* 106, no. 4: 762–86.

McCoy, Jennifer L., and Jonathan Hartlyn. 2009. "The Relative Powerlessness of Elections in Latin America." In Staffan I. Lindberg, ed., *Democratization by Elections: A New Mode of Transition.* Baltimore, Md.: Johns Hopkins University Press.

Miller, Michael K. 2012. "Democracy by Example? Why Democracy Spreads When the World's Democracies Prosper." Paper presented at the annual meeting of the International Studies Association, San Diego, April 1–4.

———. 2015a. "Elections, Information, and Policy Responsiveness in Autocratic Regimes." *Comparative Political Studies* 48, no. 6: 691–727.

———. 2015b. "Democratic Pieces: Autocratic Elections and Democratic Development since 1815." *British Journal of Political Science* 45, no. 3: 501–30.

Millett, Richard. 1985. "Guatemala: Progress and Paralysis." *Current History* 84, no. 503: 109–13.

Møller, Jørgen, and Svend-Erik Skaaning. 2013a. "Autocracies, Democracies, and the Violation of Civil Liberties." *Democratization* 20, no. 1: 82–106.

———. 2013b. "The Third Wave: Inside the Numbers." *Journal of Democracy* 24, no. 4: 97–109.

Myerson, Roger B., 2008. "The Autocrat's Credibility Problem and Foundations of the Constitutional State." *American Political Science Review* 102, no. 1: 125–39.

Nordlinger, Eric A. 1977. *Soldiers in Politics: Military Coups and Government.* Englewood-Cliffs, N.J.: Prentice-Hall.

Pepinsky, Thomas. 2014. "The Institutional Turn in Comparative Authoritarianism." *British Journal of Political Science* 44, no. 3: 631–53.

Persson, Torsten, and Guido Tabellini. 2003. *The Economic Effect of Constitutions.* Cambridge, Mass.: MIT Press.

Pop-Eleches, Grigore, and Graeme B. Robertson. 2011. "Elections, Information and Political Change in the Post–Cold War Era." Manuscript, Princeton University. At https://www.princeton.edu/~gpop/Elections%20Info%20Pol%20Chg%20GPE%20GBR%20Dec%202010, accessed August 31, 2016.

Powell, Jonathan. 2012. "Determinants of the Attempting and Outcome of Coup." *Journal of Conflict Resolution* 56, no. 6: 1017–40.

Przeworski, Adam, and Fernando Limongi. 1997. "Modernization: Theory and Facts." *World Politics* 49, no. 2 (January): 155–83.

Przeworski, Adam, Michael E. Alvarez, José Antonio Cheibub, and Fernando Limongi. 2000. *Democracy and Development. Political Institutions and Well-Being in the World, 1950–1990.* Cambridge, UK: Cambridge University Press.

Reuter, Ora John, and Jennifer Gandhi. 2011. "Economic Performance and Elite Defection from Hegemonic Parties." *British Journal of Political Science* 41, no. 1: 83–110.

Ross, Michael L. 2001. "Does Oil Hinder Democracy?" *World Politics* 53, no. 3 (April): 325–61.

Schedler, Andreas. 2002. "The Menu of Manipulation." *Journal of Democracy* 13, no. 2: 36–50.

———. 2006. "The Logic of Electoral Authoritarianism." In Andreas Schedler, ed., *Electoral Authoritarianism: The Dynamics of Unfree Competition.* Boulder, Colo.: Lynne Rienner Publishers.

———. 2013. *The Politics of Uncertainty: Sustaining and Subverting Electoral Authoritarianism.* Oxford, UK: Oxford University Press.

Schuler, Paul, Dimitar D. Gueorguiev, and Francisco Cantu. 2013. "Risk and Reward: The Differential Impact of Authoritarian Elections on Regime Decay and Breakdown." Manuscript, University of Arizona. doi: 10.2139/ssrn.1718056.

Seeberg, Merete B. 2014. "State Capacity and the Paradox of Authoritarian Elections." *Democratization* 21, no. 7: 1265–85.

———. 2015. "The Power to Control: How State Capacity and Economic Control Condition the Effect of Authoritarian Elections on Regime Stability." Ph.D. diss. Aarhus University.

Serdyuk, Igor N., Nathan R. Zaccai, and Joseph Zaccai. 2007. *Methods in Molecular Biophysics: Structure, Dynamics, Function.* Cambridge, UK: Cambridge University Press.

Singer, J. David. 1988. "Reconstructing the Correlates of War Dataset on Material Capabilities of States, 1816–1985." *International Interactions* 14, no. 2: 115–32.

Svolik, Milan W. 2012. *The Politics of Authoritarian Rule.* Cambridge, UK: Cambridge University Press.

———. 2013. "Contracting on Violence: The Moral Hazard in Authoritarian Repression and Military Intervention in Politics." *Journal of Conflict Resolution* 57, no. 5: 765–94.

———. 2015. "Which Democracies Will Last? Coups, Incumbent Takeovers, and the Dynamic of Democratic Consolidation." *British Journal of Political Science* 45, no. 4: 715–38.

Teorell, Jan. 2010. *Determinants of Democracy: Explaining Regime Change in the World, 1972–2006.* Cambridge, UK: Cambridge University Press.

Thompson, Mark R., and Philipp Kuntz. 2004. "Stolen Elections: The Case of the Serbian October." *Journal of Democracy* 15, no. 4: 159–72.

Tucker, Joshua A. 2007. "Enough! Electoral Fraud, Collective Action Problems, and Post-Communist Colored Revolutions." *Perspectives on Politics* 5, no. 3: 535–51.

Tullock, Gordon. 2005. *The Social Dilemma of Autocracy, Revolution, Coup d'État, and War.* Indianapolis, Ind.: Liberty Fund.

van de Walle, Nicolas. 2002. "Africa's Range of Regimes." *Journal of Democracy* 13, no. 2: 66–80.

Vanhanen, Tatu. 2000. "A New Dataset for Measuring Democracy, 1810–1998." *Journal of Peace Research* 37, no. 2: 251–65.

Vreeland, James Raymond. 2008. "The Effect of Political Regime on Civil War: Unpacking Anocracy." *Journal of Conflict Resolution* 52, no. 3: 401–25.

Weede, Erich, and Edward N. Muller. 1998. "Rebellion, Violence and Revolution: A Rational Choice Perspective." *Journal of Peace Research* 35, no. 1: 43–59.

Weingast, Barry R. 1997. "The Political Foundations of Democracy and the Rule of the Law." *American Political Science Review* 91, no. 2: 245–63.

Weyland, Kurt. 2005. "Theories of Policy Diffusion: Lessons from Latin American Pension Reform." *World Politics* 57, no. 2 (January): 262–95.

Wig, Tore, and Espen Geelmuyden Rød. 2016. "Cues to Coup Plotters: Elections as Coup Triggers in Dictatorships." *Journal of Conflict Resolution* 60, no. 5: 787–812.

Wintrobe, Ronald. 1998. *The Political Economy of Dictatorship.* Cambridge, UK: Cambridge University Press.

Wood, Simon N. 2006. *Generalized Additive Models: An Introduction with R.* New York: Chapman & Hall/CRC.

Wright, Joseph. 2008. "Do Authoritarian Institutions Constrain? How Legislatures Affect Economic Growth and Investment." *American Journal of Political Science* 52, no. 2: 322–43.

———. 2011. "Electoral Spending Cycles in Dictatorships." Manuscript, Pennsylvania State University. At http://www.personal.psu.edu/jgw12/blogs/joseph wright/ESC1.pdf, accessed August 19, 2016.

Wright, Joseph, and Abel Escribà-Folch. 2012. "Authoritarian Institutions and Regime Survival: Transitions to Democracy and Subsequent Autocracies." *British Journal of Political Science* 42, no. 2: 283–309.

Zaslavsky, Victor, and Robert J. Brym. 1978. "The Functions of Elections in the USSR." *Europe-Asia Studies* 30, no. 3: 362–71.