Autocratic Breakdown and Regime Transitions: New Data

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This research is supported by NSF-BCS #0904463 and NSF-BCS #0904478.

Abstract

When the leader of an autocratic regime loses power, one of three things happens. Someone from the incumbent leadership group replaces him, and the regime persists. The incumbent leadership group is replaced by democratically elected leaders. Or the incumbent leadership group loses control to a different group that replaces it with a new autocracy. Scholarship exists on the first two kinds of transition, but almost none on transitions from one autocracy to another, though they make up about half of all regime changes. We have lacked data to identify and analyze autocracy-to-autocracy transitions. In this paper, we introduce a new data set that provides transition information for the 280 autocratic regimes (in 110 countries with more than a million population) in existence from 1946 to 2010. The data set also identifies how regimes exit power, how much violence occurs during transitions, and whether the regimes that precede and succeed them are autocratic. This essay explains the data set, shows how it differs from currently available data sets, illustrates how using data that reflect the usual meaning of the concept regime changes answers to basic questions about transition, and presents a number of examples to highlight the data set's practical utility.

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When Islamic extremists assassinated Egyptian President Anwar Sadat hoping to end the secular regime he led, another military officer and dominant-party official from within Sadat's inner circle, Hosni Mubarak, quickly replaced him. The regime continued, controlled by the same leadership group and following the same basic rules. But not all authoritarian leadership changes follow this pattern. When Zine Ben Ali, the dictator of Tunisia until January 2011, fled the country after weeks of protests, military and civilian elites who had until a few weeks before supported his rule cooperated to move the country smoothly toward democracy. In contrast, the Shah of Iran's ouster by similar protests in 1979 resulted in the seizure and consolidation of power by a radically different autocratic regime led by Muslim clerics. These examples illustrate the three possible outcomes when a dictator is ousted: regime survival under new leadership, democratization, and replacement by a new autocratic regime. Many studies have investigated democratization. Systematic investigation of the other two outcomes, however, are rare, though case studies have examined them. Yet in the nearly 65 years since World War II, only about 45% of leadership changes in autocracies led to regime change, and more than half of regime changes were transitions from one autocracy to another. In other words, fewer than a quarter of the ousters of dictators resulted in democratization.

This article introduces new data that lay the empirical groundwork for better theorization and analysis of transitions from one autocracy to another and, in doing so, can also help deepen our understanding of democratization. The Autocratic Regimes Data Set uses hitherto uncollected information to identify all autocratic regime

breakdowns between 1946 and 2010 in countries with populations greater than one million. The data are in the form of 4587 country-year observations; they identify transitions from autocracy to new autocracy as well as transitions to and from democracy. The data include the exact start and end dates of autocratic regimes, and whether democracy or autocracy precedes (for country-years after 1946) and succeeds them. They also provide information about how the outgoing regime collapsed (e.g., ousted by coup, popular uprising, election loss) and the amount of violence during the transition.

The new data thus make quantitative studies of a variety of previously difficult questions easier. Among these is the question raised by the Arab Spring: in what circumstances is the ouster of a dictator likely to lead to democratization rather than renewed autocracy or chaos? As the Arab Spring unfolded, activists and journalists responded with exuberance at the prospect of democratization in countries long oppressed by autocratic rule. Observers with longer memories, however, worried about whether the ferment would lead to democracy, future instability, or reinvigorated dictatorship, as happened after the Shah of Iran's ouster. Lucan Way raises exactly this question. He suggests using the 1989-1991 post-communist transitions to make predictions about the Arab Spring, a reasonable suggestion in the absence of appropriate data covering more cases. The new data now enable scholars to base expectations on the experience of nearly all post-World War II transitions, as shown below, rather than a small and unusual group of cases. Although no one can make meaningful predictions about what will happen in a single country, e.g., Libya next year, our data can help establish base odds of the likelihood of democratization in a country like Libya, conditional on its income, oil wealth, kind of outgoing dictatorship, and amount of violence during the dictatorship's collapse.

In what follows, we describe the new data and provide examples of how they can

be used to answer interesting and policy-relevant questions. By comparing the two proxies for autocratic breakdown most often used in quantitative research, leader ouster and democratization, with our measure, we show that the data used to test theories can determine what answers one gets. Substituting leader ouster for regime change underestimates autocratic stability by about 50 percent. Using Polity democratization thresholds as a proxy for breakdown overestimates the survival of autocratic regimes by 100 percent. These are big differences that would lead to big under or overestimations of the effects of anything thought to influence authoritarian breakdown.

In examples that demonstrate some possible applications for the data, we suggest ways to use it to address two important issues, war and democratization. Several studies have shown that dictators who fear punishment after ouster are more likely to start wars. To these findings, we add preliminary evidence that dictators who are ousted along with their regimes and those whose regimes are replaced by a different autocracy face higher odds of punishment than those whose personal ouster either does not coincide with regime change or leads to democratization. These findings, if confirmed, will contribute to a more nuanced understanding of the reasons dictators start wars.

Our other examples investigate regime change. As noted, fewer than half of post-WWII autocratic breakdowns resulted in democratization. Though democratization has become more likely since the end of the Cold War, our data suggest more pessimistic predictions for the contemporary Middle East. We show preliminary evidence that regimes led by dictators with wide personal discretion over policy making (such as Libya under Qaddhafi and Yemen under Saleh) are less likely to democratize after regime breakdown, as are dictatorships forced from power and dictatorships ended by violence. These findings add to our theoretical understanding of democratization. They also suggest that even if foreign military intervention helps to end hated dictatorships, it may

not contribute to democratization.

Central Concepts

Consistent with much of the qualitative literature, we define a regime as a set of basic formal and informal rules for choosing leaders and policies. Informal rules must be included because autocracies often hide the rules that shape and constrain political choices. Dictatorship routinely coexists with democratic formal institutions. The informal rule we judge most central to distinguishing autocracies that make decisions in one way from those that make decisions in another is the rule that identifies the group from which leaders can be chosen and determines who influences leadership choice and policy. Our definition reflects one of the most common normal language uses of the term regime which, for example, treats the entire period of Somoza family dominance in Nicaragua as one regime, despite changes in leadership and formal electoral rules. Conventional usage then identifies the subsequent Sandinista dictatorship as a different regime, though Sandinista rule followed Somoza without a democratic interlude. In short, an important aspect of our definition, as of conventional usage, is the informal rule that identifies the leadership group.

Our "leadership group" resembles the Selectorate, as this term is used by Shirk and Roeder. To retain power, leaders must retain the support of members of this group, but leaders also have substantial ability to influence the membership of the group, especially after initial leadership selection. Formal rules do not determine membership in the group.

Bueno de Mesquita et al. also use the word Selectorate to identify those citizens who influence the selection of leaders, but our leadership group is more similar to what they call the Winning Coalition, the subset of the Selectorate from which leaders come. We agree with them that this group has central importance in dictatorships. We disagree,

however, about what characteristics of the group matter. We think that basic substantive traits of the leadership group, such as the hierarchical relationships that characterize officer corps, affect autocratic decision making. Our autocratic regime type coding depends on those characteristics. We distinguish these substantive types because prior research suggests that the decision-making norms and power distributions within these groups affect what happens after members of the groups seize power. This is the reason for distinguishing military regimes, for example, from party-based regimes, both of which might have the same formal institutions. In contrast, Bueno de Mesquita et al. define regimes entirely by the number of individuals included in the Selectorate, the Winning Coalition, and the ratio between the two, regardless of substantive differences and the concrete political institutions that embed individuals.

The history of Iran illustrates our use of the concept regime and how our data differ from others used to analyze transitions. Since 1925, two successive autocratic regimes have governed Iran, with no democratic interludes. The first, the monarchy, lasted until 1979, and the second retains power today. Despite the continuity of autocratic governance, the two autocratic regimes bear little resemblance to each other and demand quite different policy responses. The first was led initially by Reza Shah Pahlavi, and then by his son, Mohammad Reza Shah Pahlavi. In this regime, the Shah made basic decisions about domestic politics, foreign policy, and the oil industry in consultation with a small group of advisers he chose. Following the Iranian revolution in 1979, a new set of actors seized power, ending the monarchy and establishing a theocracy with a clerical Supreme Leader. They arrested most of those still in the country who had held powerful positions under the Shah, and a new elite of clergy and Republican Guard leaders occupied decision-making positions. Since 1979, this inner circle has dominated Iranian foreign and domestic policy. While this regime has been in force, two Supreme Leaders

have ruled, Ruhollah Khomeini, in power from 1979 until his death in 1989, and Ali Khamenei since, but the basic rules governing who can rise to top leadership positions and who determines how much influence other politicians can exercise have not changed.

This brief summary of modern Iran's experience highlights some important points. The first is that multiple autocratic leaders can rule during a single autocratic regime. In Iran's monarchic dictatorship, Reza Shah Pahlavi was replaced by his son. Today's theocratic dictatorship has also had two leaders. Autocratic regimes often last well beyond the tenure of any single ruler.

The second point is that a single, continuous autocratic time period – or spell – can conceal multiple, consecutive autocratic regimes. Though Iran has been autocratic for its entire independent history, two distinct autocratic regimes have governed it since 1925. Each of these regimes has featured rules that identified a unique set of elites and established methods for choosing policies and leaders, and as a result, elites in each regime have made very different domestic and international policy choices. Autocratic spells, in other words, can include successive autocratic regimes. This occurs because democracy is not the only potential outcome when dictatorships collapse. If autocratic regimes rarely followed one another, this would be a minor problem, but in fact, a new dictatorship follows autocratic breakdown more often than democratization. Figure 1 presents the frequency of autocracy-to-autocracy transitions since World War II, with democratic transitions included as a frame of reference. Autocratic breakdown leads to democracy more often now than in earlier decades, as shown in the right-hand columns of the figure, but transitions to subsequent autocracy remain common.. .

[Insert Figure 1 here]

The frequency of autocracy to autocracy transitions has implications for how we study many questions in comparative politics and international relations. Theories, for

example, link economic performance to autocratic survival, but analysts have sometimes used democratization as a proxy for autocratic regime collapse, leading to underestimates of autocratic vulnerability to economic crisis. Efforts to explain whether and how foreign policy tools, such as economic sanctions and military intervention, influence autocratic survival have also sometimes assessed only their effect on the probability of democratization. Both academics and policy-makers, however, want to know not only whether such policies contribute to democratization, but also whether foreign-induced autocratic collapse might lead to a new dictatorship or a failed state. Our new data make it possible to assess these alternatives.

As this discussion makes clear, there are at least three ways of thinking about autocratic political survival – leader survival in office, regime duration, and continuous autocratic spell – and two outcomes of interest when discussing transitions from autocratic rule – democracy and subsequent autocracy.

Existing data enable scholars to test theories about the duration of autocratic leaders' tenures or the likelihood of transitions to democracy, identified as the ends of autocratic spells. Scholars interested in evaluating theories about autocratic regime survival, however, have been forced to collect their own data or use proxies to capture essential concepts because no publicly accessible data existed to measure either regime survival or transitions to subsequent autocracy. Proxies introduce systematic measurement error into analyses: the use of autocratic leadership tenure underestimates the survival of autocratic regimes (because regimes often survive the ouster of individual leaders), while the use of spell data overestimates regime duration (because spells treat autocracy-to-autocracy transitions as though the same regime had survived throughout).

The differences among leader tenure, regime duration, and continuous years of autocracy (spells) determine which data are appropriate for testing a particular theory.

Theories often imply expectations that could be tested using one or two of these ways of measuring autocratic survival but not all of them. Theories about the political effects of economic performance, for example, lead us to expect that high growth would lengthen leaders' tenure in office and prolong autocratic regime duration. High growth would not be expected to lengthen autocratic spells, however, because long autocratic spells can be caused either by successive unstable dictatorships or by long periods of stable authoritarianism, and we would only expect growth to be associated with the latter.

Nevertheless, one of these measures has sometimes been used as a proxy for another. In their highly respected book, for example, Przeworski and coauthors use spell data to assess whether economic crisis has more damaging effects on the survival of democracy or dictatorship. They conclude that economic crises are less destabilizing for dictatorships. Because they use spell data, however, what they actually show is that economic crisis fails to increase the odds of democratization. They could not assess the effect of economic crisis on autocratic breakdown using the data they had. Spell data are appropriate for most of the uses to which Przeworski and his collaborators put them, but they are not appropriate for identifying the causes of authoritarian breakdown or for comparing the causes of democratic and autocratic breakdown. If we want to know whether economic problems contribute to the breakdown of dictatorships, we need to include all breakdowns in the analysis, not just the fewer than half that result in democratization.

In short, the Autocratic Regimes Data Set improves analysts' ability to test arguments using theoretically appropriate measures.

In what follows, we explain the key measures included in the new data and then show how regime duration differs from leader tenure and length of spells. We follow each comparison with an applications section in which we show how the data can be used to

extend theoretical ideas or answer new questions. The aim is to improve the way we think about autocratic regimes, leader tenures, and transitions, in turn enhancing theoretical understanding of autocratic political survival and transitions, the empirical precision with which we examine both, and the policy advice we give.

Measuring Autocratic Regimes

The data set identifies 280 autocratic regimes during the period from 1946 to 2010 in independent countries with more than one million inhabitants as of 2009. Country-years are coded as autocratic; democratic; ruled by a provisional government charged with overseeing a transition to democracy; not independent; occupied by foreign troops (if the occupier governs or exerts major influence on how it is governed); ruled by multiple governments, none of which controls most resources of the state, or no government at all. Thus, in contrast to José Antonio Cheibub, Jennifer Ghandi, and James Raymond Vreeland's (CGV) data set, autocratic in our data set is not a residual category, and periods of anarchy and provisional government can be excluded from analysis if the researcher wishes.

These data extend, update, and add new variables to the autocratic regime classifications done by XXX. XXX's original regime classification scheme was proposed to test a set of theoretical arguments about different kinds of dictatorship, specifically dominant-party rule, rule by the military as an institution, and rule by dictators unconstrained by either a strong party or a unified military, which she labeled personalist. Because she sought to test arguments about differences among these kinds of dictatorship, she classified only autocratic cases in these categories, excluding democracies, monarchies, other less common forms of autocracy, and periods of anarchy. She also excluded all periods of autocracy lasting less than three years and regimes in countries that came into existence at the end of the Cold War. In subsequent years, XXX

and YYY put the regime classifications in country-year format, updated them, and added some of the country-years originally omitted.

The current data set includes all country-years from 1946 to 2010, making it usable for investigating many different questions. The coding of regime beginnings and ends has been redone using more rigorous criteria, described below, and the new data include more exact information about the emergence and collapse of autocracies. We have also added several additional measures to the data set. For those regimes that collapsed between 1946 and 2010, we code the amount of violence, based on the reported number of deaths during the transition event. We also code the mode of transition, that is, whether the outgoing autocratic regime lost power by losing an election, military coup, popular uprising, insurgency, or elite-determined rule changes such as the introduction of universal suffrage in a previously oligarchic regime. The data identify the start and end dates of autocratic regimes by noting the pivotal political events that mark changes in the most basic rules for choosing leaders and policies. Exact dates make it possible for scholars to assess the chronology of other key political events – e.g., military coups, terrorist attacks, or protests – that occur during the same calendar year as the transition. To define the start dates, we use the following coding rules. A span of years is coded as autocratic if any of the following occurred and the same basic rules and leadership group persist in subsequent years:

> An executive achieved power through undemocratic means. "Undemocratic" refers to any means besides direct, reasonably fair, competitive elections in which at least ten percent of the total population (i.e., 40 percent of adult males) was eligible to vote; or indirect election by a body, at least 60 percent of which was elected in direct, reasonably fair, competitive elections; or constitutional succession to a democratically elected executive. The start date is the date the

executive achieved power.

The government achieved power through democratic elections (as described above), but subsequently changed the formal or informal rules, such that competition in subsequent elections was limited. The start date is the date of the rule change or action (e.g., the arrest of opposition politicians) that crossed the threshold from democracy to autocracy.

Competitive elections were held to choose the government, but the military prevented one or more parties that substantial numbers of citizens would be expected to vote for from competing and/or dictated policy choice in important areas. The start date is the date when these rules take effect, usually the first election in which popular parties are banned.

Autocratic regimes end when any of the following occur:

A competitive election for the executive, or for the body that chooses the executive, occurs and is won by a person other than the incumbent or someone allied with the incumbent; and the individual or party elected is allowed to take office. The end date is the election, but the end is only counted if the candidate or party elected is allowed to take power.

The government is ousted by a coup, popular uprising, rebellion, civil war, invasion, or other coercive means, and replaced by a different regime (defined, as above, as a government that follows different rules for choosing leaders and policies). The end date is the date of the ouster, death, resignation, flight, or arrest of the outgoing regime leader or the date when an insurgency takes the capital.

The ruling group markedly changes the basic rules for choosing leaders and policies such that the identity of the group from which leaders can be chosen or the group that can select major policies changes. The end date is the date of the

rule change.

Narratives describing events that begin and end regimes, along with the reasons for identifying some events rather than others as pivotal, are posted on the website along with the data set.

As these rules imply, our requirements for coding democratic country-years include minimal conditions for suffrage and party competition not included in CGV's coding, and we do not use their alternation rule. Nevertheless, our set of democratic country-years is quite similar to theirs.

Most regime beginnings and ends are easy to identify and uncontroversial. When a coup led by military officers ousts a monarch, it is clear that the rule identifying members of the leadership group has changed from members of a ruling family to high ranking officers. In this example, the coup that ousts the monarchy identifies both the end date of the first regime and the beginning of the second. Some beginnings and ends, however, require consideration of context. Coups that replace a current military leader with another, for example, may be either leader changes in an on-going regime or regime transitions and can be difficult to classify. If the leader's successor is from the same inner circle as the ousted leader, we code a leadership change; if not only the leader but the leadership group changes (e.g., includes representatives of different ethnic groups), we code it as a regime change. This is because the rule defining the leadership group changes with the leader in the latter situation but not the first.

In addition to identifying the start and end dates of regimes, the data provide information on the type of leadership group. Autocratic regimes included in the current data set are identified as dominant-party, military, personalist, monarchic, oligarchic, indirect military, or hybrids of the first three. These classifications refer to whether control over policy, leadership selection, and the security apparatus is in the hands of one

party (dominant-party dictatorships), a royal family (monarchic dictatorships), the military (military dictatorships), or a narrower group centered around an individual dictator (personalist dictatorships). Additional categories were needed in order to include all autocratic country-years in the data set. Oligarchy refers to regimes in which leaders are chosen through competitive elections but most of the population is disenfranchised, e.g., South Africa before 1994. Indirect military rule refers to regimes in which formal political leaders are chosen through competitive elections, but the military either prevents parties that would attract large numbers of voters from participating or controls the selection of important cabinet ministers. Though most of these regime classifications have existed for some time, the new data set is the first to include all country-years and make the data publicly available in an easy to use format.

Our coding rules, described in detail on the data website, are less minimalist and objective than those used to produce the CGV dataset, but less based on judgment than the qualitative coding used by Steven Levitsky and Lucan Way or Stephan Haggard and Robert Kaufman. We are sympathetic to Cheibub, Gandhi, and Vreeland's arguments about the need for replicability and interpretability, but we also see the need for operationalizations of concepts that capture essential elements of the theories being tested, as noted by Levitsky and Way. XXX's theories about how factional conflict in different kinds of autocratic regimes would affect policy choice and propensity to collapse, which motivated the beginning of this data collection effort, could not be tested using simple objective indicators. As Schedler notes, complex concepts are not always operationalizable using objective indicators. Some of our coding relies on judgments about what events are important and what things that can be observed indicate the presence of abstractions that are not directly observable. For example, as noted above, we code a coup that ousts a military government dominated by officers from one ethnic

group and replaces it with officers from a different ethnic group as a regime change because, following the case study literature, we see the ethnic identity of officers (in countries where ethnicity structures political conflict) as one of the central rules that determines membership in the leadership group. In short, we make judgments about what characteristics and events to take into account in making coding choices. Coders were not asked to make "more" or "less" judgments, however, or to assess anything like whether the press is free. They were asked to provide factual information such as: How did the regime fall? How many people died during the transition event? In this way, we have tried to maximize replicability and interpretability. Our judgments determined what factual information they were asked to find and what we interpret the factual information as meaning.

Our coding of transition dates and modes of transition required judgments about which events began and ended regimes. Endings tend to be easy to identify since most autocracies end in lost elections, coups, or violence, all of which are dramatic and visible. Where regimes are begun by coup or insurgency, start dates are also unproblematic. When, however, a government originally brought to power in a competitive election changes the rules to limit future competition, identifying one event from which to date the change can be difficult because not all "authoritarianizations" begin with an autogolpe or by outlawing opposition parties. In situations in which the opposition remained legal but could not compete effectively, we identified the date when opposition leaders were first arrested or when opposition deputies were excluded from the legislature as the start.

The autocratic regime-type classifications also depend on a combination of objective and judgmental coding, which is described elsewhere. These classifications are included as a convenience for analysts who wish to use them. The data on regime

transitions do not depend on the regime classifications and can be used alone.

The line between qualitative and quantitative research has become more permeable, and we hope our data contributes to that trend. Some recent qualitative studies, for example, have adopted the norms of replicability and transparency of measurement from quantitative research, but use qualitative evidence to assign cases to categories in much the same way that we use evidence from case studies to assign cases to authoritarian regime types. Haggard and Kaufman, for example, rely on qualitative coding of whether instances of democratization involve conflict between rich and poor, based on careful reading of detailed descriptions. Their qualitative coding is similar in spirit to that done by Levitsky and Way to assess international linkages and the organizational strength of ruling parties. Haggard and Kaufman also use standard large-N data to identify the instances of democratization they investigate. Using these data rather than identifying democratizations de novo through qualitative coding saved them time. More important, using standard sources eliminates the possibility that their findings might depend on idiosyncratic criteria for identifying democratizations. This is one of the ways that data collected primarily for use in quantitative studies, like ours, can be used in qualitative. Our regime-type classifications (as well as other concepts we rely on) reflect theories developed in qualitative studies of different dictatorships, also helping to reduce some of the barriers between quantitative and qualitative researchers.

Figure 2 shows the distribution of different authoritarian regime types over time. Dominant-party dictatorships were the most common type for most of the post-1946 period, but declined by about half at the end of the Cold War. Military dictatorships, always less common, peaked at the height of the Cold War and dropped in its aftermath. These developments reflect the strategic support of dictatorships to advance U.S. and Soviet geo-political agendas during the Cold War. The proportion of personalist dictatorships, by contrast, has increased steadily throughout the period, such that these regimes now rival dominant-party regimes as the most common form of autocracy. The

number of monarchies has remained stable for the past 50 years or so, reflecting the durability of monarchies that survived the first decades after World War II.

[Insert Figure 2 here]

These regime classifications capture something different from degree of democraticness or repressiveness. Figure 3 shows how they map onto one of the most commonly used measures of democraticness, combined Polity scores. The figure shows that some regimes we classify as dictatorship receive fairly high Polity scores (as represented by the outliers in the graph). Polity scores vary a lot both within each regime type and across them. Monarchies typically receive the lowest scores, followed by dominant-party dictatorships. Military and personalist dictatorships receive comparable combined Polity scores, which are usually somewhat higher than those in other types of dictatorship.

[Insert Figure 3 here]

Autocratic Leaders and Autocratic Regimes

In the two sections that follow, we show the differences between: 1) the tenure of autocratic leaders and autocratic regimes, and 2) autocratic regimes and autocratic spells. We do so by comparing how our data match up with data that measure autocratic leaders' time in office and autocratic spells. Through these comparisons, we emphasize that autocratic leaders, regimes, and spells are different concepts, each appropriate for use in some studies but not others. We close each section with a few examples of how our data can be used.

Since the establishment of Communist rule in China in 1949, the country has had five leaders: Mao Zedong, Hua Guofeng, Deng Xiaoping, Jiang Zemin, Hu Jintao, and currently Xi Jingping. Leaders have come and gone, but the regime has remained intact. Using leader tenure as a measure of regime survival is akin to treating Tony Blair's ouster

as the end of Britain's democratic regime. Though the leader and the regime are virtually synonymous in some regimes (as in the Congo under Mobutu), this is not true in many dictatorships, where intra-regime leadership turnover happens periodically.

We illustrate how leader tenure and regime duration differ from each other by comparing our regime data to leadership data from Archigos and Milan Svolik and Seden Akcinaroglu, both of which include the entry and exit dates of political leaders. Figure 4 displays this comparison, plotting leadership and regime failure rates per year by type of dictatorship. Because some autocratic leaders are subject to term limits, we also include leader failure rates from Svolik and Akcinaroglu excluding term limited leaders (a useful feature of this data set). We limit the sample to the country-years we classify as autocratic. The figure shows that leadership failure rates (excluding those due to natural death or foreign invasion) are higher than regime failure rates. The bars labeled Archigos, Svolik, and Svolik (no term limits) refer to the measures of leader tenure used. The right-hand bar in each cluster is the regime failure rate. The number inside each bar is the probability that the leader will be ousted or the regime will end in any particular year.

[Insert Figure 4 here]

As would be expected, the rates are similar for personalist dictatorships, where one-man rule is the norm. Though cases of intra-regime leadership succession sometimes occur in personalist dictatorships – as in the Duvalier dictatorship in Haiti – they are less common than in other kinds of autocracy. In monarchies, leader failure rates are about double regime failure rates, though both are very low (about 5% and 2% per year, respectively). Dominant-party dictatorships exhibit a similar trend, though leadership turnover is a bit higher than in monarchies, leading to even greater disparity between leader and regime failure rates. In military dictatorships, leader failures rates are highest, ranging from about 16% to about 20% per year depending on the data set used. Regime

failure rates are lower (about 13%), though still high compared to those in other kinds of autocracy.

Though the size of the gap between leader and regime failure rates differs across type of dictatorship, regime failure rates are lower than leader failure rates in all types. The average time to leader ouster is about seven years in the Archigos data set, half the average for regime duration. The data show that dictatorships persist after the fall of the dictator about half the time, indicating that leadership turnover can and often does occur during autocratic regimes, just as it does in democracies. This means that using leader survival to test arguments about regime survival would underestimate autocratic durability by about 50 percent. More important, it underestimates it more for some types of autocracy and some time periods than for others.

In the next section our focus shifts to how the new data can be used to extend theoretical ideas or answer new questions.

Theoretical Applications: Regime type, transition, and leader fate

Recent theories use dictators' expectations about their post-ouster fates to explain their decisions about things as varied as holding elections, repressing citizens, and starting wars. This research indicates that the risk of post-exit punishment causes dictators to behave differently than they would otherwise. Here, we explore how the new data can be used to further develop our understanding of the fates of dictators after ouster. We examine differences in post-exit fates using the Archigos data set, which identifies whether leaders are exiled, imprisoned, or killed immediately after leaving office. The left portion of Figure 5 shows the proportion punished, by autocratic regime type.

[Insert Figure 5 here]

Note that our regime classifications correspond to very different trends in how leaders fare after leaving power. In personalist dictatorships, most leaders (69%) face

exile, imprisonment, or death after ouster; in dominant-party dictatorships, by contrast, significantly fewer (37%) do. Monarchs and military dictators lie in between. In short, leaders' treatment after they fall from power depends on the type of dictatorship. This finding suggests an additional reason why personalist dictators start more wars.

We next look at the post-exit fates of leaders whose regimes fall with them, again by regime type. The right portion of Figure 5 shows the same information as the left, but includes only those leaders who lost office at the same time their regimes collapsed. For all the regime categories except military, the percentage of leaders who face punishment after losing office is higher when the regime falls than when it survives their ouster. Simultaneous regime ouster causes a particularly stark change of fortune for monarchs, who face a strong chance of exile, imprisonment, or death if the monarchy is abolished; this risk decreases by nearly half when the monarchy persists after the individual vacates the throne. The removal of living monarchs is of course rare in stable regimes, so any conclusions have to be tentative, but when a ruling family decides to replace a monarch, they have been unlikely to arrest or kill him. For dictators in other types of autocracy, bad fates are also more likely when the regime is ousted too. This makes intuitive sense because if the regime persists, those who are most likely to determine the ex-leader's fate are his erstwhile allies, but if the regime falls, his fate falls into the hands of enemies.

[Insert Table 1 here]

The new data also enable us to dig deeper into how the post-exit fates of leaders vary depending on whether the succeeding regime is democratic or autocratic. Table 1 shows the post-exit fates for leaders whose regimes were followed by a subsequent autocracy compared to those whose regimes democratized. The likelihood of a "good" fate – where leaders are not exiled, imprisoned, or killed – is more than twice as high when a democratic transition occurs as when a new autocracy replaces the old one. While

democracy affords protections to former dictators after the fall of all types of autocracy, Figure 6 shows that democratization after party-based autocratic rule increases the chance of a good fate from 36% to 80%. For military regimes this figure rises from 37% to 63%. Thus the odds of the leader surviving a transition in these contexts are substantially better if the dictatorship democratizes than if it falls to new dictatorship. While democracy also protects the former incumbent in personalist regimes – raising the chances of a good fate from 16% to 36% – democratic transitions still entail a substantial risk for ousted personalist leaders, which may explain their reluctance to negotiate transitions.

[Insert Figure 6 here]

Personalist leaders most likely face bad fates even after democratic transitions because their regimes lack institutions (like a professionalized military or well-developed party) that persist after regime change and could potentially provide protection or enforce guarantees of immunity made before ouster after their departure from office. The likelihood of facing arrest or death after ouster deepens our understanding of why leaders of personalist regimes less frequently negotiate their transitions from power and has obvious policy implications. A third party trying to help end a period of violent chaos in a dictatorship might be able to nudge a military or dominant-party regime toward democratization by cutting aid, but would probably need to offer safe exile as well to a personalist dictator in the same circumstances.

In sum, departing leaders are more likely to suffer costly fates during transitions to subsequent autocracy than transitions to democracy, perhaps because the leader of the old regime poses a threat to the new one. Should the leader survive the transition period, a dictatorship will be more likely than a democracy to address the threat posed by the former leader with brute force. The greater likelihood of punishment after ouster by a new dictatorship also suggests that autocrats facing challenges from insurgencies or

popular protests (which increase the chance of transition to a new autocracy, as shown below) might be more likely to try to rally support by attacking a neighbor than would dictators whose main fear is losing an election. Our data set makes possible more nuanced investigation of this and other aspects of authoritarian decision-making thought to be affected by dictators' expectations about their future.

Autocratic Regimes and Autocratic Spells

An autocratic spell refers to the consecutive calendar years a country is ruled by some form of dictatorship. In other words, it is the length of time that a country is not democratic, regardless of any other characteristics of rule. Spells only end when democracy interrupts them.

Researchers are not usually interested in autocratic spells per se. Rather, they use data that code country-years as democratic or not, without regard to the beginnings and ends of autocratic regimes, and thus end up equating autocratic regimes with autocratic spells in quantitative analyses. This is unproblematic if the purpose of the research is to investigate causes of democratization, but it leads to bias if the purposes of the research include explaining what contributes to autocratic breakdown or what happens after it. To answer questions about what is likely to happen as a result of the Arab Spring, for example, and what factors might increase the likelihood of democratization, we need data that identify autocratic breakdown independent of whether democratization follows. Such data would also be needed to further test Levitsky and Way's (2010) argument that international linkages had stronger effects on the likelihood of democratization after 1990. The outcomes of interest for Levitsky and Way are persistence of competitive authoritarian regimes, democratization, and intensified dictatorship. Using spell data, it is not possible to distinguish persistence of the initial competitive authoritarian regime from the imposition of a new, more severe one.

Because spell data are often used as proxies for regime survival, we discuss the intricacies of the two data sets that measure them, Polity and CGV, in order to show the size of the bias that results. Polity scores measure the "qualities of democratic and autocratic authority in governing institutions." They identify characteristics, such as the competitiveness of elections and executive constraints. Autocracy or democracy is typically defined using combined Polity scores, which aggregate autocratic and democratic Polity scores, generating a 21-point scale that ranges from -10 to 10. With combined Polity scores, the length of the spell usually corresponds to the length of time during which a country's combined Polity score consecutively falls below 6 or 7.

Some studies instead use the Polity Durable variable, which identifies the years in which combined Polity scores increase or decrease by three points or more. Using Polity Durable, the length of the spell corresponds to the length of time until a country's combined score moves three points from one year to the next. Spells computed using the Polity Durable variable are significantly shorter than those using the combined Polity score threshold because 3-point jumps are more common.

Polity scores measure regime characteristics, but do not identify the group that selects leaders and implements policy changes and thus do not identify many of what would be called regime changes by many analysts. For example, most observers view the ouster of civilian president Milton Obote of Uganda by General Idi Amin as a regime change. Both regimes were autocratic, but the groups who held power and controlled policy dramatically altered in terms of ethnic composition and party vs. military institutional organization. Because executive power was relatively unconstrained under both leaders, however, the combined Polity scores associated with their tenures are similar. Using combined Polity scores as a proxy for regime would miss the 1971 Ugandan regime change, while lumping the Obote and Amin dictatorships into one

single, continuous regime.

The problem is not that a few country-years are miscoded, but that using movements up and down the Polity spectrum to identify regime changes misses most autocracy-to-autocracy transitions because regime ends are only identified if the country democratizes. Use of the Polity Durable variable leads to the opposite problem. With this measure, Iran's 1979 revolution would be identified as an episode of democratization, because the country's combined Polity score increased by several points. Yet few of us view the post-1979 Iranian government as democratic.

The second data set used to capture autocratic spells, CGV, codes whether countries are democratic or not, and if not, classifies the dictatorship, according to whether the leader is civilian, military (measured as having ever worn a uniform), or monarchic. These leader codes can be used to infer autocracy-to-autocracy transitions, but the data and earlier versions of them have more often been used as a dichotomous measure of democracy/autocracy.

The CGV data code as military all autocracies led by men who had ever been officers. In contrast, the coding of military regimes in our data builds on theories of institutionalized military rule advanced by Guillermo O'Donnell (1973) and Alfred Stepan (1971). Institutionalized military rule involves consultation within the officer corps and implies constraint by other officers on the paramount leader. In our data set, regimes are only coded as military when dictators govern in collaboration with the rest of the officer corps. The Ugandan dictatorship led by Idi Amin, for example, is coded as military by CGV but personalist in our data because Amin marginalized most of the military from decision making. The difference in these coding rules is quite large and substantively important. CGV code more than twice as many country-years as military than we do. Which data should be used depends on whether the analyst wants to test a

theory about rulers from military backgrounds or a theory about rule by the military as an institution.

Although the CGV data set classifies country-years by leader type, it does not provide regime start and end dates. Regime changes must be inferred from changes among civilian, military, and hereditary rulers. Such inferences identify some regime changes, but not all of them. Periods of rule by successive men wearing uniforms imply a single long regime, as do successive civilian dictators, regardless of whether basic rules changed. As an example, Bolivia was governed by men who wore or had worn uniforms from 1964 to 1979, but standard understandings of regime would not consider this period a single regime because the informal rules defining the leadership group changed first in 1969 and again in 1971. In late 1964 General René Barrientos, supported by a populist faction of the military, seized power in a coup; he quickly created a support party, allied with civilian social groups, appointed civilians to key government posts, and was elected president in 1966. This regime was led by a military man but the leadership group included a populist faction of the military and representatives of civilian interest groups. When Barrientos died in 1969, General Alfredo Ovando, commander-in-chief of the army, seized power from Barrientos' civilian constitutional successor in order to impose government by a junta of top military officers, ushering in a short period of military rule without explicit links to civilian groups. Collegial military rule ended in 1971 when Colonel Hugo Banzer, an exiled cashiered officer supported by a right-wing faction of the military and two of Bolivia's main political parties, seized power and established a regime under his personal control. In our data set, the populist military-civilian alliance established under General Barrientos from 1964 to 1969 is coded as one regime, the period of collegial military rule led by Bolivia's commanding officers from 1969 to 1971 is coded as a second regime, and the government of ex-Colonel Banzer is coded as a

third. Using the leader's background as the only basis for identifying regime beginnings and ends misses these kinds of regime changes, which are common in poor countries.

There are also regimes in which the top leader is at one time an officer and at another time a civilian. In Mexico, for example, General Manuel Ávila Camacho was followed as president by his hand-picked successor and fellow dominant-party stalwart, the civilian lawyer Miguel Alemán. Using the CGV leader coding as a proxy for regime change would inappropriately code the dominant-party regime in Mexico as two regimes, one military and the other civilian. There are also a number of other instances of party-based regimes led by current or former officers for part of the time, including the post-1981 period in Communist Poland led by General Wojciech Jaruzelski. Consequently, using CGV data to identify autocratic regime beginning and end points results in both type I and type II errors.

We explore how regimes and spells differ from each other by comparing our data to the Polity and CGV data. We calculate Polity autocratic spells by looking at the time until an autocratic country (those with combined Polity scores of 6 or lower) reaches a score of 7. The median duration of a Polity autocratic spell is 28 years, double the median duration of autocratic regimes in our data (14 years). The median duration of an autocratic spell – defined as years of consecutive non-democratic rule – using the CGV democracy or dictatorship classification is 23 years.

[Insert Figure 7 here]

When we disaggregate by type, we see a more nuanced picture. The left portion of Figure 7 compares the CGV spell data with our duration data from dominant-party and monarchic regimes, while the right portion compares it with our duration measures for military and personalist regimes. We see that the spell durations match closely with the durations of dominant-party and monarchic regimes, though the right tail of the autocratic

spell distribution is substantially longer. Thus using autocratic spell as a proxy for regime will not change estimates in applied research on monarchies and dominant-party regimes much. This is not true of military and personalist regimes, however, where the median regime lasts only 8 years. Thus dominant-party regimes and monarchies, because they are the most durable, are roughly as stable as autocratic spells. In other dictatorships, however, a typical autocratic spell contains multiple autocratic regimes.

In short, the duration of autocratic spells is usually longer than that of autocratic regimes. This can be important, not so much because we care how long autocracies last, but because we want to understand why they collapse and why their collapses are sometimes violent and other times negotiated, sometimes result in democratization and other times in renewed autocracy. To investigate these things, we need to correctly identify when regimes, in the standard political science sense of the word, end. Yet, when combined Polity or CGV dichotomous democracy/autocracy data are used to identify regime changes, a substantial number of regime ends are omitted from analysis. The omitted authoritarian breakdowns are not randomly distributed across autocracies, levels of development, and other characteristics, but rather disproportionately involve military and personalist dictatorships in poorer countries.

Theoretical and policy applications: What promotes democratization?

We begin this section by showing that the baseline probability of democratization, given regime collapse, varies across autocratic regime types. The left panel of Figure 8 shows that only in military dictatorships is democratization more likely than transition to subsequent autocracy. Personalist dictatorships are least likely to democratize. Though dominant-party regimes democratize more frequently than personalist dictatorships, a dominant-party's loss of power is more likely to result in subsequent autocracy than in democracy. These findings suggest that in the past intervening in non-military

dictatorships with the intention of democratizing them may instead have led to the emergence of new autocratic regimes.

[Insert Figure 8 here]

The right panel shows the same baseline probabilities of democratic transition, after autocratic collapse, using only post-Cold War data (1990 to 2010). While the prospects for democratization have become much higher during the past two decades, the pattern across autocratic regime types remains unchanged: military dictatorships are the most likely to democratize and personalist least likely. These patterns have implications for the probable results of the Arab Spring. We can also use them as the basis for comparing outcomes in the Middle Eastern and North African (MENA) countries with those in former communist countries. Of the 16 communist countries in 1988, five states ceased to exist within the next few years, and one descended into warlordism. Five of the remaining ten democratized and in the rest, the old regime survived the crisis and continues in power today. Twelve of the new states created by the collapse of communism immediately democratized, though two of those democracies lasted only a short time. Nine became autocracies, though three of those eventually democratized. One remained controlled by international actors through 2010. Many of these countries suffered civil wars. If we combine the new states with the surviving old ones, their rate of democratization after autocratic collapse is 61 percent, a little below that for the entire group of post-1990 dominant-party transitions.

As Way (2011) notes, although the Arab Spring was set off by waves of unprecedented popular opposition reminiscent of the collapse of communism in Romania and East Germany, outcomes in MENA countries are unlikely to be similar. The Arab Spring raises two questions for forecasters and policy makers: What will happen where the old regime has already fallen? Is democratization likely if additional regimes are

ousted? Two of the regimes that have already fallen, Egypt and Tunisia, were coded as dominant-party and two as personalist, Yemen and Libya. As Figure 8 shows, democratization is more likely to follow dominant-party than personalist regimes, but even Yemen and Libya have base odds of democratizing of above 50 percent, all else equal -- though as we show below, all else is not equal. The only remaining dominant-party autocracy in the MENA countries is Syria, falling as we write. The results shown in Figure 8 lead us to expect that, on average, two out of three dominant-party regime breakdowns will lead to democracy. The only remaining personalist regime is in Iraq, artificially maintained by external support.

Nearly all the other MENA countries are ruled by monarchs, who are unlikely to fall and, if they do, unlikely to be replaced by democracy. In the post-1945 period, democracy replaced monarchy in only one of eight countries in which autocratic monarchy ended: Nepal in 1991, where the king agreed to a transition to constitutional monarchy, and again in 2006, after a brief return to unconstitutional monarchy. The total number of monarchies was small to begin with, so predictions based on their experience have to be tentative, but so far, the ouster of monarchs has rarely led to democracy and has arguably left people in most of the countries once ruled by monarchs worse off. The overthrow of the monarchy led to long, bloody civil war in three cases, Yemen, Ethiopia, and Afghanistan; the Libyan monarch was replaced by Qaddhafi, the Iranian by Khomeini, the Egyptian by the regime that just ended, and the Iraqi by an unstable series of coup leaders that eventually resulted in Saddam Hussein. In Nepal, where the constitutionalization of the monarchy was negotiated, the aftermath was less dire, though far from what participants had hoped: a long, violent Maoist insurgency, renewal of repressive unconstitutional monarchy, redemocratization, and currently a chaotic, flawed democracy apparently unable to govern. This record should give pause to anyone

advocating intervention in monarchies to aid opposition forces.

Descriptive data of the kind shown here cannot, of course, tell us why these patterns exist. We do not know if democratization is least likely after regime collapse in personalist dictatorships because of structural factors that gave rise to personalist rule in the first place; or if personalist rule undermines civil society or domestic institutions, which in turn reduces the prospects for democratization; or if personalist regimes are simply less likely to end in a manner conducive to democratization because their leaders resist negotiating. The reasons for these patterns can only be investigated, however, after we know that they exist. The new data make that knowledge possible.

The new data also shed light on the likely consequences of some specific kinds of policy interventions. They suggest that if democratization is the goal, aid to peaceful opposition groups is more likely to help than aid to armed opponents or military intervention.

Our data include two variables that may be useful to policy makers trying to predict the consequences of different actions. Both code aspects of regime collapse, making it possible to assess the likely consequences of interventions that would affect not only whether the regime falls but how it falls. First, we include a measure of the level of violence during the regime collapse event. This variable takes one of four values: 0 for no deaths, 1 for 1-25 deaths, 2 for 25-1000 deaths, and 3 for more than 1000 deaths. With this information, we can examine the baseline probability of democratic transition, given regime collapse, for violent and non-violent regime failures (shown in the left panel of Figure 9). Non-violent regime collapses predominate, and they are more likely to result in democratization. This finding suggests that democracy was more likely after the recent autocratic collapse in Tunisia, where the level of violence was moderate, than after those in Libya or Yemen or the one that may happen in Syria, all of which would be coded in

our highest violence category. Violence has played a much larger role in the ouster of autocratic regimes in MENA countries than it did in the fall of communism.

[Insert Figure 9 here]

Our data also include a variable for the means of autocratic collapse. In the right panel of Figure 9, we collapse these categories into two: coerced transitions, which include foreign invasions, coups, uprisings, and ouster by insurgents; and non-coerced, elections and rule changes made by insiders. The pattern for coerced regime failures is even stronger than for violent collapse: fewer than one in five coerced regime breakdowns result in democracy, while nearly three-quarters of non-coerced collapses do.

While this evidence concurs with recent analysis of the relative success of non-violent campaigns to achieve political goals, it does not conclusively show that non-violent, uncoerced transitions are more likely to lead to democracy because we do not control for other factors – such as structural characteristics of society or incumbent regime characteristics – that may explain both the chances of democratization and the level of violence during regime collapse.

How transitions occur varies considerably across different autocratic contexts. As Figure 10 shows, coercion contributes to most ousters of personalist dictatorships and monarchies. Peaceful regime transitions are unusual for these types of dictatorship. Military dictatorships exhibit a different pattern, with non-coerced transitions occurring more frequently than coerced ones.

[Insert Figure 10 here]

This evidence reinforces what we know about transitions from past research. Military dictatorships are more likely to negotiate their transitions, rather than cling to power at all costs, making it less likely that their exits will be violent and more likely that they will democratize. As we noted above, personalist dictators and monarchs are more

likely to face exile, arrest, or death after their regimes end, so they have good reasons to resist negotiation if they think they can retain power. We also know that individuals and parties linked to personalist dictatorships have limited prospects for successful future political careers after regime failure. Refusal to negotiate or reneging on past negotiated agreements, however, increases the likelihood that the opposition will resort to force, as happened recently in Libya, Syria, and Yemen. Such coercion – especially when coupled with the institutional vacuum typical of personalist dictatorships – reduces prospects for democratization.

More than a third of opposition movements used force to dislodge autocratic incumbents. This fraction is even higher for personalist dictatorships, where violent transitions are the norm. Nearly all transitions from one personalist dictatorship to another autocracy are forced, but so are about two thirds of transitions from personalist rule to democracy. We see developing a better understanding of when coercion will contribute to democratization as a fruitful topic for future research.

The examples presented here point to the importance of including both democratic and autocratic outcomes in studies aimed at understanding regime change, as well as in analyses of events like the Arab Spring and assessments of appropriate foreign policy choices in different situations. As noted above, during the last "spring" in Eastern Europe and Central Asia, not all Communist breakdowns led to democratization. Belarus, Uzbekistan, and Azerbaijan are notable but not the only examples. With the new data, scholars can more easily assess the factors that help predict which autocratic breakdowns are likely to be succeeded by democracy and which are not, improving our theoretical understanding and aiding policy makers in decisions about how to respond to instability and potential regime collapse in countries with autocratic government.

Conclusion

This paper has introduced a new data set that makes possible the quantitative analysis of theoretical questions about autocratic regime survival in the face of economic crisis, popular protest, and other challenges, as well as policy-relevant questions about how to influence what happens after autocratic breakdown. The data set adds to what is available in several ways. Most importantly, it identifies beginning and end dates for autocratic regimes, defined as: the set of basic formal and informal rules that determine who influences the choice of leaders – including rules that identify the group from which leaders can be selected – and policies. In addition, it provides new data on how autocracies collapsed and how much violence accompanied the transition. The data also allow analysts to distinguish periods of autocratic government from periods of provisional government and warlordism, which is not possible in other commonly-used measures of democracy/autocracy. It identifies all country-years from 1946 to 2010 as democratic, autocratic, provisional, foreign-occupied, or lacking a central government. Finally, it includes updated and augmented regime-type classifications in a user-friendly format. As we show in a number of the examples, the classifications are associated with different political outcomes, such as the likelihood of violent collapse and post-breakdown democratization.

By comparing our data with existing data sets often used to assess the causes of regime change, we have shown that autocratic regimes last about twice as long, on average, as individual dictators survive in power, which means that using leadership tenure data as a proxy for regime duration would lead to a very large underestimate of autocratic resilience in the face of challenges. Using continuous spells of autocratic rule as a proxy for regime duration leads to a large bias in the other direction because spells average nearly twice as long as regimes.

As is always true, which data are "better" depends on what theory is being

investigated. When testing theories, we need to think about what the theory implies about observable human behavior and then use data appropriate for testing those implications. Some theories imply that individual leaders will survive longer in office. Bruce Bueno de Mesquita and Alastair Smith, for example, argue that revolutionary threats increase the likelihood of autocratic leader ouster. Such a theory should be tested using data that identify the start and end dates that mark the tenure of individual leaders (e.g., Archigos or Svolik and Akcinaroglu). Other theories, however, have implications for systems of government, that is regimes, not individual leaders. For example, Jay Ulfelder suggests that some types of autocracy are more vulnerable to breakdown in the face of contentious collective action than are others. Theories about regime transition, like Ulfelder's, should be tested using data that identify the start and end dates for regimes. In the past, analysts interested in autocratic regime collapse have often used leader tenure or continuous years of autocracy as proxies for regime duration. The new data provide an alternative to those proxies.

The paper also includes number of examples of how the new data can be used to answer questions of interest to scholars and policy makers. Researchers in international relations have shown that fear of punishment after ouster can cause dictators to embark on violent conflict to try to shore up domestic support. We show preliminary evidence that punishment is more likely after some types of dictatorship than others and when the regime falls along with the dictator, which suggests that these circumstances also increase the likelihood of foreign adventures. These findings imply that an outside government that wants to foster regime change should focus on providing the dictator with a safe exit from power since a dictator who fears arrest or execution after ouster is less likely to negotiate a peaceful transition and more likely to attack his neighbors.

Our preliminary investigation of the conditions that increase the likelihood of

democratization after autocratic breakdown has implications for what to expect following the Arab Spring. We show that personalist dictatorships are less likely to democratize than dominant-party regimes, which suggests baseline expectations about the countries in which dictators have already fallen: a 67% probability of democracy after the dominant-party regimes (Tunisia and Egypt) and 50% after the personalist (Libya and Yemen). Most of the autocracies remaining in the MENA countries now, however, are monarchies, which are unlikely to be ousted and very unlikely to be followed by democracy if they do end. The way old regimes were ousted in the MENA countries can also be expected to affect the likelihood of democratization. Autocratic regimes that end in violence are less likely to democratize, as are those that are forced out as opposed to negotiating their transitions. It would make sense for policy makers to consider these findings when deciding what kind of intervention to use to try to achieve desired ends.

Despite optimism regarding the demise of autocracy as a form of government after the Cold War, about a third of the world's countries and many of its people are still ruled by autocratic governments. To understand what is likely to undermine contemporary autocracies and whether their destabilization is likely to lead to democracy, the reimposition of autocratic rule, or future instability and violence, we need data that measure autocratic regime and transition characteristics. Our new data set provides it.

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Notes

Brownlee (2009) is the only quantitative study of which we are aware. He compares rates of democratization and transition to subsequent autocracy in competitive authoritarian regimes.

Available along with a codebook that explains the rules used for coding at XXX.

Way 2011.

Levitsky and Way (2010) make the same point, and informal institutions are an important component of their identification of "competitive authoritarian" regimes. Our regime coding thus differs from that of Hadenius and Teorell (2007), who rely only on formal institutions, especially those governing the number of parties allowed.

Shirk 1993; Roeder 1993, especially pp. 22-33 for a thoughtful discussion of the Selectorate and how it fits into the set of formal and informal rules he labels the authoritarian constitution.

Bueno de Mesquita et al. 2003.

A second and more basic difference between our enterprise and that of Bueno de Mesquita and his collaborators is that the model in Bueno de Mesquita et al. (2003) takes institutions (that is, the size of the Selectorate and Winning Coalition) as exogenous, which means that regime change is actually not possible in the models used in their book. Bueno de Mesquita and Smith (2009) have explored endogenizing institutions, but even in this model, regime change can only happen in certain conditions. Our data set is simply a data set, not a model, and implies no similar limitations. It can be used to explore many hypothesized causes of regime change (and lots of other things).

Some observers consider the Mossadegh period in the 1950s democratic, and indeed, it might have led to democratization under a constitutional monarchy in different circumstances. It did not, however, and the Shah retained his ability to choose governments and open or close the political system at will.

For example, Przeworski et al. 2000, 109-11.

See, for example, Pickering and Peceny 2006.

YYY 2012.

Hadenius and Teorell (2007) have used their data on formal institutions to suggest an alternative understanding of regime change. They identify changes such as moving from single-party rule to autocratic multipartism as regime changes. Their data set has not been much used in studies of transitions, however, because "it departs from the conventional concepts of the comparative politics literature" (Brownlee 2009, 520). Dictators often tinker with formal institutions; we see these changes as politically motivated strategies aimed at regime survival rather than transitions.

Przeworski et al. 2000, 109-11.

Cheibub, Gandhi, and Vreeland 2010, available at: HYPERLINK "https://netfiles.uiuc.edu/cheibub/www/DDpage.html" https://netfiles.uiuc.edu/cheibub/www/DDpage.html. This data set updates the original DD data set used in Prezeworski et al. 2000 and many other studies.

XXX 1999.

YYY 2008.

A list of all country-years we code differently from CGV appears on the data website along with reasons for the discrepancies.

The coding rules suggest one way to collapse these categories to four (military, monarchy, party, personalist).

Levitsky and Way 2010; Haggard and Kaufman 2012.

Cheibub, Gandhi, and Vreeland 2010.

Schedler 2012, 29-31.

We believe this kind of judgment underlies all coding. Regardless of how minimal it is, someone used his or her judgment to decide what the most minimal and objective indicator of the abstraction being operationalized was.

See XXX for a very detailed description.

Haggard and Kaufman 2012.

Levitsky and Way 2010.

This literature is much too large to cite adequately, but includes O'Donnell 1973; Stepan 1971; Chehabi and Linz 1998; Fainsod 1963; Herb 1999; Roeder 1993; Shirk 1993; and Springborg 1989.

Here and throughout we group party-hybrids and oligarchies with dominant-party dictatorships and military-personalist hybrids and indirect military regimes with military dictatorships.

This graph does not show the handful of cases in the data set that score higher than 6 on the Polity scale.

See Goemans, Gleditsch and Chiozza 2009 and Svolik and Akcinaroglu 2007, respectively.

We only use leaders in power on January 1 of a given year; thus the leader failure rates in these data sets are actually even higher than those we report here.

Because the date for regime failure and leader exit can differ in the different data sets due to minor differences in coding rules, we extend the regime data forward (after a regime transition) in some cases to ensure that the analysis captures the leadership exit for leaders in power when the regime collapses.

The number of monarchies in our data set is small, with 12 collapsing at some point during the period and seven still in power today. Because of this small sample size, we make few inferences about monarchic transitions in the examples that follow.

See Cox 2010 on holding elections. On starting wars: Debs and Goemans 2010; Goemans 2000; Chiozza and Goemans 2011. On ending wars, Escribà-Folch 2011; on using repression, Quiroz Flores n.d..

ZZZ; Weeks 2012

Again, we have taken care to reconcile the different dates of regime failure and leadership exit. See Note 37.

This finding is consistent with Cox 2010, which argues that dictators agree to elections

because ouster via election is less likely to lead to punishment than more violent ouster.

Debs 2011.

For this reason, Brownlee (2009) uses an earlier, incomplete version of our data augmented by his own coding and a democracy indicator from Freedom House to test Levitsky and Way's argument. Hadenius and Teorell's (2007) regime coding could also be used to test it.

Polity IV Project 2010.

Some studies further differentiate between autocratic and anocratic; the former usually consist of countries with combined Polity scores between -10 and -6, and the latter of countries with scores ranging from -5 to 5.

See, for example, Smith 2004.

For a very useful description of differences among several datasets that code regime type, see Wilson 2014.

Wahman, Teorell, and Hadenius 2012, 26.

The Polity Durable variable has the opposite effect, given its sensitivity to small changes in combined Polity scores. Using this measure, the average regime duration is only about eight years, nearly cutting regime duration in half compared with our measure.

Because there are only two instances of a monarchy democratizing during the period (Nepal in 1991 and again in 2006), we exclude monarchies from this figure.

Using the collapsed regime-type categories, as noted above.

See Menaldo 2012 for an excellent analysis of these monarchies.

Sharma and Chalmers 2012, HYPERLINK "http://www.reuters.com/article/2012/11/11/us-nepal-politics-idUSBRE8AA0GH20121111" http://www.reuters.com/article/2012/11/11/us-nepal-politics-idUSBRE8AA0GH20121111.

The calculations exclude three cases of regime collapse caused by foreign occupation: Dominican Republic 1965, Afghanistan 2001, and Iraq 2003, but include all cases in which foreign troops joined domestic opposition forces.

Chenoweth and Stephan 2008.

XXX YYY.

Ibid.

Bueno de Mesquita and Smith 2010.

Ulfelder 2005.

In our data set, there were 54 dictatorships in power as of 2010. The Chinese autocratic regime alone governs around one fifth of the world's people.

Figure 1: *Frequency of Democratic and Autocratic Transitions*

Figure 2: *Autocratic Regime Types over Time*

Figure 3: *Polity Scores by Autocratic Regime Type*

Figure 4: *Autocratic Leader Ouster vs. Regime Failure Rates*

Figure 5: *Dictator's Post-Exit Fate by Regime Type*

Figure 6: *Dictators' Post-Exit Fates after Regime Collapse*

Figure 7: *Duration of Autocratic Regimes and Non-Democratic Spells*

Figure 8: *Autocratic Regime Type and the Probability of Democratization*

Figure 9: *The Effect of How the Dictatorship Collapses on the Likilihood of Democratization*

Figure 10: *The Likelihood of Coerced Regime Breakdown by Regime Type*