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Contentious Collective Action and the Breakdown of Authoritarian Regimes

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ABSTRACT. Prior research indicates that different types of authoritarian regimes break down in different ways because key cadres in those regimes have different interests and face different strategic environments. Building on that theoretical foundation, I use event history models to examine the effects of contentious collective action on the likelihood of authoritarian breakdown. This analysis shows that some kinds of autocracy are more vulnerable to breakdown in the wake of contentious events than others, and that the strength and direction of this effect varies not only across types of authoritarianism, but across forms of collective action as well.

Keywords: • Autocracy • Breakdown • Collective action • Democratization • Event history analysis

Introduction

Over the past several years, a research program has begun to emerge in comparative politics that draws on insights about the nature of authoritarian rule to examine the dynamics of stability and breakdown in autocratic regimes.[1] This emerging program represents an important complement to the booming field of comparative democratization, in which the outcome of a democratic transition is nearly always cast as the object of analysis. The occurrence of a transition to democracy presupposes the breakdown of the preceding authoritarian regime, yet studies of regime change have paid surprisingly little attention to the dynamics of autocracy. Put another way, although authoritarian breakdown is a necessary condition for the onset of democratization, scholars often do not problematize that process, selecting for comparison only cases in which authoritarian breakdown produced an attempt at democracy. Although that design has provided valuable insights into the processes at work in cases of ongoing liberalization or

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democratization, it tells us little about the durability of autocracies not already engaged in a transition.

In an important paper, Geddes (1999) begins to fill this hole by focusing on the strategies of cooperation and conflict among elites in different kinds of authoritarian regimes. Geddes argues that military, single-party, and personalistic autocracies break down under different circumstances because key cadres in those regimes have distinct interests and face different strategic environments. She finds that personalistic regimes are least vulnerable to internal splits, usually collapsing only when the leader dies or the economy deteriorates badly. Single-party regimes are also found to be quite durable, as ordinary cadres face strong incentives to cooperate and thus usually keep their heads down during leadership or succession struggles. Military regimes turn out to be the most fragile, often breaking down in the face of leadership struggles because officers' interests in preserving military unity and sustaining their careers often exceed their interest in political power.

The research described here seeks to build on Geddes' work by examining the effects of contentious collective action on the risk of breakdown in different types of authoritarian regimes. Social movement theorists have usefully characterized collective action as spontaneous behavior jointly undertaken on behalf of some group (Tilly, 1978). To analyze the dynamics of collective action and the interplay between collective actors, political elites, and authority structures, scholars have often followed Tilly (1978) and Tarrow (1988, 1998) by focusing in particular on *contentious* collective action, that is, on collective events which represent "potentially subversive acts that challenge normalized practices, modes of causation, or systems of authority" (Beissinger, 2002: 14). This strategy draws our attention to collective behavior that aims directly or indirectly to transform existing patterns of political authority. By their very nature, these sorts of disruptive acts pose a challenge to autocratic regimes, which are premised on the notion that the authority to define a society's political regime rests firmly in the hands of an internally defined political elite, and not in the hands of the subjects over whom those elites rule. This article explores whether such purposeful challenges have a measurable effect on the durability of authoritarian regimes and, if so, whether that effect varies in predictable ways according to the nature of that regime.

Most scholars of comparative democratization acknowledge that contentious collective action can help to push autocracies toward out-of-type change. In their seminal volume on transitions from authoritarian rule, O'Donnell and Schmitter (1986: 53–4) portray mass protest as an outgrowth of the rise of civil society, observing that:

> In some cases and at particular moments of the transition, many of these diverse layers of society may come together to form what we choose to call the "popular upsurge." Trade unions, grass-roots movements, religious groups, intellectuals, artists, clergymen, defenders of human rights, and professional associations all support each other's efforts toward democratization and coalesce into a greater whole which identifies itself as "the people" ... This emerging front exerts strong pressures to expand the limits of mere liberalization and partial democratization.

Their discussion (O'Donnell and Schmitter, 1986: 54–6) of the nature and impact of this "popular upsurge," however, suggests that they view contentious collective action more as a symptom than a cause of democratization. They describe mass

mobilization as an "ephemeral" process vulnerable to elite co-optation, manipulation, exhaustion, and disillusionment. O'Donnell and Schmitter posit that such upsurges are more likely to occur and to affect the outcome of a transition in cases in which the transition is shorter and more unexpected, and they suggest that the lack of contentious collective action may reduce the chances of a transition-reversing coup. Ultimately, though, their analytic framework focuses squarely on the strategic choices of elites, and popular action is considered relevant primarily for its indirect effects on intra-elite bargaining in situations in which a transition is already underway.

Various subsequent studies of democratic transitions have afforded collective actors a more prominent role, allowing for the possibility that mass mobilization has a substantial impact on the transition process and is sometimes the catalyst that sets a transition in motion. In their analysis of sub-Saharan Africa, Bratton and Van de Walle (1997) observe that collective action often played a critical role in prodding that region's authoritarian rulers to initiate liberalization and, in some cases, democratization in the late 1980s and early 1990s. Collier and Mahoney (1997) identify a similar pattern in South America and southern Europe, arguing that labor movements often played a direct and positive role in destabilizing autocracies and encouraging the democratic transitions that followed. Consistent with that view, Bermeo (1997: 314) challenges the notion that popular mobilization can undercut the democratization process by provoking a backlash among frightened elites, concluding instead that, "In many cases, democratization seems to have proceeded alongside weighty and even bloody popular challenges."

The conclusion common to all of this work is that contentious collective action, while neither a necessary nor a sufficient condition for democratization, may be a decisive factor in a significant subset of regime transformations.[2] Recent work by McAdam et al. (2001) makes the stronger claim that democratization and contentious collective action are inseparable; the former does not occur without the latter. "Democracy results from, mobilizes, and reshapes popular contention," write McAdam et al. (2001: 269), arguing that processes such as the formation of cross-class coalitions and the co-optation of previously autonomous leaders who serve as intermediaries to excluded groups help to produce democracy.[3]

In short, a significant body of prior theoretical and empirical work identifies contentious collective action as an important element of the transition from authoritarian rule to democracy. Most of these studies are incomplete, however, in three important ways. First, by focusing exclusively on transitions to democracy, these studies overlook an entire class of transformative political moments that can improve our understanding of the durability (and vulnerabilities) of the oppressive systems under which hundreds of millions of people still live, that is, they overlook authoritarian breakdown, irrespective of whether attempts at democratization do or do not ensue.[4] Second, these studies fail to explore ways in which significant variations in the character of an autocracy mediate the relationship between contentious collective action and the risk of regime breakdown. Third, these studies typically have not explored the possibility that different types of collective action may have different effects either because the studies have focused (often for theoretical reasons) on a single type of collective event or because they have lumped various forms of contentious collective action together under a single heading such as "mass mobilization," "unrest," or "popular uprising."

Using Geddes' typology and an extended and slightly modified version of her

dataset, I explore the argument that contentious collective action has different effects on the risk and outcome of regime breakdown in different forms of authoritarianism. Consistent with Geddes' fundamental premise, I find that some kinds of autocracy are more vulnerable to contentious collective action than others. Moreover, I find that the strength and direction of this effect varies not only across types of authoritarianism, but across types of collective action as well. As the analysis described in this article shows:

- For personalistic regimes, contentious collective action has no significant effect on the risk of regime breakdown
- Single-party and military regimes are more likely to break down following nonviolent, antigovernment protests
- Military regimes are *less* likely to break down in the wake of riots.

These distinct patterns highlight key differences in the underpinnings of different kinds of autocracy, and thus their vulnerabilities to contentious collective action. The durability of personalistic regimes depends largely on bargains among cliques with no claim to grass roots, so ruling elites are freer to ignore popular challenges or to suppress them vigorously when they occur. In essence, the strategic environment of these cliques is minimally affected by contentious events, so any popular uprising short of a revolution is unlikely to breach the walls of the regime. By contrast, elites and citizens in single-party and military regimes confront a changed strategic environment after significant contentious events occur. Both of these types of regimes usually attempt to legitimate their rule by way of populist ideology or technical performance, and contentious collective action strikes a blow against both of these rationales. As regime legitimacy weakens, the costs to the regime of continued coercion and co-optation rise, producing new calculations on both sides of the regime–society divide about the toll required to achieve critical interests. Collective action can also tip the balance in ongoing leadership struggles toward cadres favoring out-of-type regime change by signaling the presence of a potential ally. When collective action involves deliberate violence, however, it may bolster military rule by emphasizing officers' corporate interest in the maintenance of internal security and by legitimizing those efforts in the eyes of the broader public.

Forms of Authoritarian Rule and the Impact of Contentious Collective Action

"Different forms of authoritarianism break down in characteristically different ways," Geddes (1999: 1) argues. "They draw on different groups to staff government offices and different segments of society for support. They have different procedures for making decisions, different characteristic forms of intra-elite factionalism and competition, different ways of choosing leaders and handling succession, and different ways of responding to society and opposition ... These differences ... cause authoritarian regimes to break down in systematically different ways, and they also affect post-transition outcomes" (Geddes, 1999: 6).

What are the major forms of authoritarian rule, and what do the characteristics of those forms imply about the effect of contentious collective action on the risk of regime breakdown? The research presented in this article relies on the three types elaborated by Geddes: personalist, single party, and military. These categories, of course, do not comprise a complete typology of authoritarian rule; monarchies

represent an obvious type of nondemocratic rule not represented in Geddes' categories, and other scholars have elaborated different types based on alternative criteria.[5] Moreover, in the real world, these categories often overlap, producing "hybrid" regimes that may behave differently than the "purer" types. Nevertheless, the categories Geddes elaborates appear to capture the essential features of most authoritarian regimes worldwide in recent decades, as evidenced by their powerful influence in statistical models assessing the risk of authoritarian breakdown. Consequently, they offer a useful tool for evaluating the dynamics of contemporary authoritarian stability, and I apply them as such.[6]

The basic argument here is as follows. Different kinds of authoritarian regimes seek to legitimate and sustain their authority in distinct ways. These patterns, in turn, shape the vulnerability of those regimes to contentious collective action by affecting elite and collective-actor expectations about the future costs and benefits associated with either suppressing or supporting collective action.

Personalist Regimes

Geddes (1999: 20) defines *personalist* regimes as ones in which "the leader, who usually came to power as an officer in a military coup or as the leader of a single-party government, had consolidated control over policy and recruitment in his own hands, in the process marginalizing other officers' influence and/or reducing the influence and functions of the party." This definition is largely consistent with what Linz and Stepan (1996: 51–4), following Weber, refer to as *sultanism*, a concept echoed in Bratton and Van de Walle's (1994) description of *neopatrimonial* regimes. Linz and Stepan (1996: 52) understand sultanism as an extreme form of patrimonialism, arguing that, in sultanistic regimes:

> The private and the public are fused, there is a strong tendency toward familial power and dynastic succession, there is no distinction between a state career and personal service to the ruler, there is a lack of rationalized impersonal ideology, economic success depends on a personal relationship to the ruler, and, most of all, the ruler acts only according to his own unchecked discretion, with no larger, impersonal goals.

Intra-elite bargaining dominates the politics of personalistic regimes. The relevant elites tend to comprise a fairly small number of individuals organized into cliques that may or may not be linked to specific social groups or classes (such as families, clans, or tribes). Where these elites are linked to such groups, however, they generally do not attempt to mobilize their "followers" as a source of leverage against the will of the "sultan," because to do so would probably cost them their insider status, if not their life, as soon as the sultan caught wind of it. The ruler is primarily concerned with fending off plots or challenges from palace rivals, and he typically uses a combination of narrowly focused inducements and threats to manage that risk.

The mass public generally plays no role in the rise of a personalist leader, a process that usually plays out behind palace doors. When it comes to the broader public, the regime's primary concerns are the suppression of threat and the maintenance of whatever economic machinery is required to generate the wealth the ruler requires to support his own desires and fund the co-optation and suppression of would-be rivals. Put another way, the relationship between regime and society emphasizes exploitation and repression rather than cooperation and

mobilization. If anything, the public is deliberately demobilized in order to reduce the threat of an attack from that flank and allow the ruler to focus his attention on elite rivalries.

The absence of any social contract linking the despot's right to rule to the will or well-being of the people reduces the impact of mass challenges to the regime on regime stability. Absent any implicit link between the public interest and regime legitimacy, popular uprisings are more likely to play out as raw power struggles. Not surprisingly, regimes built explicitly on the use of coercion or terror usually perform well in such struggles, and bystanders, who generally recognize the regime's extreme commitment to power maintenance, are less likely to bandwagon.

The despot's palace rivals are also unlikely to ally themselves with popular challengers because under all circumstances the expected payoffs from sustaining the regime exceed the expected payoffs from a popular victory. Whether those rivals are in or out of the despot's favor, so long as the regime remains intact, they can expect positive gains either from sharing directly in the leader's spoils or from side payments intended to sustain their loyalty. By contrast, all regime insiders can expect to do worse should the regime topple through mass mobilization. Cooperation with collective actors may mitigate the damage, but because the politics of personalist regimes tend to play out behind palace doors, popular challengers who succeed in toppling the regime are likely to paint all insiders with the same brush, so the expected payoffs to the ruling cliques are negative regardless of their relative status at the moment. Under virtually all circumstances, then, the strategic incentives for regime insiders point toward the maintenance of the authoritarian regime.

This logic implies that contentious collective action is unlikely either to sway despots toward reform or to alter substantially the calculus of intra-elite bargaining in ways that might lead to the end of the despot's tenure. We can summarize this idea in the following hypothesis:

H1: Contentious collective action has no systematic effect on the likelihood of regime breakdown in personalistic regimes.

Single-Party Regimes

In sharp contrast to personalistic regimes, where the state effectively becomes an extension of a single individual, are autocracies in which political authority resides in a single political party or similar organization. In operational terms, Geddes (1999: 20) defines *single-party* regimes as ones in which "the party has some influence over policy, controls most access to political power and government jobs, and has functioning local-level organizations."[7] This definition includes situations in which all but one party are officially excluded from the political process. It also includes situations in which other parties may organize and participate, but these other parties are (through formal or informal restrictions on their activities and their access to political authority) effectively excluded. In some situations, the role of the leading party is played by a "movement" or "national front" that does not claim or even explicitly rejects the partisan label, but nevertheless serves essentially the same functions and thus gives rise to the same kinds of political dynamics. As Geddes' definition implies, the key pattern is the presence of an extensive, cohesive, and bureaucratic organization that controls access to political power and government jobs.

Broadly speaking, authoritarian regimes that seek to rule without constantly relying on terror attempt to legitimate their authority (sometimes earnestly, but often cynically) with reference to an ideology, a guiding principle, or technical criteria. In single-party regimes, the party of power typically justifies its monopoly by claiming a social contract under which the party serves on behalf of "the people" or in promotion of the national interest. In the communist regimes that proliferated in the latter half of the 20th century, this relationship was spelled out in an ideology that emphasized the party's role as an extension of the interests of the working class, or the "common people" more generally. In Africa and Asia, single-party dominance has often been justified as a means to preserve national unity and, in effect, to protect the people from themselves by reducing the threat from ethnic or tribal rivalries, or simply to free the government from political squabbling of all kinds as it pursues an ambitious agenda for economic development that will, in theory, benefit the broader public.

Whatever the form of this claim, however, the key point is that the party of power in a single-party regime typically purports to represent the interests of the mass public or some substantial segment thereof. This claim renders single-party regimes vulnerable to contentious collective action because virtually any mass mobilization can be construed as a blow to the legitimacy of the regime. For regimes with a broad organizational base, the use of coercion in response to contentious collective action is likely only to erode that legitimacy further, as party members are more likely to be touched personally by the violence. As the regime's legitimacy erodes, the costs of sustaining the current order increase (North, 1981: 53), and collective as well as elite actors adjust their expectations about future payoffs accordingly.

As many scholars of comparative democratization have emphasized, when mobilization occurs in this context, it also presents rivals inside the leading party with a potential ally, helping to shift the strategic balance among elites. The key point is that, under single-party rule, elites can imagine a political future for themselves in the wake of a regime breakdown catalyzed by collective action. If democratization ensues, party elites who ally with collective actors can often expect to sustain their political career, and (as the experience of many post-communist regimes illustrates) they may even manage to retain or regain power through the ballot box.[8] Elites who resist popular mobilization will reap the largest payoff if mobilization fails, but the greater "fixed" costs of sustaining the regime in the face of weakened legitimacy and through a now-divided party reduce the size of that payoff. The worst payoff, of course, goes to elites who resist a popular upsurge that eventually succeeds.

The form of collective action could be expected to mediate this relationship, however. For party rivals considering alliances with mass challengers, the form of contention might shape expectations about the likelihood that collective action will be sustained and succeed. More specifically, contentious events requiring a higher degree of organization and discipline, such as large-scale nonviolent protests and general strikes, should stand a greater chance of encouraging elite defections than more anomic events, such as riots. Citizen bystanders often make similar calculations and thus can be expected to make decisions about participating in future events based in part on the character of preceding ones. Other things being equal, nonviolent collective action seems more likely to attract new participants than violent collective action, if for no reason other than the concerns of potential participants about their personal safety.

The basic implication of this logic is that, although both the majority and minority factions can generally expect to do better by suppressing collective action, the differences in expected utility associated with cooperating or defecting are narrower and therefore more sensitive to the probability of the collective actors' success and the likelihood of elite defection. Consequently, single-party regimes are more likely to break down in response to contentious collective action, either by acquiescing to out-of-type change or as the result of a conservative coup that replaces the old order with a military or personalist regime. Lastly, that response is more likely to occur in conjunction with forms of collective action that signal the presence of organized and disciplined challengers than it is in response to more chaotic events.

We can summarize these arguments in the second and third hypotheses:

H2: Contentious collective action increases the likelihood of regime breakdown in single-party regimes.

H3: Forms of contentious collective action involving more organization and discipline among participants have a greater effect on the probability of breakdown in single-party regimes.

Military Regimes

Geddes (1999: 20) considers authoritarian regimes to be *military* when they are "governed by an officer or retired officer, with the support of the military establishment and some routine mechanism for high level officers to influence policy choice and appointment." In essence, military regimes are autocracies in which the military qua organization performs many of the functions performed by the ruling party in single-party regimes.

Following Huntington and Nordlinger, among others, Geddes highlights the corporate interests of many military officers as a fundamental difference between military regimes and other forms of authoritarianism. Military officers tend to value the survival and efficacy of the military above all else, and this corporate interest makes military rule more fragile than other forms of authoritarianism because it implies that many of the relevant elites have a lesser interest in sustaining the regime for its own sake. For similar reasons, military regimes are also more likely than other kinds of authoritarianism to suffer from visible splits among ruling elites. Officers usually have the option of continuing their careers following a return to civilian rule, so when elite rivalries or policy differences become acute, those officers are more likely to favor a return to barracks as a means to preserve military unity rather than a slide into naked rivalry.

Also important are the conditions under which military regimes tend to arise. The military often intervenes in politics in response to a real or purported threat to public order. In recent decades, military leaders have also frequently sought to justify their interventions on technocratic grounds, basing their right to rule on the desire to toss out corrupt officials or chart a more effective economic policy free from political constraints. Both of these rationales reflect what Stepan (1971) labels the "new professionalism," in which military officers come to believe they are uniquely qualified to act on behalf of the national interest as the agents of political change when civilian rulers fail or become captive to special interests.[9]

Taken together, these attributes (a weaker commitment to power for its own sake, a heightened vulnerability to elite splits, and a corporate emphasis on

defending the national interest) render military regimes more vulnerable to breakdown in the face of contentious collective action. Mass mobilization may indicate that the regime is failing according to its own criteria or it may indicate that the regime has succeeded, but the public now believes the time has come for a return to civilian rule. In either case, mass mobilization signals the availability of a potential ally to reform-minded insiders in a context in which the balance of power among elites was more precarious to start with.

In game-theoretic terms, the payoff structure is similar to the one confronting elites in single-party regimes. Given the military's lesser interest in political power for its own sake, however, the expected payoff to officers who resist mobilization is even lower. Meanwhile, the expected utility for officers who side with collective actors may be even greater than it is for soft-liners in single-party regimes, not because the rewards are necessarily greater, but because the probability of realizing them (in this case, of sustaining a military career following a return to civilian rule) is usually higher. Taken together, these patterns give officers in military regimes even stronger incentives to step aside in the face of mass mobilization.

There is a crucial caveat to this logic, however. In contrast to single-party or personalistic regimes, military rulers have a distinct professional interest in the maintenance of public order and security; indeed, this objective is often the rationale behind their initial thrust into politics. Consequently, we might expect military rulers to react differently to different forms of contentious collective action, depending on the degree to which they appear to pose a violent threat to public order. While nonviolent strikes and protests may exacerbate elite splits and encourage military rulers to step aside, violent collective action is more likely to harden the resolve of military rulers to remain in power, at least until the maintenance of public order is assured.

The preceding arguments suggest a final pair of hypotheses:

H4: Military regimes are more likely to break down in response to nonviolent collective action.

H5: Military regimes are more likely to survive in response to violent collective action.

Data and Methods

This section lays out the design of an analysis intended to test the preceding hypotheses with statistical models estimated from global data.

To observe the lifespan of autocracies, I relied primarily on a list of authoritarian regimes compiled by Geddes (1999). To expand the window of observation, I extended this list forward through 2002 and added episodes of autocracy in countries "born" in the 1990s, many of which fell into the personalist category.[10] I also made a handful of changes to the categorizations or start and end dates of regimes already included in her dataset, most of them involving cases Geddes acknowledges as ambiguous.[11] The resulting list, shown in the Appendix, includes 176 authoritarian regimes in 104 countries. As Table 1 shows, these three types of authoritarian rule have been more or less equally prevalent in the past 50 years. "Pure" instances of each comprise nearly two-thirds of all autocracies during that period; the remaining third combine elements of two or more types. Some 40 authoritarian regimes (not including monarchies) were in existence at year-end 2002, nearly all of them in Africa, Asia, and the southern fringe of the former Soviet Union.

TABLE 1. *Authoritarian Regimes by Type, 1955–2002*

Type	Count	Percentage of all authoritarian regimes	Median duration (in years)*
Personalist			
Personalist only	36	20.5	
Hybrids	25	14.2	
Total	61	34.7	17.3
Single-party			
Single-party only	40	22.7	
Hybrids	25	14.2	
Total	65	36.9	32.6
Military			
Military only	36	20.5	
Hybrids	25	14.2	
Total	61	34.7	11.6

Note: *Excludes regimes surviving at year-end 2002.

To observe contentious collective action worldwide over several decades, I relied on annual counts of three types of events as reported in the Cross-National Time-Series Data Archive (sometimes referred to as the Arthur Banks dataset): riots, general strikes, and antigovernment demonstrations.[12] The Banks dataset defines these three types of events as follows.

1. *Riots*: any violent demonstration or clash of more than 100 citizens involving the use of physical force. The annual count of riots in authoritarian regimes during the period 1955–2002 ranges from zero in 84.7 percent of the country-years to a high of 32 in China 1967. The mean for all autocracies is 0.35 events per year. Autocracies with a military element tended to fare worse than those without, experiencing 0.58 riots per year compared with 0.32 per year for cases involving single-party domination and 0.35 per year for personalist regimes.
2. *General strikes*: any strike of 1000 or more industrial or service workers that involves more than one employer and that is aimed at national government policies or authority. These are the least common of the three contentious events examined here, occurring in less than 5 percent of the observed country-years of autocracy, with maximum counts of 13 and seven in Argentina in 1969 and 1970, respectively. Autocracies involving military rule experienced the most general strikes, averaging 0.15 events per year compared with 0.05 for single-party regimes and their hybrids and 0.06 for cases involving personalist rule, but the exceptional case of Argentina accounts for a significant share of that difference.
3. *Antigovernment demonstrations*: any peaceful public gathering of at least 100 people for the primary purpose of displaying or voicing their opposition to government policies or authority, excluding demonstrations of a distinctly anti-foreign nature. These were the most common form of collective action during the period of study, with nearly 15 percent of all country-years of autocracy registering at least one such event. The peak count of 24 demonstrations occurred in Indonesia in 1998, a case in which the regime broke down the following year. The average for all autocracies from 1955 to 2002 was 0.41

antigovernment demonstrations per year. Again, military regimes and their hybrids led the way with 0.68 events per year, compared with 0.40 for single-party regimes and 0.41 for autocracies involving personalist rule.[13]

From a statistician's perspective, the major advantage of the Banks dataset is its extensive and systematic coverage. For the purposes of the present analysis, there are at least two major concerns about these data: the potential for reporting bias and the lack of coverage of smaller events. To a certain extent, however, the second concern may counterbalance the first; by only including relatively large events, the Banks dataset probably enhances the comparability of the data across cases with varying degrees of press freedom and international interest, because the size and claim thresholds in the Banks definitions tend to filter out the kinds of events likely either to fall "under the radar" in closed societies or to represent "normal" politics in open societies. Even with this implicit filter, however, we would expect differences in press coverage to produce artificially higher counts in certain cases. To address this issue, our models use the square root of the observed event counts, implicitly emphasizing the occurrence of collective action over its degree and reducing the influence of extreme values.

To control for the effect of other factors on authoritarian breakdown, we include several additional variables in our models, as follows.

1. *Economic development*: measured by a country's annual infant mortality rate (logged), as estimated by the US Census Bureau. Results are generally similar to those obtained with GDP per capita, but the Census Bureau's infant mortality series (annual estimates based on quintennial UN data adjusted for intervening events) offers more complete historical coverage and mitigates the sampling bias that can result from the absence of economic data on some closed societies, a concern when the nature of the authoritarian regime is a focus of the analysis. The mean infant mortality rate during the period 1960–2002 was similar across the three overlapping sets of authoritarian regimes, ranging from 8.91 percent in regimes with single-party characteristics to 10.10 percent in personalist cases, with military regimes in the middle at 9.18 percent.
2. *Economic growth*: annual percentage change in GDP as reported in the World Bank's *World Development Indicators*. To reduce the influence of extreme values, which tend to reflect differences in the denominator (that is, in the size of the economy) at least as much as they do the pace of economic change, I took the square root of the reported figure (or, for negative values, the square root of the absolute value then multiplied by –1). The data suggest that autocracies with personalist leaders generally experience slower growth rates, averaging 2.97 percent over the period of study, compared with 4.31 percent for single-party regimes and 4.26 percent for instances of military rule.[14]
3. *Prior democracy*: conventional wisdom suggests that countries which have prior experience as democracies are more likely to democratize again. Although the research reported here does not discuss the outcome of authoritarian breakdown, any such effect might also show up as a hastening of the demise of autocratic rule. I control for this relationship with a dummy variable coded as 1 in cases that have had prior episodes of democracy any time since 1800 or independence, based on a review of polity data on executive recruitment indicating the occurrence of reasonably free and fair elections to executive and legislative offices and broad political participation. More than 55 percent of all country-years of autocracy involving military rule occur in countries with prior

democratic experience, compared with just 16 percent of the single-party observations and 35 percent of the observations involving personalist rule. As this pattern suggests, over the past 50 years military regimes have usually marked authoritarian "interludes" in societies in which democracy is already developing, whereas single-party and personalist rule has often taken root in newly independent countries.

4. *Post-cold war.* the chances of authoritarian breakdown clearly changed in 1989 when the USSR effectively announced it would no longer use military force to support client states abroad. We would expect this effect to be particularly pronounced for the many single-party communist regimes in central and eastern Europe, but the end of the cold war may have affected the longevity of other autocracies as well. To control for this effect, I included a dummy variable, coded as 1, for years 1989 and beyond.

To identify the conditions under which autocracies are more or less likely to break down, I use an event history technique called *discrete-time logit models.* Generally speaking, event history analysis focuses on the duration of a particular condition, seeking to relate differences in duration across units or over time to a vector of independent variables, which may or may not change during the period of observation. In the social sciences, event history techniques have been applied to a diverse set of phenomena, from the survival of firms and rate of ethnic riots to the process of regime change.

In contrast to continuous-time event history models, in which state changes may occur at any moment, a discrete-time approach models the process of interest as if state changes can only occur at discrete intervals, say, once per year. This design is useful in situations in which the variables of interest are only measured at discrete intervals, as is the case with the kinds of cross-national, time-series data generally available to social scientists. What is more, discrete-time models nearly always produce results that are very similar to ones obtained from continuous-time methods (Allison, 1984; Yamaguchi, 1991).[15] Continuous-time designs such as the Cox model can be applied to data measured at discrete intervals, but those models are likely to produce biased parameter estimates if there are many "ties" in the duration data, for example, autocracies that endured for the same number of years.

In practice, a discrete-time logit model looks a lot like an ordinary logistic regression on time-series, cross-sectional data. Conceptually, the distinguishing feature of a discrete-time model is the notion that the occurrence and timing of the event of interest is controlled not by an unobserved probability, but by an unobserved hazard rate, which is akin to a conditional probability. The practical implication of this distinction is that the analysis only includes units of observation at risk of experiencing the event of interest, rather than all units at all times. In the present study, the units of observation are countries, time is measured in years, and the event of interest is the breakdown of authoritarian rule. Following the logic of discrete-time modeling, then, the statistical analysis includes only those country-years that began with authoritarian rule (rather than all country-years for which data are available), because, of course, only countries under autocratic rule can experience the breakdown of such a regime. The dependent variable is simply a binary one indicating whether that authoritarian regime broke down before the end of that year.

Consistent with the principles underlying event history analysis, researchers

implementing discrete-time logit models should explore the possibility of duration dependence, that is, a relationship between the hazard rate and time irrespective of population heterogeneity. Texts on the subject generally recommend testing for duration dependence by including a series of dummy variables representing each year of duration (save one) observed in the dataset (Allison, 1984; Yamaguchi, 1991). This approach can become impractical, however, in situations in which the condition in question (for us, an authoritarian regime) often lasts many years, and the event of interest (regime breakdown) is rare, because these dummy variables can consume more degrees of freedom than there are observed events. To address this problem, I chose to include in each model a single variable representing the natural log of regime duration.[16] In effect, I assumed (based in part on an initial exploration of the duration data) that the risk of breakdown increased non-monotonically over time. This assumption is also testable, of course, and based on the results reported below; it appears to be a reasonable one.[17]

Results

Empirical analysis supports each of the hypotheses elaborated above. As Table 2 shows, while contentious collective action appears to have no systematic effect on the survival of personalist regimes, it does affect the risk of breakdown in single-party and military regimes, but the degree and direction of that effect depends on the nature of the contentious events. Regimes involving single-party and military rule are both more likely to break down in the wake of anti-government demonstrations. Single-party regimes appear particularly vulnerable to general strikes, but are little affected by riots. By contrast, military regimes are actually more likely to survive in the wake of riots.

While the expected pattern holds at a general level, some of the details in the results are also intriguing. One such detail is the magnitude, in the analysis of personalist regimes, of the coefficient associated with general strikes. Although the null hypothesis cannot be rejected with confidence, this result (illustrated in Figure 1) suggests that personalist regimes may be sensitive to collective action that hits directly at their economies. If so, this finding would be consistent with the argument that personalist regimes are extractive in nature and thus particularly dependent on their economies as a source of personal enrichment for ruling elites and funds to co-opt rivals. Put simply, contentious events may be most threatening to personalist rulers when they hit them in their wallets.

A second intriguing detail emerges from the analysis of single-party regimes. In Table 2 and Figure 1, we see that the impact of riots, while not statistically significant, points in the same direction as it does in military regimes and is not entirely inconsequential in magnitude. Based on this evidence, it seems that violent collective action might promote a "circle the wagons" effect in single-party as well as military regimes, perhaps by undermining the appeal to soft-liners of alliances with mass actors, who appear more overtly hostile and less disciplined. Nevertheless, we cannot confidently reject the null hypothesis that there is no systematic effect, and the relationship is clearly weaker than in military regimes, in which officers have a strong corporate interest in the maintenance of order and security for its own sake.

Also intriguing are the results associated with the control variables indicating economic development and performance. My analysis shows no significant relationship between a country's level of economic development, measured by

TABLE 2. *The Effects of Contentious Events on the Risk of Authoritarian Breakdown by the Type of Autocracy and Type of Contentious Event*

Variable	Type of autocracy (pure or hybrid)		
	Personalist	Single-party	Military
Regime duration	0.549***	0.252	1.133***
	(0.211)	(0.284)	(0.300)
Infant mortality	0.135	0.367	0.653
	(0.341)	(0.318)	(0.431)
Economic growth	–0.179***	–0.228***	–0.267***
	(0.063)	(0.084)	(0.075)
Prior democracy	0.173	0.561	0.457
	(0.312)	(0.484)	(0.421)
Post-cold War	0.469	1.247***	0.825**
	(0.314)	(0.396)	(0.345)
Hybrid: personalist		–0.324	–0.605
		(0.451)	(0.375)
Hybrid: single-party	–1.035**		–1.858***
	(0.469)		(0.502)
Hybrid: military	0.424	0.048	
	(0.395)	(0.444)	
Constant	–4.948	–6.119	–7.591
	(1.790)	(1.893)	(2.368)
Riots	0.156	–0.433	–0.709**
	(0.313)	(0.389)	(0.317)
General strikes	0.535	1.200**	0.559
	(0.476)	(0.585)	(0.386)
Antigovernment demonstrations	–0.046	0.533*	0.615**
	(0.295)	(0.287)	(0.246)
N	1,413	1,694	733
Log likelihood	–196.85	–137.22	–141.20

Note: *p < 0.10; **p < 0.05; ***p < 0.01.

infant mortality, and the risk of authoritarian breakdown; although the coefficients all point in the expected direction (the poorer the country, the less stable the regime), none is statistically significant at even the 0.10 level. Although numerous studies have documented a relationship between economic development and broad patterns in regime type, it does not appear to have a substantial impact on the likelihood that an autocratic regime will break down, given that one is already in place. By contrast, I find that short-term economic performance is far more influential on the risk of authoritarian breakdown. Put simply, good times help autocrats stay in power, while bad times put them at risk. Consistent with Geddes (1999), I find this effect is strongest in military regimes, although the magnitudes are fairly similar across the three types.

Lastly, the results associated with the post-cold war indicator also merit discussion. Unsurprisingly, this analysis shows the odds of breakdown in single-party regimes worldwide since 1989 are more than six times as high as they were when the threat of Soviet military intervention was helping to sustain communist rule throughout central and eastern Europe. The results in Table 2 appear to indicate that military regimes have also seen an increase in the risk of breakdown since 1989, but a separate analysis that omits hybrid cases suggests this result is

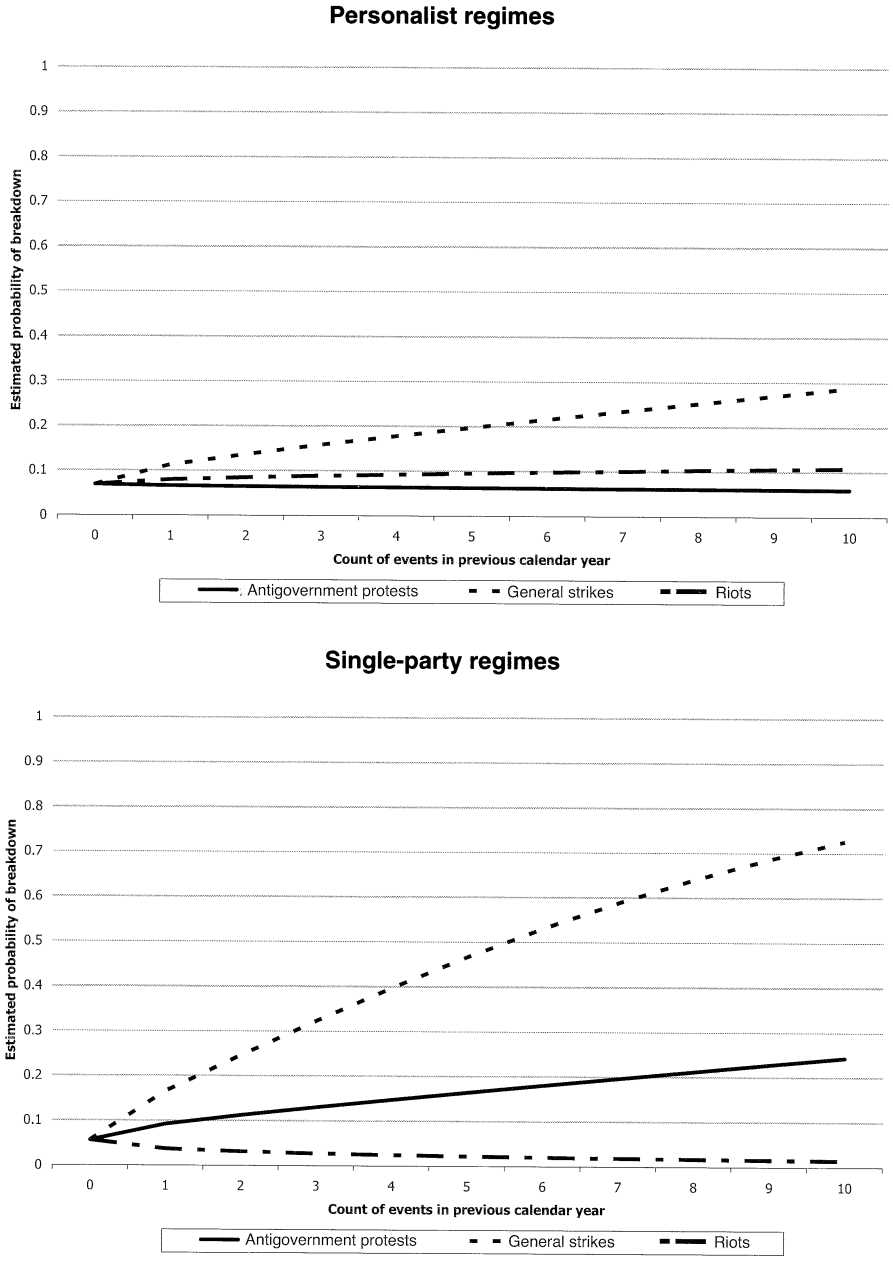

FIGURE 1. *Estimated Effects of Contentious Events on the Risk of Authoritarian Breakdown*

Note: Estimates were generated from the models reported in Table 2, assuming the post-cold war period and holding all other variables equal at average values for each regime type.

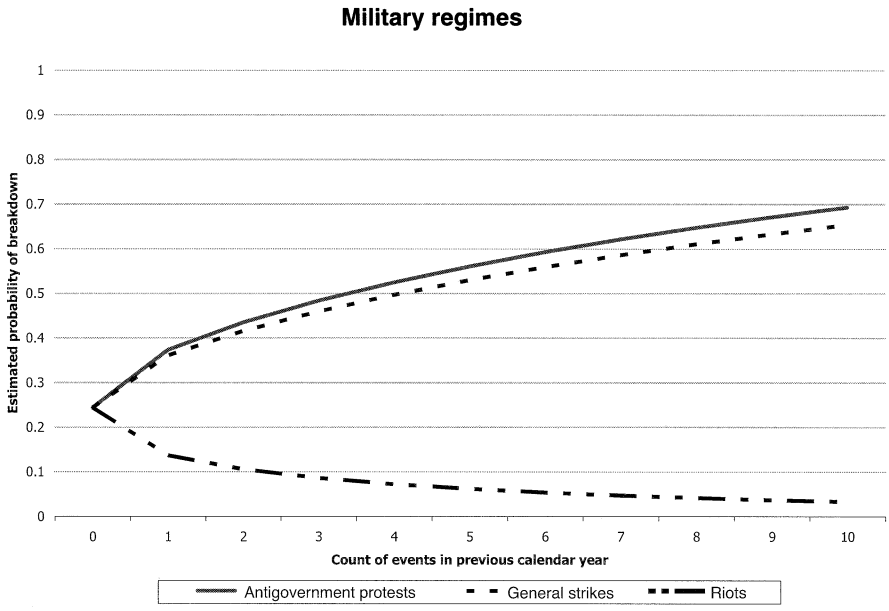

FIGURE 1. *continued*

driven by the cases in which military and single-party patterns commingled; when we look at "purely" military regimes, the post-cold war indicator is not statistically significant. Likewise, the end of the cold war does not appear to have had much effect on the durability of personalist regimes, and a similar analysis of "purely" personalist regimes reinforces this finding.

Taken together, these results suggest that the end of the cold war had little net impact on the durability of authoritarian rule beyond the USSR's central European client states. Bearing in mind that the present analysis omits monarchies (a category that includes a small, but intriguing, set of the world's most durable autocracies), it appears that authoritarian regimes remain as formidable as at any time in the past several decades. Without explicitly modeling the outcome as well as the occurrence of authoritarian breakdown, we are unable to say whether the end of the cold war has improved prospects for democratization. Nevertheless, the results presented here indicate that if there is any such relationship, it is not operating by hastening the demise of autocracies, but rather by affecting the direction societies go when authoritarian regimes break down.

Conclusion

The research presented in this article was motivated by a pair of interrelated objectives. First, this work was intended to advance our understanding of the dynamics of authoritarian breakdown. Building on patterns in authoritarian rule described by Geddes (1999), this analysis shows that contentious collective action affects different kinds of autocracies in different, but predictable, ways. The authority patterns, elite bargains, and corporate interests on which different types

of autocracy are based make those regimes differently vulnerable to different kinds of public challenge.

Second, this analysis was intended to illustrate the point that theories of comparative democratization might benefit from more careful attention to the nature and dynamics of authoritarian rule. If, as scholars, we are interested in developing more complete theories of democratization, we need to expand our vision to include not only the outcome, but also the onset, of that process, which means that we need to grapple more thoroughly with the dynamics of authoritarian stability and breakdown.

As we look to broaden theories of democratization, it is important to acknowledge that contentious events can be a cause of regime change, a symptom, or both. Prior research indicates that collective events are more likely to occur when, among other things, ruling elites appear divided or seem less likely to respond to mobilization with violent repression.[18] In some cases, then, contentious events are probably encouraged by deeper processes that could have produced authoritarian breakdown absent popular mobilization. As Beissinger (2002: 17) argues, however, such events can also take on a life of their own, overwhelming the structural preconditions that initially encouraged groups to act and becoming instead "a causal variable in a subsequent chain of actions." This "eventful" perspective, as Beissinger (2002) calls it, provokes scholars of regime change to consider all of the roles that contentious collective actors might play at various moments in the process of regime transformation. More fundamentally, it reminds us of the sheer complexity of that process, and thus the magnitude of the challenge involved in attempting to develop a comprehensive theory that could explain and predict movement all the way from stable authoritarian rule to consolidated democracy.

Appendix

Country	Start	End	Type
Afghanistan	1973	1976	Personal
Afghanistan	1979	1993	Single-party
Albania	1946	1991	Single-party
Algeria	1963	1992	Single-party/military
Algeria	1992		Military
Angola	1976		Single-party
Argentina	1949	1955	Personal
Argentina	1955	1958	Military
Argentina	1966	1973	Military
Argentina	1976	1983	Military
Azerbaijan	1993		Personal
Benin	1965	1968	Military
Benin	1972	1991	Personal
Burkina Faso	1966	1980	Personal
Burkina Faso	1983	1987	Personal
Burkina Faso	1987		Personal
Belarus	1996		Personal
Bangladesh	1971	1975	Single-party/personal
Bangladesh	1975	1982	Personal
Bangladesh	1982	1990	Personal

Bolivia	1952	1964	Single-party
Bolivia	1964	1969	Personal
Bolivia	1971	1978	Military/personal
Brazil	1964	1985	Military
Burundi	1966	1987	Military/single-party
Burundi	1987	1993	Military
Burundi	1996		Military
Bulgaria	1947	1990	Single-party
Cambodia	1953	1967	Personal
Cambodia	1967	1975	Personal
Cambodia	1975	1979	Single-party
Cambodia	1979	1990	Single-party
Cameroon	1961	1983	Single-party
Cameroon	1983		Personal
Cen. Afr. Rep.	1960	1966	Personal
Cen. Afr. Rep.	1966	1979	Personal
Cen. Afr. Rep.	1981	1993	Personal/military
Chad	1960	1975	Personal/single-party
Chad	1975	1979	Military
Chad	1982	1990	Personal
Chad	1990		Personal
Chile	1973	1989	Military/personal
China	1949		Single-party
Colombia	1953	1958	Military
Congo (Brazzaville)	1963	1968	Personal/single-party
Congo (Brazzaville)	1968	1992	Single-party/military
Congo (Brazzaville)	1997		Single-party/military
Croatia	1991	2000	Personal/single-party
Cuba	1952	1959	Personal
Cuba	1959		Single-party/personal
Czechoslovakia	1948	1990	Single-party
Dominican Republic	1930	1961	Personal
Dominican Republic	1966	1978	Personal
Ecuador	1963	1966	Military
Ecuador	1972	1979	Military
Egypt	1953		Single-party/personal/military
Eritrea	1993		Single-party
Ethiopia	1974	1991	Military/personal
Ethiopia	1991		Single-party
Gabon	1960		Single-party/personal
East Germany	1945	1990	Single-party
Ghana	1960	1966	Personal
Ghana	1966	1969	Military
Ghana	1972	1979	Military
Ghana	1981	2000	Personal
Guinea-Bissau	1974	1980	Single-party
Guinea-Bissau	1980	1999	Personal
Greece	1967	1974	Military
Guatemala	1954	1958	Personal
Guatemala	1963	1966	Military
Guatemala	1970	1985	Military
Guinea	1958	1984	Single-party
Guinea	1984		Personal
Haiti	1950	1956	Personal
Haiti	1957	1986	Personal

Haiti	1991	1994	Military
Honduras	1933	1956	Personal/single-party
Honduras	1963	1971	Military/single-party
Honduras	1972	1981	Military
Hungary	1949	1990	Single-party
Indonesia	1949	1965	Personal
Indonesia	1967	1999	Personal/military/single-party
Iran	1979		Single-party/personal
Iraq	1958	1963	Personal
Iraq	1963	1968	Personal
Iraq	1968	1979	Personal
Iraq	1979		Personal
Ivory Coast	1960	2000	Single-party
Kenya	1963	2002	Single-party
Kyrgyzstan	1991		Personal
Kazakhstan	1991		Personal
Laos	1975		Single-party
Liberia	1944	1980	Personal
Liberia	1980	1990	Personal
Lesotho	1966	1986	Single-party
Lesotho	1986	1993	Military
Libya	1969		Personal
Mauritania	1960	1978	Personal
Mauritania	1980		Personal
Madagascar	1960	1972	Personal
Madagascar	1972	1975	Military
Madagascar	1975	1993	Personal
Malaysia	1957		Single-party
Malawi	1964	1994	Personal
Mexico	1929	2000	Single-party
Mali	1960	1968	Single-party
Mali	1968	1991	Personal
Mongolia	1921	1990	Single-party
Myanmar (Burma)	1962	1988	Single-party/military/personal
Myanmar (Burma)	1988		Military
Mozambique	1975	1994	Single-party
Nicaragua	1936	1979	Personal
Nicaragua	1979	1990	Single-party
Nigeria	1966	1979	Military
Nigeria	1983	1993	Military
Nigeria	1993	1999	Military/personal
Niger	1960	1974	Single-party
Niger	1974	1991	Personal/military
Niger	1996	1999	Military/personal
Pakistan	1958	1969	Personal
Pakistan	1971	1977	Personal
Pakistan	1977	1988	Military/personal
Pakistan	1999		Military
Panama	1968	1981	Personal/single-party
Panama	1981	1989	Military/personal
Paraguay	1954	1989	Military/personal/single-party
Paraguay	1989	1993	Military/single-party
Peru	1948	1956	Personal/military
Peru	1968	1980	Military
Philippines	1972	1986	Personal

Poland	1947	1989	Single-party
Portugal	1932	1974	Personal
North Korea	1948		Single-party/personal
South Korea	1961	1987	Military
Romania	1945	1990	Single-party/personal
Republic of Vietnam	1955	1963	Personal
Rwanda	1962	1973	Single-party
Rwanda	1973	1994	Military/single-party
Rwanda	1994		Military
El Salvador	1948	1984	Military/single-party
Senegal	1960	2000	Single-party
Sierra Leone	1968	1992	Single-party
Sierra Leone	1992	1996	Military/personal
Singapore	1965		Single-party
Somalia	1969	1990	Personal
Spain	1930	1975	Personal
Sudan	1958	1964	Military
Sudan	1969	1985	Personal
Sudan	1989		Military
Syria	1963		Personal/single-party/military
Tajikistan	1992		Personal
Taiwan	1949	1996	Single-party
Tanzania	1964	1995	Single-party
Thailand	1948	1957	Military
Thailand	1958	1973	Military
Thailand	1976	1988	Military
Turkmenistan	1991		Personal
Togo	1967		Personal
Tunisia	1957		Single-party
Turkey	1980	1983	Military
Uganda	1966	1971	Personal
Uganda	1971	1979	Personal
Uganda	1986		Personal
Uruguay	1973	1985	Military
USSR	1953	1991	Single-party
Uzbekistan	1991		Personal
Venezuela	1948	1958	Military/personal
Vietnam	1954		Single-party
North Yemen	1962	1978	Military
North Yemen/Yemen	1978		Personal
Yugoslavia	1991	2000	Personal
South Yemen	1967	1990	Single-party
Yugoslavia (former)	1944	1991	Single-party
Congo (Kinshasa)	1965	1997	Personal
Zambia	1964	1991	Single-party
Zimbabwe	1979		Single-party/personal

Notes

1. See Brownlee (2002), Geddes (1999), and Posusney (2004) for efforts to motivate this research program and some important contributions to it. See Chehabi and Linz (1998), Linz (2000), Linz and Stepan (1996), and O'Donnell (1979, 1988) for related work on types of authoritarian rule. In light of the current policy environment, it is hardly surprising that many of the recent contributions, such as Brumberg (2002) and

Bellin (2004), have focused on the Middle East and North Africa, attempting to explain the apparently exceptional durability of autocracies in that region. Ross (2001) tackles the problem from a different direction by exploring the link between oil wealth and authoritarian rule.

2. Przeworski et al. (2000: 114–7) reach the same conclusion.
3. What McAdam et al. (2001) do not address directly is the causal priority of the processes they identify. After all, the recurrence of mechanisms such as shifts in trust networks and reliance on brokerage could be a consequence as much as a cause of democratization, reflecting the way society reorganizes itself in response to institutional changes rather than causing those changes. Arguably, then, their work serves more as a description of collective dynamics in the course of democratization than as an explanation for the breakdown of authoritarian rule and the development of democracy.
4. Collier and Mahoney (1997) is a partial exception to this point, as these authors make an explicit distinction between the destabilization of authoritarian rule and the outcome of the transition process that follows. As with most such studies, however, their empirical analysis only includes cases in which democratic transitions ensued and eventually succeeded. Also exceptional in this regard are some of the most intriguing studies of the collapse of communist rule, including Kuran (1991) and Beissinger (2002).
5. See Linz (2000) and Linz and Stepan (1996). Linz evaluates nondemocratic regimes along two dimensions: the degree of pluralism and the extent of top-down mobilization. The major category identified by this approach, and not evident in Geddes' scheme, is totalitarianism. To address the "decay" of totalitarianism evident in many communist regimes after the Stalin era, Linz (2000) and Linz and Stepan (1996) add a "post-totalitarian" category that, in their view, remains analytically distinct from other kinds of authoritarian rule. I would argue, however, that many of the features they ascribe to post-totalitarian regimes (such as a loss of interest in mobilization, a shift of emphasis from ideology to programmatic consensus, and checks on the top leadership via party structures) render these regimes functionally comparable to Geddes' single-party category, which is, in fact, where most of these cases wind up.
6. Applying these categories without significant alteration also makes the results of this analysis directly comparable with prior research, an important consideration when the emphasis is on extending an existing set of arguments into new areas rather than testing the arguments' fundamental assumptions.
7. This category does not have a direct analog in the typology Linz and Stepan (1996) develop, though presumably nearly all of the regimes they consider "post-totalitarian" and many of the regimes they consider "authoritarian" would fit in this set.
8. In some instances, elites who adopt the role of "tribune of the people" may also succeed at diverting the process from democratization by channeling that mobilization in alternative directions. In the former Yugoslavia, for example, Slobodan Milosevic took advantage of the tools of the state to channel mobilization in an ethno-nationalist direction. A breakdown of the old order ensued, but the outcome in the rump Yugoslav state was a personalist and single-party hybrid that managed to endure for nearly a decade.
9. See also Linz (1975: 305–6).
10. Geddes (1999) does not include monarchies in her set of authoritarian types. We added these regimes to our list, but treated them as a distinct type. Because there are not enough breakdowns of monarchies since 1955 to estimate a statistical model (we only identified six), these cases were not included in our analysis.
11. The most common change involved regimes that Geddes (1999) considers to be single-party autocracies, despite their holding elections that many observers viewed as mostly free and fair (for example, Botswana since independence or Taiwan since 1996). We chose to err on the side of exclusion and considered these regimes to be democracies from the year when competitive elections were first held. These changes involve a small

percentage of the regimes in question, and a sensitivity analysis suggests that they have little impact on our results.

12. Data on these and all other independent variables used in this study were drawn from a global dataset covering the period 1955–2002 that was compiled by the Political Instability Task Force, a project funded by the US Central Intelligence Agency. The views expressed in this article are the author's alone and do not represent the official views of the US Government, the US intelligence community, or the US Central Intelligence Agency. For more on the Task Force, see http://www.cidcm.umd.edu/inscr/stfail/.
13. Because the pattern is so consistent, the greater frequency of collective action in military regimes deserves some comment. As the discussion below of the "prior democracy" indicator indicates, our dataset shows that military regimes have often arisen as the result of military intervention in democracies, whereas single-party and personalist regimes have often taken root in newly independent countries with no democratic experience. We suspect that the institutional, organizational, and socio-cultural legacy of the abrogated democracy accounts for the higher rates of collective action under military regimes. Other things being equal, collective action is more likely to occur when political parties, labor unions, and non-governmental organizations are already well organized and have high expectations for a role in policy-making, if not direct experience.
14. Whether slower growth is a consequence of personalist rule or a symptom of some other root cause is a question that this research cannot answer, but it is interesting to note that the new institutionalist literature on property rights (North, 1990; North and Weingast, 1989) implies that economic development will suffer in situations in which political power is exercised more arbitrarily. We believe that a more recent analysis by Przeworski et al. (2000) probably understates the relationship between autocratic instability and economic growth by considering autocracies stable so long as they do not democratize.
15. According to Yamaguchi (1991: 15–17), discrete-time models are adequate for the approximation of continuous-time models when the conditional probability of the event's occurrence at any given discrete-time point, given that the event has not yet occurred, is reasonably small – about 0.10 or less.
16. This solution is among those recommended by Box-Steffensmeier and Jones (2004: 75–6). Case-control techniques offer another alternative. See, for example, Goldstone et al. (2000) and King and Zeng (2001).
17. As Table 2 shows, the apparent exceptions are the single-party regimes, where the duration parameter is not statistically significant. In these cases, historical time rather than regime duration appears to be the critical clock, with the removal in 1989 of the threat of Soviet intervention hastening the breakdown of many long-time autocracies. Absent this set of cases, however, single-party regimes appear to behave more "normally," so I chose to model duration dependence the same way while including a separate dummy variable to capture the historical effect.
18. Tarrow (1998) remains the keystone work on the relationship between collective action and changes in the structure of political opportunities.

References

Allison, Paul D. (1984). *Event History Analysis: Regression for Longitudinal Event Data.* Beverly Hills, CA: Sage.

Beissinger, Mark R. (2002). *Nationalist Mobilization and the Collapse of the Soviet State.* New York: Cambridge University Press.

Bellin, Eva (2004). "The Robustness of Authoritarianism in the Middle East: Exceptionalism in Comparative Perspective," *World Politics* 36(2): 139–58.

Bermeo, Nancy (1997). "Myths of Moderation: Confrontation and Conflict during Democratic Transition," *Comparative Politics* 29(3): 305–22.

Box-Steffensmeier, Janet and Jones, Bradford S. (2004). *Event History Modeling: A Guide for Social Scientists.* New York: Cambridge University Press.

Bratton, Michael and Van de Walle, Nicholas (1994). "Neopatrimonial Regimes and Political Transitions in Africa," *World Politics* 46 (July): 453–89.

Bratton, Michael and Van de Walle, Nicholas (1997). *Democratic Experiments in Africa: Regime Transitions in Comparative Perspective.* New York: Cambridge University Press.

Brownlee, Jason M. (2002). "Low Tide after the Third Wave: Exploring Politics under Authoritarianism," *Comparative Politics* (July): 477–98.

Brumberg, Daniel (2002). "Democratization in the Arab World?: The Trap of Liberalized Autocracy," *Journal of Democracy* 13(4): 56–68.

Chehabi, H.E. and Linz, J.J., eds (1998). *Sultanistic Regimes.* Baltimore, MD: Johns Hopkins University Press.

Collier, Ruth Berins and Mahoney, James (1997). "Adding Collective Action to Collective Outcomes: Labor and Recent Democratization in South America and Southern Europe," *Comparative Politics* 29(3): 285–303.

Geddes, Barbara (1999). "Authoritarian Breakdown: Empirical Test of a Game-Theoretic Argument." Paper presented at the annual meeting of the American Political Science Association, Atlanta, GA.

Goldstone, J.A., Gurr, T.R., Harff, B., Levy, M.A., Marshall, M.G., Bates, R.H., Epstein, D.L., Kahl, C.H., Woodward, M.R., Surko, P.T., Ulfelder Jr, J.C. and Unger, A.N. (2000). *State Failure Task Force Report: Phase III Findings.* McLean, VA: Science Applications International Corporation (SAIC).

King, Gary and Zeng, Langche (2001). "Logistic Regression in Rare Events Data," *Political Analysis* 9: 137–63.

Kuran, Timur (1991). "Now Out of Never: The Element of Surprise in the East European Revolution of 1989," in Nancy Bermeo (ed.), *Liberalization and Democratization: Change in the Soviet Union and Eastern Europe.* Baltimore, MD: Johns Hopkins University Press.

Linz, Juan J. (1975). "Totalitarian and Authoritarian Regimes," in Fred I. Greenstein and Nelson J. Polsby (eds), *Handbook of Political Science.* Reading, MA: Addison-Wesley.

Linz, Juan J. (2000). *Totalitarian and Authoritarian Regimes.* Boulder, CO: Lynne Reinner.

Linz, Juan J. and Stepan, Alfred (1996). *Problems of Democratic Transition and Consolidation: Southern Europe, South America, and Post-Communist Europe.* Baltimore, MD: Johns Hopkins University Press.

McAdam, D., Tarrow, S. and Tilly, C. (2001). *Dynamics of Contention.* New York: Cambridge University Press.

North, Douglass (1981). *Structure and Change in Economic History.* New York: Norton.

North, Douglass (1990). *Institutions, Institutional Change, and Economic Performance.* New York: Cambridge University Press.

North, Douglass and Weingast, Barry W. (1989). "The Evolution of Institutions Governing Public Choice in 17th Century England," *Journal of Economic History* 49: 803–32.

O'Donnell, Guillermo (1979). *Modernization and Bureaucratic Authoritarianism: Studies in South American Politics.* Berkeley, CA: Institute of International Studies, University of California.

O'Donnell, Guillermo (1988). *Bureaucratic Authoritarianism: Argentina 1966–1973 in Comparative Perspective.* Berkeley: University of California Press.

O'Donnell, Guillermo and Schmitter, Philippe C. (1986). *Transitions from Authoritarian Rule: Tentative Conclusions about Uncertain Democracies.* Baltimore, MD: Johns Hopkins University Press.

Posusney, Marsha Pripstein (2004). "Enduring Authoritarianism: Middle East Lessons for Comparative Theory," *Comparative Politics* 36(2): 127–38.

Przeworski, A., Alvarez, M.E., Cheibub, J.A. and Limongi, F. (2000). *Democracy and Development: Political Institutions and Well-Being in the World, 1950–1990.* New York: Cambridge University Press.

Ross, Michael L. (2001). "Does Oil Hinder Democracy?" *World Politics* 53(April): 325–61.

Stepan, Alfred (1971). *The Military in Politics: Changing Patterns in Brazil.* Princeton, NJ: Princeton University Press.
Tarrow, Sidney (1988). *Democracy and Disorder: Politics and Protests in Italy, 1965–1975.* New York: Oxford University Press.
Tarrow, Sidney (1998). *Power in Movement: Social Movements and Contentious Politics,* 2nd edn. New York: Cambridge University Press.
Tilly, Charles (1978). *From Mobilization to Revolution.* Reading, MA: Addison-Wesley.
Yamaguchi, Kazuo (1991). *Event History Analysis.* Newbury Park, CA: Sage.

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