Leader Age, Death, and Political Liberalization in Dictatorships

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This article examines how expectations about the likelihood of a dictator's death affect the strategic calculations of regime insiders and potential challengers. On the one hand, would-be reformers are better positioned to plan and execute post-death challenges as dictators age. On the other hand, regime insiders anticipate these challenges and try to proactively solve the problem of political succession. The circumstances surrounding leader death determine which of these competing effects dominates. Accordingly, leader death is more liberalizing as leaders age in personalist regimes compared to nonpersonalist regimes, and in countries with high levels of economic development compared to those with low levels of development. Furthermore, preemptive actions in personalist dictatorships, such as coup attempts and irregular removals, are more likely as leaders age and their death becomes imminent.

And dictators die, and the power they took from the people will return to the people. And so long as men die, liberty will never perish.
—Charlie Chaplin, in *The Great Dictator* (1940)

Muhammed Salih, the chairman of the Erk opposition party of Uzbekistan, stated in a 2006 briefing to the US Commission on Security and Cooperation in Europe that "there is no state in all of Central Asia that depends on the will of just one person like Uzbekistan does. But on the other hand, this is what makes a dictatorship so weak. By replacing one person, you can change not only the situation in Uzbekistan, but indeed the entire region. As [former President] Karimov himself likes to say, 'No man, no problem'" (Salih 2006). Precisely because so much political power is concentrated in the hands of one person, the removal or departure of a dictator makes change, including a dramatic change such as liberalization, appear possible.

The death of a dictator, however, does not often generate an opportunity for reform. As Kendall-Taylor and Frantz (2016) demonstrate, democratization rarely follows death and, indeed, is less likely following death than it is after other types of leadership turnover. This finding is remarkably robust. As I show in the first section of this article, the conclusion holds for other measures of political change and, further, the likelihood of liberalization is no greater in a year following leader death than in any other year, regardless of whether leadership change occurred. Authoritarian regimes are remarkably resilient in the aftermath of leader death.

What, then, explains the empirical rarity of post-death reform? Are there circumstances that make liberalization possible? The answer to each of these questions depends on the interplay between the actions taken by political actors in the shadow of leader death and the circumstances that constrain or bolster these actions. I begin by examining how leader age affects the strategic calculations of both regime insiders and outsiders. While potential reformers are typically unprepared for the death of young or middle-aged dictators, at some age it becomes clear that the dictator's death is imminent. In such cases, they may plan post-death challenges to take advantage of the increased vulnerability associated with transition. However, leader age also influences the behavior of regime elites. As death draws near, insiders experience increasing pressure to "solve" the succession problem and exert greater effort to ensure that the leadership transition occurs smoothly. This yields competing predictions about the effect of age: it simultaneously increases the threat from regime outsiders and the stabilizing efforts of insiders. In the aggregate, I find no relationship between death and liberalization, regardless of age.

Certain conditions, however, strengthen the reformist threat and/or constrain regime elites. Accordingly, I find a positive correlation between the death of aging dictators

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Data and supporting materials necessary to reproduce the numerical results in the article are available in the *JOP* Dataverse (https://dataverse.harvard.edu/dataverse/jop). An online appendix with supplementary material is available at https://doi.org/10.1086/707492.

The Journal of Politics, volume 82, number 3. Published online May 14, 2020. https://doi.org/10.1086/707492

and political liberalization in economically developed countries, where demand for reform is greatest, and personalist dictatorships, where it is hardest for elites to plan for succession. Furthermore, we can directly observe the stabilizing efforts of regime insiders in personalist regimes, where uncertainty surrounding transition increases the willingness of elites to preemptively remove the dictator from power. In line with this, I show that relatively few personalist dictators reach old age and that leader death has a positive effect on coup attempts and irregular removals in personalist regimes, compared to other types of dictatorships.

The article contributes to our theoretical and empirical understanding of succession in dictatorships. Leader age, regime type, and economic development all influence the balance between regime insiders and outsiders in the struggle over succession. By accounting for this, I identify the "most likely" cases for political reform, while still emphasizing that liberalization is rare, even under the most favorable circumstances. The article demonstrates how key actors respond to the vulnerability associated with leader age and ultimately death, thus speaking more broadly to literatures on the stability and breakdown of authoritarian regimes. It also refines our understanding of the relationship between economic development and democratization. Finally, the findings in this article have clear real-world implications. The remarkable stability of dictatorships, even during periods when we might expect them to be vulnerable, implies that waiting for dictators to die is not generally an effective strategy for achieving political liberalization.

THE RARITY OF POST-DEATH LIBERALIZATION

There are at least three reasons why the death of a dictator might cause political liberalization. First, regimes are particularly vulnerable to challenges, including reformist ones, during periods of transition. Heightened uncertainty hinders coordination among regime elites and makes it harder for them to present a united front against challenges. Second, new dictators are both weaker and more likely to be reformist, in expectation, than their predecessors (Svolik 2012). Since weak leaders are removed from power early in their tenure and reformist leaders oversee democratic transitions or cede power voluntarily, leaders who remain in power are more likely to be both strong and uninterested in reform. Third, leader death can provide a focal point for prodemocracy challenges, helping to overcome the coordination problems associated with collective action (Chong 1991; Schelling 1960).

Despite these theoretical expectations, political liberalization rarely follows leader death. Dictatorships are remarkably stable following the death of leaders. As Kendall-Taylor and Frantz (2016) show, the death of dictators rarely leads to democratization. Building on this, figure 1 illustrates the effect of death on the degree of political liberalization. Each panel depicts the combined Polity score before and after all 238 instances of leader death in the Archigos data set. The vast majority of cases fall on the diagonal, meaning the Polity score was the same over the 1-, 5-, and 10-year periods following death as it was in the year before death. Very few countries experience liberalization in the aftermath of death (i.e., observations above the diagonal), and their number is roughly equal to those experiencing movement away from democracy (i.e., observations below the diagonal).

Kendall-Taylor and Frantz (2016) also demonstrate that political instability—defined as democratization or regime collapse—is less likely following the death of a dictator than it is following any other form of leader turnover. I extend their analysis by regressing a variety of political change measures on the occurrence of leader death in nondemocracies. In doing so, I compare the political situation following leader death with the political situation following a year in which the leader did not necessarily leave office. This is the difference between asking, "Is leader death as destabilizing as other forms of exit?" as Kendall-Taylor and Frantz do, and "Is leader death destabilizing at all?" Since a change in leadership may, in and of itself, make dictatorships more vulnerable, mine is a more difficult test of the claim that death does not cause political change.

Figure 2 illustrates the results of these regression analyses by depicting the coefficient estimates for leader death.[1] The top panel depicts the effect of leader death on 1-, 5-, and 10-year averages of the combined Polity score. In the second panel, I use the Democracy and Dictatorship Indicator variable (Cheibub, Gandhi, and Vreeland 2010) to determine whether countries transitioned to democracy in the subsequent 1, 5, or 10 years. Third, I use a measure of regime change (Geddes, Wright, and Frantz 2014) that captures whether the country switched between the four main types of dictatorship—monarchy, party, personalist, and military—or to democracy within 1, 5, or 10 years. Finally, I use the absolute change in Polity score over 1, 5, or 10 years to test whether leader death causes instability rather than directional change. For each measure of political change, I include specifications with and without fixed effects and with and

1. More details on the dependent variables, samples, and model specifications can be found in section 3 of the appendix. Robust standard errors throughout the article are calculated using the clubSandwich R package (Pustejovsky 2019).

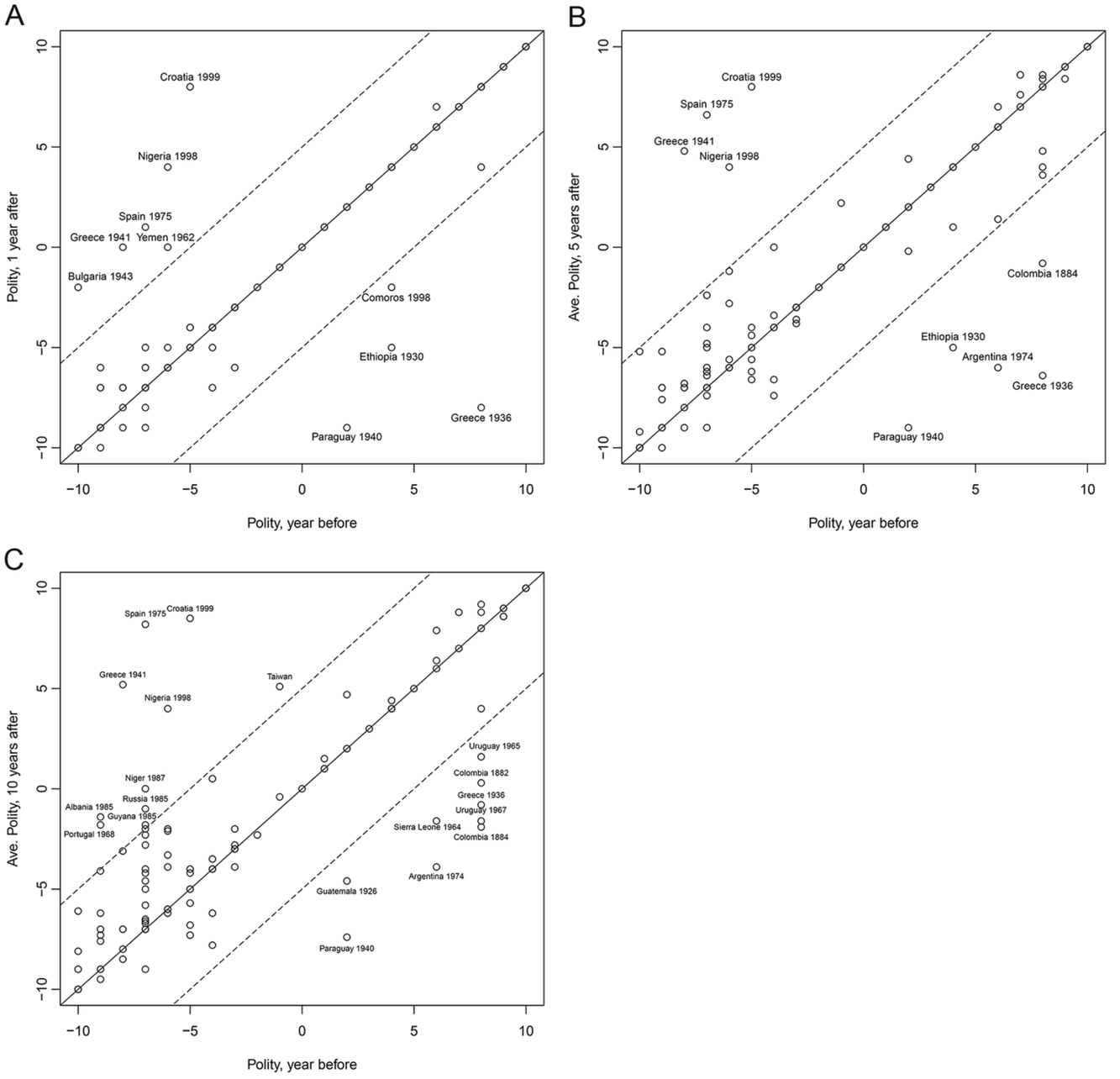

Figure 1. Polity score, before and after death. *A*, 1 year; *B*, 5 years; *C*, 10 years

without a control for leader age. While leader death is often treated as exogenous in the case of economic dependent variables (e.g., Jones and Olken 2005), age is very likely to be correlated with death and plausibly has an independent effect on the country's Polity score.

I find no evidence that death affects either regime change or the absolute change in Polity. It has a negative and significant effect on the 5-year Democratization variable and in one specification that uses the 10-year Polity variable. However, in no specification does it have a positive effect on the likelihood of political change. These results highlight just how unlikely significant political change, particularly in a liberalizing direction, is to follow the death of a dictator.

What, then, explains the rarity of post-death liberalization? Strong forces within dictatorships work to stabilize the system, especially during the periods surrounding death. Dictatorships contain a core group of privileged citizens who support the dictator at the highest level, carry out orders,

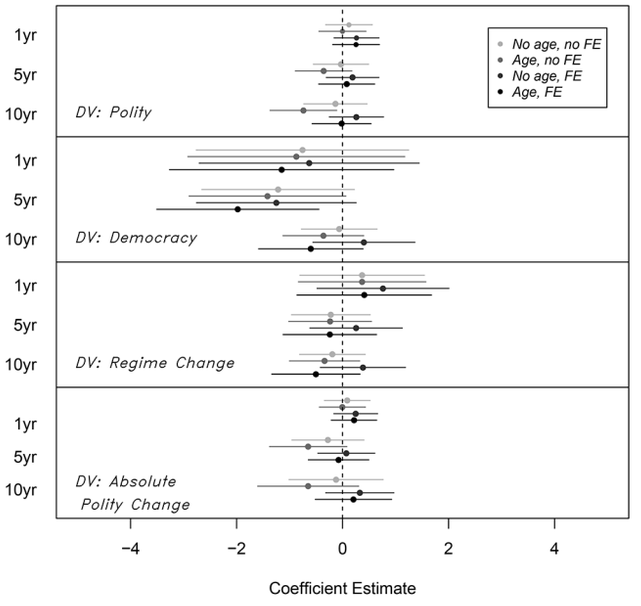

Figure 2. Effect of leader death on political change. The figure depicts coefficient estimates from models that use the 1-, 5-, and 10-year versions of each dependent variable, with and without a control for leader age, and with and without fixed effects. All models include a control for the Polity score at year $t-2$. Models with the Polity and Absolute Change in Polity dependent variables are ordinary least squares (OLS) with robust standard errors clustered at the country, and the fixed effects specifications include both country and year fixed effects. The models with the Democracy and Regime Change dependent variables are logits (no fixed effects) and conditional logits (country fixed effects) with robust standard errors clustered at the country. The coefficient estimates come from models in tables 2–13 in the appendix.

implement policies, and work to uncover enemy plots.[2] In return, they receive patronage in the form of handouts, government positions, and—in some cases—control over policy decisions.[3] During a dictator's life, the well-being of regime insiders is tied to his or her continuation in power. This generates an intense degree of loyalty, especially if elites are considered "replaceable" (Beuno de Mesquita et al. 2003). However, at least some regime insiders expect to outlive the dictator. Given that these individuals generally hope to retain their positions after the death of their erstwhile leader, it behooves them to plan for the death of even beloved dictators.

From the perspective of regime insiders, a successful succession is one in which "the larger ruling coalition around the absolute leader remains intact" (Carapico 2002, 109).[4] Regime insiders prospered under the old dictator and, consequently, prefer to maximize continuity between the old and new regimes. In their ideal world, the old dictator leaves, a new one is installed, and the regime continues on much as before. This is true even if it requires them to forgo the possibility of becoming the dictator themselves (Brownlee 2007). Regime insiders are unlikely to risk their elite status on the small chance that they might win a power struggle.

To ensure stable succession, regime insiders lay plans that help them negotiate transitions as smoothly as possible. The more prepared regime insiders are, the less likely radical political change will follow the dictator's death. This typically involves agreeing either on a successor or on a mechanism for selecting an acceptable successor. Doing so helps elites avoid internal schisms and enables them to present a united front against outside challengers. In addition, this can mitigate the potential selection effects associated with transition. In contrast to other forms of exit, a leader's death reflects neither discontent on the part of regime insiders nor the new ascendency of regime outsiders (Kendall-Taylor and Frantz 2016), suggesting that regime insiders prefer the new dictator to look very similar to the old. Consequently, well-prepared elites circumscribe the list of insider-approved candidates for power following the death of a leader to ensure that only like-minded candidates become serious contenders.[5]

INSIDERS, OUTSIDERS, AND EXPECTATIONS ABOUT DEATH

The previous section demonstrated that post-death liberalization is uncommon. While, all else equal, leader death increases the regime's vulnerability to challenges, insiders with a vested interest in its survival will minimize this vulnerability. In this section, I argue that expectations about leader death interact with the specific circumstances faced by political actors to determine how they act and, ultimately, the likelihood of post-death reform. I focus, in particular, on cases where engineering stable succession is most challenging and, therefore, liberalization is most likely.

Elite actions surrounding succession are difficult to observe directly, especially when everything goes smoothly.

2. For example, Bueno de Mesquita et al. (2003), Egorov and Sonin (2011), and Svolik (2012).

3. For example, Arriola (2009), Boix and Svolik (2013), Gandhi and Przeworski (2007), and Magaloni (2008).

4. Also see Tullock (1987) for an overview of the succession problem.

5. I am not suggesting that no changes will occur after a dictator's death but, rather, that the scope of those changes will be limited. Some differences will follow from the fact that the new leader is younger (Horowitz, McDermott, and Stam 2005; Truett 1993) or perhaps better educated (Besley, Montalvo, and Reynal-Querol 2011; Inglehart and Welzel 2005). However, since regime insiders prefer successors who resemble their predecessors, they have a strong incentive to support a successor who promises as much continuity as possible. In line with this, Carnes and Lupu (2016) survey changes to GDP growth, unemployment, inflation, inequality, frequency of strikes, and deaths from interstate war following the death of a leader and find remarkably few differences before and after death.

Dictatorships are not known for the transparency of their decision-making processes. In many cases, even discussing the question of succession is dangerous. For example, in 2016 the national commissioner of Zimbabwe's ruling Zanu-PF party issued a public warning against discussing who would succeed then-President Robert Mugabe, calling such discussions treasonous (*news24* 2016). However, it is somewhat easier to observe elite actions and their implications when conditions are challenging. Not only is liberalization more likely in these cases, but elites may take preemptive action to avoid the uncertainty surrounding the dictator's death. In Zimbabwe, this took the form of a coup that removed the 93-year-old dictator from power and installed former Vice President Emmerson Mnangagwa as the new head of the Zanu-PF and, ultimately, as president.

Leader age is the first source of vulnerability in dictatorships because it causes political actors to anticipate death. While they cannot accurately predict the exact timing of death, political actors can and do form expectations about the likelihood that their leader will die. These expectations depend on information about both the leader's age and health. For example, we can say with reasonable confidence that a 90-year-old dictator is more likely to die in the next five years than a 50-year-old dictator. We can also be reasonably sure that a 60-year-old dictator in good health will survive longer than a 60-year-old dictator who is suffering from cancer. There is, however, an important difference between information about age and information about health. While age is common knowledge, health is often a closely guarded secret. Regime insiders possess more accurate information about the health of the current leader than do regime outsiders. This gives them a clear advantage over regime outsiders when it comes to preparing for death. Regime insiders protect this advantage by limiting the flow of information to those outside the inner circle, resulting in a notable degree of secrecy surrounding health problems suffered by autocrats (Bueno de Mesquita and Smith 2012). For instance, information about Venezuelan President Hugo Chavez's fight with cancer was tightly controlled and, only eight months before his death in office, he claimed to be entirely cancer free (Naranjo and Cawthorne 2012).

Private information about the dictator's health places regime elites in a better position than potential challengers to navigate post-death transitions. Crucially, however, this informational advantage declines as dictators approach old age. To see why, consider a simple model. Let $\pi_t(h)$ be the probability that the leader dies in the next t years, based on his current health. Regime insiders know whether the leader is sick (s) or not sick (ns) and so have accurate beliefs about this probability. Furthermore, sick dictators are more likely to die than healthy ones (i.e., $\pi_t(s) > \pi_t(ns)$). Regime outsiders do not have access to this information. However, they do know that the probability of being sick, $p(a)$, is increasing in the leader's age. Regime outsiders estimate that the probability the leader dies in the next t years is

$$\Pi_t(a) = p(a)\pi_t(s) + (1 - p(a))\pi_t(ns).$$

This equation tells us, intuitively, that regime outsiders believe the probability of dying increases as the dictator ages, since $\pi_t(s) > \pi_t(ns)$ and $p(a)$ is increasing in a. Furthermore, the importance of knowing the leader is sick decreases with age. We can identify the informational advantage (IA) of regime insiders as follows:

$$\begin{aligned} \mathrm{IA}(a|s) &= \pi_t(s) - [p(a)\pi_t(s) + (1 - p(a))\pi_t(ns)] \\ &= (1 - p(a))[\pi_t(s) - \pi_t(ns)]. \end{aligned}$$

The above equation represents how much outsiders underestimate the probability that a sick dictator dies.[6] The derivative of this with respect to age is clearly negative,[7] implying that the informational advantage associated with knowing a dictator is sick declines with age.

The argument illustrated by this simple model is intuitive. In short, regime insiders have a systematic informational advantage over potential challengers, but the size of this advantage declines as leaders age. Elderly dictators are expected to have health problems, while this is not the case for their younger counterparts. Consequently, the information of those inside and outside the dictator's inner circle converges as he or she becomes older. This decreases the advantage insiders have when preparing for the death of leaders.

Post-death challenges are also strongest as dictators age. Would-be reformers who correctly anticipate the leader's death can take full advantage of the uncertainty associated with transition by organizing cohesive campaigns in favor of liberalization. The most effective mass movements take time and effort to coordinate (McCarthy and Zald 1977), even in the modern twitter reality (Tufekci 2017). The better organized the challenge, the greater the likelihood that liberalization occurs, either by directly toppling the regime or by

6. This assumes that we are only concerned with underestimating the likelihood of death. An alternative conceptualization of the informational advantage would be the probability with which insiders correctly predict the leader's death when outsiders do not: $\mathrm{IA}(a) = p(a)[\pi_t(s) - p(a)\pi_t(s) - (1 - p(a))\pi_t(ns)] + (1 - p(a))[p(a)\pi_t(s) + (1 - p(a))\pi_t(ns) - \pi_t(ns)] = 2p(a)(1 - p(a))[\pi_t(s) - \pi_t(ns)]$. In this case, the informational advantage declines with age so long as $p(a) > 1/2$, meaning that the dictator is old enough such that he is more likely to die than not. This is still consistent with the argument, as outsiders will not plan post-death challenges unless death is likely to occur.

7. Specifically, $[\delta \mathrm{IA}(a|s)]/\delta a = -p'(a)[\pi_t(s) - \pi_t(ns)]$.

convincing regime elites to take the threat of revolution seriously. There is also an opportunity cost associated with waiting until after a leader's death to launch such a challenge. This opportunity cost declines as the leader ages. For example, writing about 72-year-old Yoweri Museveni, one journalist explained, "In my home of Uganda, I continually hear people say, 'Let's just wait until the old man dies'" (Wilmot 2017). Such delays become less costly as leaders age.

In sum, leader age both decreases the informational advantage of regime insiders and strengthens post-death challenges. This leads to my first hypothesis:

> **H1.** Political liberalization is more likely to follow death as a dictator ages.

Although leader age decreases the advantage held by regime insiders, it may not be enough to tip the scales in favor of would-be reformers. Recognizing the hazards associated with an older leader, regime elites feel even more pressure to proactively plan for transition, minimizing the associated vulnerability and limiting the opportunity for reform. Consequently, I identify two other sources of vulnerability that, in combination with leader age, create "most likely" conditions for reform.

First, the succession problem looms particularly large in personalist dictatorships. In such regimes, power concentrates in the hands of a single individual, rather than being spread among a broader group of elites.[8] On the one hand, this increases uncertainty about succession before the dictator dies. Since personalist regimes lack norms or precedents to prevent a named successor from trying to seize control from the sitting dictator, personalist leaders rarely announce their chosen successors until much later in life, and sometimes never. This limits the severity of the "crown prince problem" (Herz 1952) but dramatically increases the degree of uncertainty surrounding future succession. Furthermore, without meaningful checks on the dictator's power, a named successor can be easily unnamed and established succession rules can simply be unestablished, reducing the efficacy of formal succession plans, should they exist. On the other hand, personalism also increases uncertainty about succession after the leader dies. Personalist regimes lack a clearly defined, institutionalized elite to oversee succession and provide necessary support to the new dictator during the transitional period (Kendall-Taylor and Frantz 2016). Uncertainty about the distribution of power among regime insiders in personalist regimes complicates transitions and facilitates the rise of multiple candidates for succession.

We can contrast the experience of personalist regimes with that of nonpersonalist ones. Monarchies are characterized by familial succession, formalized through institutional arrangements (Hadenius and Teorell 2007). Although the successor is typically known from birth, both the generational divide and familial loyalty hinder preemptive claims to the throne (Brownlee 2007; Burling 1974). More recent scholarship also highlights the success of single-party regimes at negotiating succession (Ezrow and Frantz 2011; Magaloni and Kricheli 2010). The Chinese Communist Party demonstrated its ability to engineer smooth successions after—and even before—the death of erstwhile leaders (Nathan 2003), and the Soviet Union successfully survived the deaths of five leaders. In these regimes, the party serves as a clearly defined elite that can oversee the selection of a new leader, even if the previous dictator did not identify a preferred successor. While military regimes often lack formal succession rules, power lies with certain military officers (Gandhi and Przeworski 2007) who can facilitate coordination over succession, and ensure that prelaid plans are not overturned at the whim of the dictator.

The contrasting experiences with succession in personalist and nonpersonalist regimes leads to my second hypothesis:

> **H2a.** Post-death liberalization is more likely as leaders age in personalist regimes.

Although greater uncertainty surrounding the death of older, personalist dictators increases the opportunity for liberalization, regime insiders will still do their best to minimize this opportunity. Formal succession rules—typically untested and subject to the whim of the current leader—are not enough to ensure a smooth transition in personalist regimes. However, regime insiders have two other options. First, they can make informal plans for succession that may or may not align with the formal ones. For example, on December 21, 2006, President Niyazov of Turkmenistan died at the age of 66. Constitutionally, the speaker of the Mejlis should have taken control as acting president. However, in deeply personalist Turkmenistan, regime elites blatantly ignored this untested succession rule. In a quick and coordinated move, the speaker was arrested on "vague charges" (Nichol 2007), and deputy prime minister and health Minister Gurbanguly Berdimukhammedov took over as acting president. These announcements came the morning of Niyazov's death, indicating significant coordination among the elites and, likely, prior knowledge of President Niyazov's ill-health. Soon after, the constitution was

8. Geddes defines personalist dictatorship as one in which "neither the military nor the party exercises independent decision-making power insulated from the whims of the ruler" (Geddes 1999, 121–22).

changed to legalize Berdimukhammedov's rule, which continues to this day. As this example illustrates, succession plans do not have to be written down to exist.

If informal consensus over succession proves impossible, regime insiders in personalist dictatorships have a second and more extreme option: removing the dictator from power, rather than allowing him or her to die peacefully in office. Faced with the prospect of uncertain transition and unable to reach consensus, competing factions are increasingly willing to risk a coup or other form of irregular removal to avoid the destabilizing effects of death and install their preferred candidate. This argument is consistent with that of Bueno de Mesquita and Smith (2018), who claim that winning coalition members may support a preemptive coup out of fear of being excluded once the current leader dies. Here, however, I emphasize that preemptive removal is a last resort and that the frequency of its use varies by regime type: it is only likely in personalist regimes where succession poses the greatest challenge.

Two factors reinforce the attractiveness of preemptive action as personalist leaders age, at least in the absence of informal consensus. First, Bueno de Mesquita and Smith (2017) argue that sickly leaders care less about future rewards and are, subsequently, less willing to purge. Second, the natural aging process may also make leaders less willing or, as discussed by Bienen and Van de Walle (1991), less able to take actions necessary to maintain power in the face of such a threat. If succession is not already settled through informal means, both the will and the opportunity for a preemptive removal increase as death becomes more likely. This leads to my next hypothesis:

> **H2b.** The age of a personalist dictator is positively correlated with the likelihood of attempts to remove him or her preemptively.

The vulnerability of personalist dictatorships stems from heightened uncertainty that constrains the ability of elites to oversee smooth transitions. A second source of vulnerability results from stronger post-death challenges, rather than constraints on insiders. Specifically, post-death liberalization is more likely if there is latent demand for democratization in the country that can be harnessed by would-be reformers. Along these lines, Treisman (2015) argues that democratization is most likely to occur if (1) economic development is high and (2) a leader exits office. Following classic modernization theory, he argues that economic development increases demand for reform (Boix and Stokes 2003; Lipset 1959). However, Treisman argues that latent demand is not enough to cause democratization on its own; development only has the opportunity to cause democratization if there is a change in leadership, including a change that follows leader death.

Faced with the prospect of a strong post-death challenge,[9] reform may occur even without the realization of this challenge as regime elites allow for managed liberalization (Acemoglu and Robinson 2000; Boix 2003). Franco's Spain illustrates this dynamic. The Spanish economy developed dramatically under Franco's tenure. However "no serious steps to liberalize the Franco regime were taken until after the dictator's death in 1975" (Encarnacion 2008, 29). After he died at the age of 82, however, political leaders both inside and outside the regime forged a democratic compromise. Democratization occurred quickly, with free and fair parliamentary elections in 1977 and a new democratic constitution in 1978. In this case, the threat of a prodemocracy revolution was sufficient for regime insiders to agree to political reform.

The prior discussion of leader age, however, suggests an additional condition for reform: since the strength of post-death challenges increases and the informational advantage held by regime insiders decreases as leaders age, the effect of economic development on liberalization should be greatest when an older dictator dies. When dictators die young, reformists will not have planned strong post-death challenges, and regime insiders can use their informational advantage to guarantee a smooth transition.

Indeed, there are reasons why high economic development might make post-death liberalization less likely when dictators die young. Regime elites have more to lose—economically speaking—from democratization in richer regimes and therefore exert more effort to prevent reform. In addition, they have access to greater resources than their counterparts in poorer regimes, which they can use to stabilize the regime during periods of transition. The strength of their position vis-à-vis challengers only declines as the dictator grows old. This leads to my final hypothesis.

> **H3.** Post-death liberalization is more likely as leaders age in economically developed countries.

9. Like much of the literature on leaders, Treisman's argument focuses on selection: since reformers are selected out of dictatorships, a new leader is—on average—more inclined to reform than his or her predecessor. This may be especially likely as economic development increases. However, as argued above, regime elites will coalesce around a successor who minimizes this possibility. Consequently, I expect political liberalization is more likely to result from the occurrence or threat of strong post-death challenges by reformist elements, than from the inclinations of the newly selected dictator. Regardless, the empirical expectations are the same for both mechanisms.

Although regime insiders in highly developed countries have similar vulnerabilities to those in personalist regimes, the countermeasures available to them differ. Highly visible—and antidemocratic—preemptive actions, such as coups or other irregular removals are riskier in countries with a latent demand for democracy. Consequently, elites in economically developed countries are more likely to rely on a combination of formal rules and informal consensus, than on preemptive removals.

DATA AND VARIABLES

The main dependent variables capture political liberalization and the occurrence of preemptive challenges. I use the Polity IV data set (Marshall, Jaggers, and Gurr 2011) to measure the degree of political liberalization. There is some debate in the literature about how immediate we should expect liberalization to follow a precipitating event.[10] Since it is plausible that meaningful changes to the level of democracy take more than one year to develop, I construct three dependent variables that measure the 1-, 5-, and 10-year averages of the combined Polity 2 score.[11]

I construct two different dependent variables to capture preemptive challenges. First, I use the binary occurrence of any coup attempt in a given year, as coded by the Cline Center Coup D'Etat Project (Nardulli et al. 2013). I include failed coups as well as successful ones because the theory concerns elite motivation, rather than capacity. A coup is not guaranteed to succeed, even when the theory predicts that it will be attempted. However, I exclude conspiracies, since their seriousness cannot be ascertained definitively and it is unclear how the cases captured in the data set relate to the true universe of cases. Second, I use the occurrence of an irregular exit, excluding death, as defined in the Archigos 2.0 data set (Goemans, Gleditsch, and Chiozza 2009). This includes any exit that is a contravention of explicit rules or established conventions.

The main independent variables are lagged leader age and lagged leader death, also taken from the Archigos 2.0 data set. I use the age of the leader in power on January 1 of a given year to ensure that it is measured pretransition. I restrict attention throughout to the occurrence of natural death, excluding both suicide and retirement due to illness. Suicide has a different logic to natural death, since it is unrelated to age and is almost certainly tied directly to the politics of the moment. Many instances of retirement are similar to death, especially if the leader chooses to retire as the result of a real downturn in health. However, elites can also push an undesirable leader into retirement. For example, Roberto Viola was president of Argentina for a short while in 1981. He officially retired due to ill-health, but many observers believe he was actually ousted in a coup (Tedesco 1999). To avoid conflating deaths with what are essentially coups, I exclude retirements from the analysis.[12]

Following the literature, I use the natural log of lagged GDP per capita (Maddison Project 2013) to measure the level of economic development as a proxy for latent demand for democratization. I identify personalist regimes using an indicator variable that takes a value of 1 if the country was classified as personalist in the previous year and 0 otherwise, as classified by Geddes et al. (2014). Data on leader tenure in office, which I include in robustness checks, are drawn from the Archigos 2.0 data set. Most models include a lagged (one-year) Polity score, also taken from the Polity IV data set.[13] Finally, for the models on preemptive removal, I construct a control variable that measures the lagged count of attempted or successful coups in the previous 10 years, since a history of past coups is a very strong predictor of future attempts (Belkin and Schofer 2003).

The sample spans the time period 1876–2009 and is as global as data availability allows, although I restrict attention throughout to dictatorships. I take a pragmatic, and relatively broad, approach to defining dictatorship. In models that do not include the personalist variable, I restrict attention to those countries with a combined (lagged) Polity score below 0. In models that include the personalist variable, I instead restrict attention to those countries coded as autocratic by Geddes, Wright, and Frantz. Since this variable is only available for the post–World War II period, the sample for these models is significantly smaller. There are 103 instances of leader death in the full sample of dictatorships and 61 instances in the post–World War II sample.

In all cases, I remove observations in which leader death occurs during the period covered by the dependent variable: for the one-year variable, I remove all observations in which death occurred in year t, for the five-year variable, I remove all observations in which death occurred in years t to $t + 4$, and for the 10-year variable, I remove all observations in which death occurred in years t and $t + 9$. While removing

10. For example, Treisman (2015) discusses this dilemma.

11. Specifically, I use the combined Polity 2 score, on a 21-point scale from −10 to 10, to construct these variables. The 1-year version for country i is simply Polity^i_t, the 5-year version is $[\sum_{k=0}^{4}\text{Polity}^i_{t+k}]/5$, and the 10-year version is $[\sum_{k=0}^{9}\text{Polity}^i_{t+k}]/10$.

12. Since coups positively correlate with democratization (Thyne and Powell 2016), including those observations would bias the results in favor of finding a relationship between death and liberalization.

13. This is usually a two-year lag to avoid capturing any changes associated with a death at time $t - 1$.

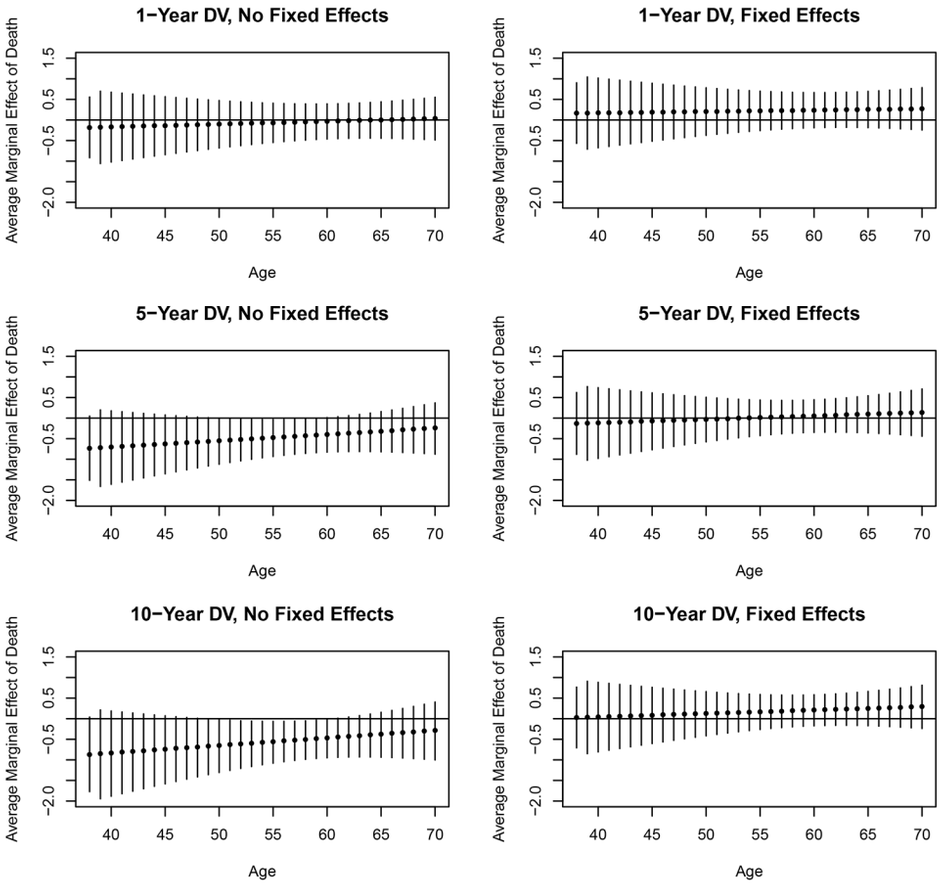

Figure 3. Average marginal effect of leader death on Polity, by age. The average marginal effects are calculated from OLS models with robust standard errors clustered at the country. A control for Polity at year $t - 2$ is included in all specifications. The fixed effect specifications include both country and year fixed effects. The average marginal effects are calculated from models in tables 14–16 in the appendix.

these observations ensures that I always compare what happens after a single leader death to what happens when no death occurs, it arbitrarily restricts the sample, especially for models using the longer term dependent variables. Therefore, I also examine the effect of leader death on an unrestricted sample for each test of my hypothesis. These results can be found in the appendix, available online.

MAIN RESULTS

My first hypothesis is that political liberalization correlates positively with leader death as dictators age. I evaluate the effect of death and age on the 1-, 5-, and 10-year Polity variables. Figure 3 depicts the average marginal effect of the leader death by age.[14] Although several specifications have the predicted positive slope, the effect is substantively small and not statistically significant. This suggests that leader age alone is not sufficient to increase the likelihood of post-death political liberalization.

The picture changes when we examine the "most likely" cases for reform. Hypothesis 2a predicts that political liberalization is more likely to follow the death of older dictators in personalist regimes than in nonpersonalist ones. To evaluate this hypothesis, I interact age and death in (1) a sample of personalist dictatorships, (2) a sample of nonpersonalist dictatorships, and (3) the full sample, adding an additional interaction with the personalist indicator variable. The interaction between age and death is positive in personalist regimes and negative in nonpersonalist ones. This tells us that the death has a more positive impact on political liberalization as dictators age in personalist regimes, especially when considered relative to the baseline effect in nonpersonalist regimes. The result is illustrated in figure 4, which depicts the average marginal effect of death by age and regime type, calculated from the triple interaction models. As is evident, political liberalization is more likely in personalist

14. The average marginal effects are calculated throughout using the Margins package in R (Leeper 2018). The average marginal effect is the difference in the predicted value of the model in a year with death and a year without, averaged across all observations.

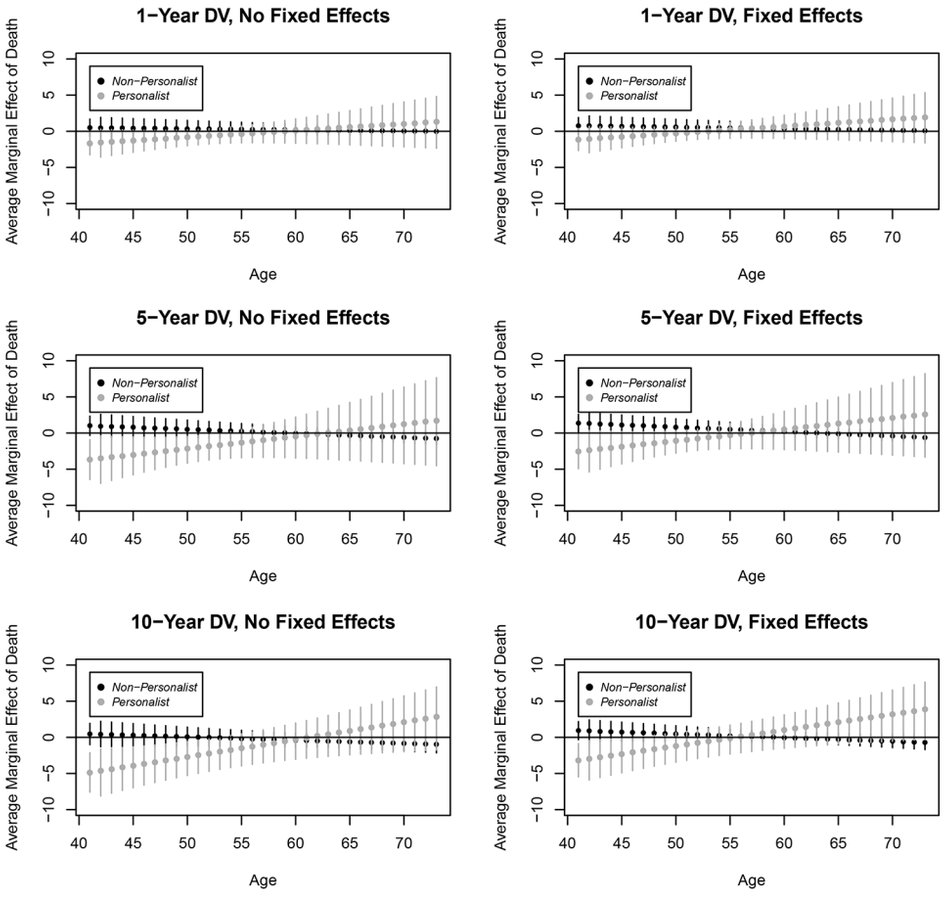

Figure 4. Average marginal effect of leader death on Polity, by age and regime type. The average marginal effects are calculated using models that include a triple interaction between death, age, and regime type (tables 17, 20, and 23 in the appendix). All models are OLS with robust standard errors clustered at the country. Controls for Polity at year $t-2$ and leader age at year $t-1$ are included in all specifications. The fixed effect specifications include both country and year fixed effects.

regimes following the death of an old dictator than if no death occurred, while the opposite is true for the death of a young personalist dictator. However, this effect is only statistically significant in models using the 5- and 10-year versions of the dependent variable, suggesting that reform does not occur immediately after death.

Although the death of older dictators in personalist regimes creates a modest opportunity for reform, remarkably few personalist dictators die in office. Figure 5 depicts the proportion of dictators above the median age who ultimately exit through death, irregular exit, regular exit, or democratization.[15] Death is an unlikely form of exit for personalist leaders, with fewer than 10% of older personalist dictators actually dying in power. In contrast, death is almost three times more likely in nonpersonalist dictatorships. This is puzzling, since it is unlikely that aging personalist dictators are simply less prone to dying than nonpersonalist ones.

One explanation is that, as predicted by hypothesis 2b, personalist dictators are more likely to be removed through some other means before they die. Faced with the prospect of a difficult transition in personalist regimes, elites turn to preemptive coups or other ways of engineering a leader's irregular exit. Accordingly, figure 5 shows that many older dictators in personalist regimes leave through irregular means. Regression analyses confirm this observation. Figure 6 shows the predicted probability of a coup attempt or irregular exit, by age and regime type. In both cases, the difference between the likelihood of occurrence in personalist versus nonpersonalist regimes increases as dictators age, suggesting that age is a disadvantage in personalist regimes relative to nonpersonalist ones. We can see this dynamic even more clearly in figure 7. This figure illustrate the results of Cox proportional hazard models in which the

15. These are the exit categories coded in the Archigos data set with the addition of "democratization." This is any exit, besides death, that occurs in the same year as democratization according to the Democracy-Dictatorship Index.

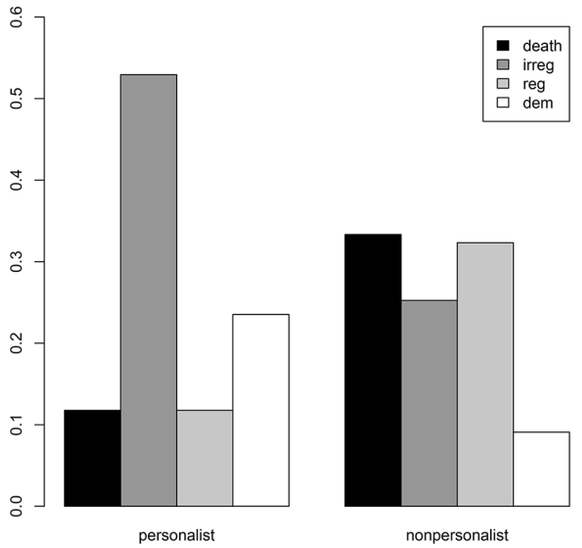

Figure 5. Leader exit for older dictators, by regime type. Each sample includes only those dictators who were in power when they reached the median age of all dictators.

occurrence of a (1) coup attempt and (2) irregular exit is considered a "failure."[16] I define time relative to the leader's first year in office. The left panel of the figure shows that coups are more likely in personalist dictatorships than nonpersonalist ones, which is consistent with the findings of Frantz and Stein (2017). However, coups are more likely to be launched against young dictators than old ones in nonpersonalist dictatorships. This distinction does not exist in personalist dictatorships: being old is not an advantage for personalist dictators. Thus, preemptive coups are more likely in personalist regimes than nonpersonalist ones. Similarly, the right panel of figure 7 shows that age has no effect on the likelihood of irregular exit in nonpersonalist regimes, but has a large (negative) effect on survival in personalist regimes. In personalist regimes, older dictators are more likely to leave power irregularly than their younger counterparts.

I also hypothesized that leader age increases the chance of post-death reform in economically developed countries (hypothesis 3). Figure 8 illustrates the average marginal effects of death from models that include triple interactions between death, age, and economic development. In general, the findings are modest. In a country with high economic development, the death of an old dictator is associated with a higher likelihood of political liberalization than the death of a young dictator. The reverse is true for a country with low economic development. However, the confidence intervals mostly overlap, with the exception of the no fixed effects model using the 5-year dependent variable. In addition, even the occurrence of expected death in countries with high economic development does not increase the likelihood of liberalization relative to a year in which no death occurred. Rather, the effect is driven by what happens if the dictator dies young: countries with high levels of economic development become less democratic when death is unexpected by potential reformers. It is plausible that regime elites, recognizing that there is latent demand for democracy and equipped with relatively high state capacity, use their informational advantage when dictators die young not only to ensure stability but to actually tighten their control over the country. In sum, leader age shifts the balance of power toward challengers, as predicted by hypothesis 3, but not enough to create a positive opportunity for reform.

Figure 8 suggests that high economic development does not increase the chances of post-death liberalization, regardless of leader age. This finding contradicts the evidence

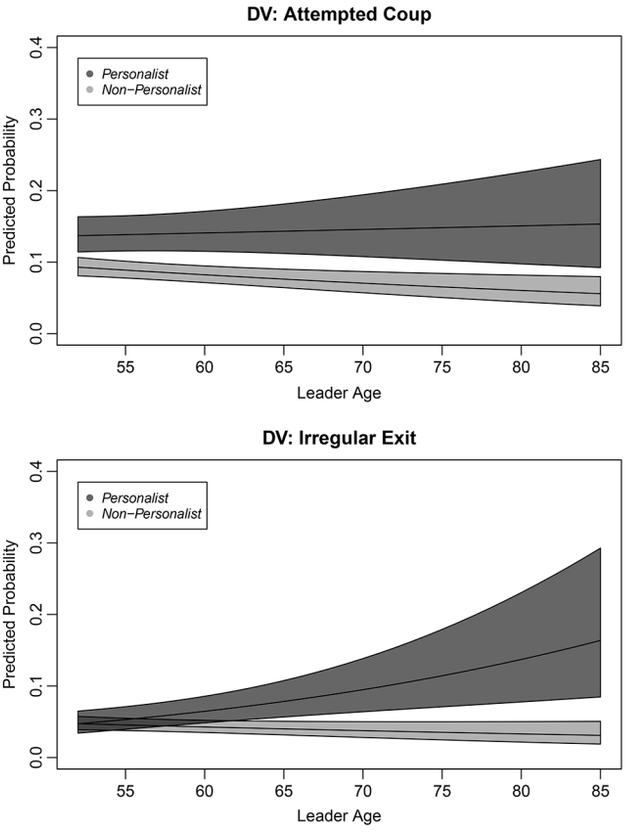

Figure 6. Predicted probability of preemptive action, by age and regime type. Predicted probabilities are calculated from logit models in which the dependent variable is an indicator variable for (1) coup attempts and (2) irregular exits. Models include controls for Polity score at year $t-1$ and the lagged count of attempted or successful coups in the previous 10 years. Standard errors are robust and clustered at the country. Predicted probabilities come from models in table 26 in the appendix.

16. Implemented using the Survival R Package (Therneau 2018).

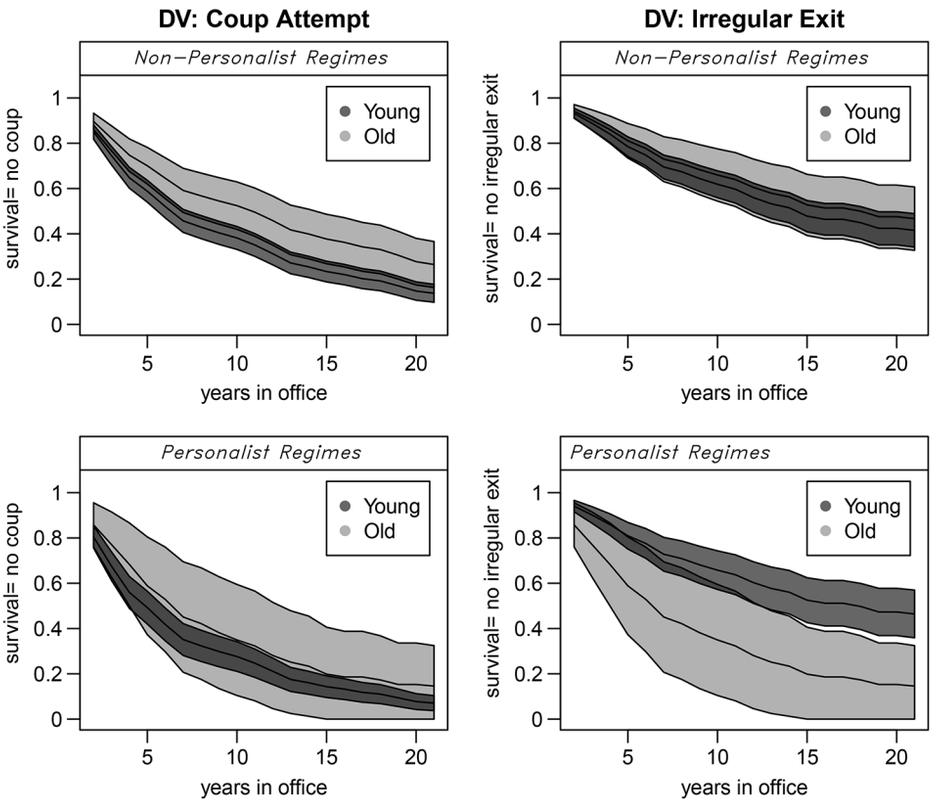

Figure 7. Survival probability, by age and regime type. Survival probabilities are calculated from Cox proportional hazard models (tables 28, 29 in the appendix). All specifications include controls for Polity in year $t-1$ and a count of the number of coup attempts between $t-1$ and $t-10$.

presented by Treisman (2015) that death leads to political reform in economically developed countries. Theoretically, I argue that death is substantively different than other forms of exit and does not present the same opportunity for reform. Empirically, Treisman's main findings concerning leader death rely on his sample selection: he includes all observations when looking at the effect of development on Polity following death but omits observations in which either death occurs in the next 10 years or any turnover occurs in the next 10 years when looking at the effect of development on Polity in years of no death. I replicate his results in the appendix and show they are significantly less supportive of his claim if we use the same sample rules to compare years of death with years of no death. In addition, I interact death with economic development for each of the different samples used by Treisman and find that neither death, nor its interaction with development is statistically significant.[17]

Finally, figure 9 shows that preemptive removal is not an option in high development regimes, as it is in personalist regimes. Death is a relatively likely form of exit in both high and low development countries. Furthermore, irregular removals are somewhat less likely in developed countries. This suggests that elites in such cases are more constrained and must rely on formal or informal consensus to guide transitions rather than a preemptive removal.

CONCLUSION

Political liberalization rarely follows the death of dictators. As I have argued, regime elites strive to engineer smooth transitions from one dictator to another. This is even true in personalist dictatorships, where succession is more uncertain. In such countries, regime elites use informal arrangements for succession or preemptive removals to ensure smooth transitions. Only the rare death of an old personalist dictator creates a modest opportunity for reform. The picture is even less optimistic in economically developed dictatorships. Although more constrained with regard to their preemptive options, elites face a great deal of pressure to coalesce—formally or informally—around a successor and to use their economic resources to stabilize the country during transition. This make liberalization unlikely in all cases and, when regime insiders possess an informational advantage over challengers, actually increases the chance that the country moves in an authoritarian direction.

17. These models can be found in tables 33, 34 in the appendix.

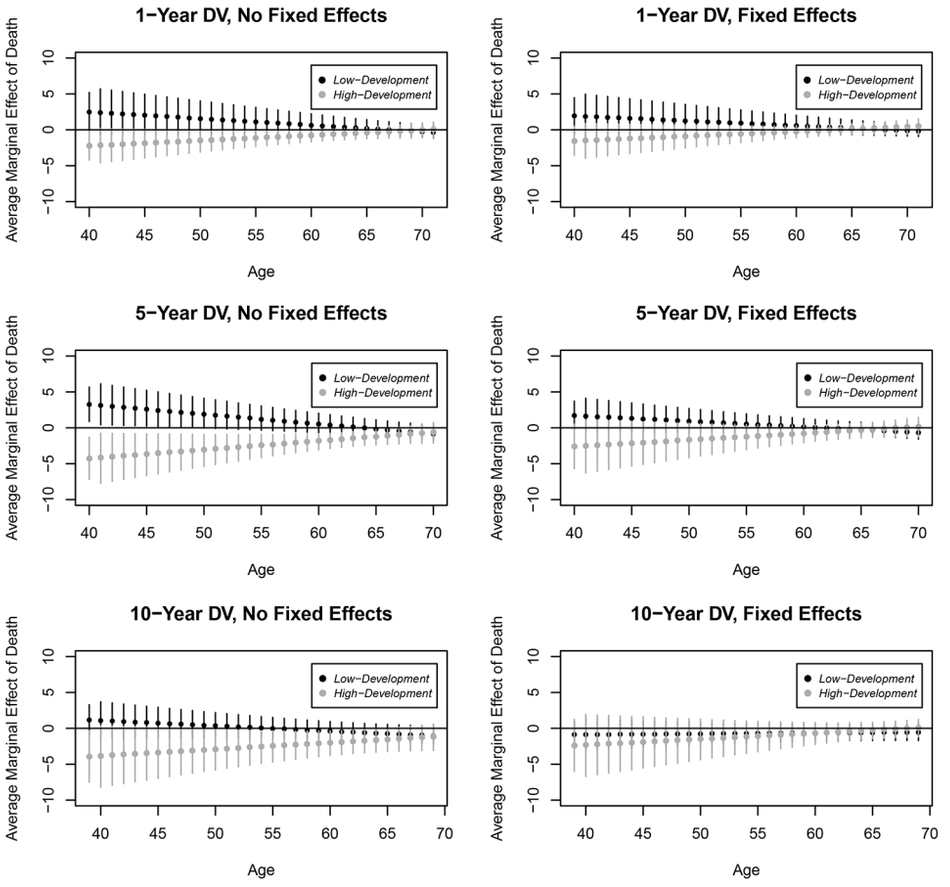

Figure 8. Average marginal effect of leader death on Polity, by age and development level. The average marginal effects are calculated using models that include a triple interaction between death, age, and level of economic development (table 30 in the appendix). All models are OLS with robust standard errors clustered at the country. Controls for Polity at year $t - 2$ are included in all specifications. The fixed effect specifications include both country and year fixed effects.

My theory accounts for the competing effects of leader death and, by extension, leader age, on the strategies employed by political actors. This, and the empirical findings in the article, expand on existing knowledge about the effects of leader age and death. First, I build on Kendall-Taylor and Frantz's (2016) findings concerning leader death in several ways: I demonstrate that the rarity of post-death liberalization is robust to different specifications and definitions of political change, highlight the conditioning effect of leader age at the time of death, identify and examine observable elite strategies as dictators age, and present conditions under which reform might actually be possible. Second, I argue for a modest revision to Treisman's (2015) argument about leadership turnover and the relationship between economic development and political liberalization: unlike other forms of turnover, leader death does not present a significant opportunity for reform.

Finally, the anticipatory effects of death suggest the need for caution when using the exogeneity of leader death as an identification strategy. For example, Jones and Olken (2005) examine instances of leader death to identify whether leaders affect economic growth. In the case of death, they write that "the *timing of the transfer* from one leader to the next was essentially random, determined by the death of the leader rather than underlying economic conditions" (836, emphasis added). In short, they argue that economic performance does not affect the timing of death and thus the difference in economic performance pre- and post-death can be attributed to the difference between the two leaders. This overstates the exogeneity of death in two ways. First, while the death of a young, nonpersonalist dictator may be exogenous to factors like economic performance, this may not be the case for the expected death of an aging personalist; regime insiders only allow older personalist dictators to die in office if they are confident in their ability to navigate the transition, which may be affected by factors like economic performance. Second, as a dictator grows old or sick, formal or informal plans for succession may also depend on economic performance,

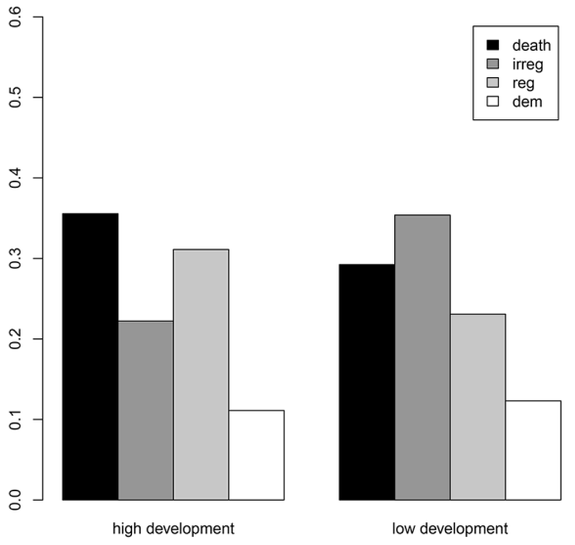

Figure 9. Leader exit for older dictators, by regime type. Each sample includes only those dictators who were in power when they reached the median age of all dictators.

making the performance of post-death leaders partially endogenous to the economic situation of pre-death leaders. Neither of these points precludes the use of leader death as an identification strategy for evaluating certain empirical claims, but it does imply that we must first account for any relevant anticipatory effects of death.

ACKNOWLEDGMENTS

I would like to thank Stephen Chaudoin, Avital Livny, Gretchen Casper, and Erica Frantz for their very useful comments on this paper. In addition, I appreciate the feedback received on earlier versions of this paper at the student-faculty workshop at the University of Illinois at Urbana-Champaign in March 2016, the 2016 APSA annual meeting, and the 2017 MPSA annual meeting. Finally, I also thank the anonymous reviewers for their feedback.

REFERENCES

Acemoglu, Daron, and James Robinson. 2000. "Democratization or Repression?" *European Economic Review* 44:683–93.

Arriola, Leonardo. 2009. "Patronage and Political Stability in Africa." *Comparative Political Studies* 42 (10): 1339–62.

Belkin, Aaron, and Evan Schofer. 2003. "Toward a Structural Understanding of Coup Risk." *Journal of Conflict Resolution* 47 (5): 594–620.

Besley, Timothy, Jose Montalvo, and Marta Reynal-Querol. 2011. "Do Educated Leaders Matter?" *Economic Journal* 121:205–27.

Bienen, Henry, and Nicolas Van de Walle. 1991. *Of Time and Power: Leadership Duration in the Modern World*. Stanford, CA: Stanford University Press.

Boix, Carles. 2003. *Democracy and Redistribution*. New York: Cambridge University Press.

Boix, Carles, and Susan Stokes. 2003. "Endogenous Democratization." *World Politics* 55 (4): 517–49.

Boix, Carles, and Milan Svolik. 2013. "The Foundations of Limited Authoritarian Government: Institutions, Commitment, and Power-Sharing in Dictatorships." *Journal of Politics* 75 (2): 300–316.

Brownlee, Jason. 2007. "Hereditary Succession in Modern Autocracies." *World Politics* 59 (4): 595–628.

Bueno de Mesquita, Bruce, and Alastair Smith. 2012. "In Sickness and in Health: Why Leaders Keep Their Illnesses Secret." *Foreign Policy*, September 18. https://foreignpolicy.com/2012/09/18/in-sickness-and-in-health/ (accessed May 4, 2020).

Bueno de Mesquita, Bruce, and Alastair Smith. 2017. "Political Succession: A Model of Coups, Revolution, Purges, and Everyday Politics." *Journal of Conflict Resolution* 61 (4): 707–43.

Bueno de Mesquita, Bruce, and Alastair Smith. 2018. "Political Loyalty and Leader Health." *Quarterly Journal of Political Science* 13:333–61.

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

Burling, Robbins. 1974. *The Passage of Power: Studies in Political Succession*. New York: Academic Press.

Carapico, Sheila. 2002. "Successions, Transitions, Coups and Revolutions." *Middle East Policy* 9 (3): 109–10.

Carnes, Nicholas, and Noam Lupu. 2016. "What Good Is a College Degree? Education and Leader Quality Reconsidered." *Journal of Politics* 78 (1): 35–49.

Cheibub, Jose Antonio, Jennifer Gandhi, and James Raymond Vreeland. 2010. "Democracy and Dictatorship Revisited." *Public Choice* 143:67–101.

Chong, Dennis. 1991. *Collective Action and the Civil Rights Movement*. Chicago: University of Chicago Press.

Egorov, Georgy, and Konstantin Sonin. 2011. "Dictators and Their Viziers: Endogenizing the Loyalty-Competence Trade-Off." *Journal of the European Economic Association* 9 (5): 903–30.

Encarnacion, Omar. 2008. *Spanish Politics: Democracy after Dictatorship*. Cambridge: Polity Press.

Ezrow, Natasha, and Erica Frantz. 2011. "State Institutions and the Survival of Dictatorships." *Journal of International Affairs* 65 (1): 1–13.

Frantz, Erica, and Elizabeth Stein. 2017. "Countering Coups: Leadership Succession Rules in Dictatorships." *Comparative Political Studies* 50 (7): 935–62.

Gandhi, Jennifer, and Adam Prezeworski. 2007. "Authoritarian Institutions and the Survival of Autocrats." *Comparative Political Studies* 40 (11): 1279–301.

Geddes, Barbara. 1999. "What Do We Know about Democratization after Twenty Years?" *Annual Review of Political Science* 2 (1): 115–44.

Geddes, Barbara, Joseph Wright, and Erica Frantz. 2014. "Autocratic Breakdown and Regime Transitions: A New Data Set." *Perspectives on Politics* 12 (2): 313–33

Goemans, Henk, Kristian Gleditsch, and Giacomo Chiozza. 2009. "Introducing Archigos: A Dataset of Political Leaders." *Journal of Peace Research* 46 (2): 269–83.

Hadenius, Axel, and Jan Teorell. 2007. "Pathways from Authoritarianism." *Journal of Democracy* 18 (1): 143–56.

Herz, John. 1952. "The Problem of Successorship in Dictatorial Regimes: A Study in Comparative Law and Institutions." *Journal of Politics* 14 (1): 19–40.

Horowitz, Michael, Rose McDermott, and Allan Stam. 2005. "Leader Age, Regime Type, and Violent International Relations." *Journal of Conflict Resolution* 49 (5): 661–85.

Inglehart, Ronald, and Christian Welzel. 2005. *Modernization, Cultural Change and Democracy: The Human Development Sequence*. New York: Cambridge University Press.

Jones, Benjamin, and Benjamin Olken. 2005. "Do Leaders Matter? National Leadership and Growth since World War II." *Quarterly Journal of Economics* 120 (3): 835–64.

Kendall-Taylor, Andrea, and Erica Frantz. 2016. "When Dictators Die." *Journal of Democracy* 27 (4): 159–71.

Leeper, Thomas. 2018. *margins: Marginal Effects for Model Objects*. https://cloud.r-project.org/web/packages/margins/index.html (accessed February 5, 2019).

Lipset, Seymour. 1959. "Some Social Requisites of Democracy." *American Political Science Review* 53 (1): 69–105.

Maddison Project. 2013. https://www.rug.nl/ggdc/historicaldevelopment/maddison/ (accessed February 5, 2019).

Magaloni, Beatriz. 2008. "Credible Power-Sharing and the Longevity of Authoritarian Rule." *Comparative Political Studies* 41 (4/5): 715–41.

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

Marshall, Monty, Keith Jaggers, and Ted Gurr. 2011. "Polity IV Project: Dataset Users' Manual." Center for Systemic Peace: Polity IV Project, Vienna, VA.

McCarthy, John, and Mayer Zald. 1977. "Resource Mobilization and Social Movements: A Partial Theory." *American Journal of Sociology* 82 (6): 1212–41.

Naranjo, Mario, and Andrew Cawthorne. 2012. "Venezuela's Chavez Says 'Totally Free' of Cancer, Again." *Reuters*, July 9. https://www.reuters.com/article/us-venezuela-election-chavez/venezuelas-chavez-says-totally-free-of-cancer-idUSBRE8681CQ20120709 (accessed February 5, 2019).

Nardulli, Peter, Michael Martin, Michael Slana, Sina Toosi, and Joseph Bajjalieh. 2013. "The Coup d'Etat Project." Cline Center for Democracy, Champaign, IL.

Nathan, Andrew. 2003. "Authoritarian Resilience." *Journal of Democracy* 14 (1): 6–17.

news24. 2016. "Discussing Mugabe Succession Is Treasonous, Zanu-PF Official Warns." https://www.news24.com/Africa/Zimbabwe/discussing-mugabe-succession-is-treasonous-zanu-pf-official-warns-20160404 (accessed February 5, 2019).

Nichol, Jim. 2007. "Turkmenistan's Political Succession: Developments and Implications." Congressional Research Service Report for Congress, Washington, DC.

Pustejovsky, James. 2019. *clubsandwich: Cluster-Robust (Sandwich) Variance Estimators with Small-Sample Corrections*. https://cran.r-project.org/web/packages/clubSandwich/index.html (accessed February 5, 2019).

Salih, Muhammad. 2006. "Speech at the US Congress on Problems in Central Asia." Washington, DC, July 25.

Schelling, Thomas. 1960. *The Strategy of Conflict*. Cambridge, MA: Harvard University Press.

Svolik, Milan. 2012. *The Politics of Authoritarian Rule*. New York: Cambridge University Press.

Tedesco, Laura. 1999. *Democracy in Argentina: Hope and Disillusion*. New York: Routledge.

Therneau, Terry. 2018. "survival: Survival Analysis." https://cran.r-project.org/web/packages/survival/index.html (accessed May 4, 2020).

Thyne, Clayton, and Jonathan Powell. 2016. "Coup d'Etat or Coup d'Autocracy? How Coups Impact Democratization, 1950–2008." *Foreign Policy Analysis* 12:192–213.

Treisman, Daniel. 2015. "Income, Democracy, and Leader Turnover." *American Journal of Political Science* 59 (4): 927–42.

Truett, K. R. 1993. "Age Differences in Conservatism." *Personality and Individual Differences* 14 (3): 405–11.

Tufekci, Zeynep. 2017. *Twitter and Tear Gas*. New Haven, CT: Yale University Press.

Tullock, Gordon. 1987. *Autocracy*. Dordrecht: Martinus Nijhoff.

Wilmot, Phil. 2017. "Why Africans Can't Just Wait for Dictators to Die." *Waging Nonviolence*. https://wagingnonviolence.org/2017/03/why-africans-cant-wait-for-dictators-to-die/ (accessed May 4, 2020).