

Modeling Transitions to and from Democracy

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Introduction

By the start of the 21st century, nearly two-thirds of the world's states could reasonably be described as democracies.¹ The prevalence of democracy today represents a significant advance from the early 1970s, when more than two-thirds of the world's states were under authoritarian rule. That progress, however, should not be taken for granted. As various scholars have observed, many of the world's newer democracies depart significantly from the liberal ideal, occupying an uneasy middle ground that is more likely to end with a backslide to autocracy or suffer an outbreak of internal war.²

This paper describes models of transitions to and from democracy that were developed in 2004-2005 as part of the work of the Political Instability Task Force (PITF), a US government-funded interdisciplinary research program that develops statistical models to assess the relative vulnerability of countries around the world to various forms of political change.³ Although the definitions and data are the same, these models are *not* a subset of the Task Force's traditional work on political instability. Instead, they represent a distinct research project undertaken in response to growing interest among policymakers in assessing systematically prospects for transitions to democracy and risks of backsliding among countries worldwide.

The results described here are based on statistical analysis of regime transitions that have occurred over the past several decades in sovereign states with populations larger than 500,000. Our analysis identifies a number of factors that are statistically associated with differences in the likelihood of movement back and forth across the threshold of electoral democracy. Although these models were developed primarily for use as forecasting tools, the sponsors of this work are also interested in what the policy community might describe as the "drivers" and "triggers" of democratic transitions and backsliding. Bearing that in mind, we have focused our research on factors suggested by theory and prior research in order to improve our ability to make causal inferences as well.

Definitions and Measures

Among scholars who study patterns of political authority—regime types, for short—the debate over whether to treat democracy a binary concept or a continuous one remains unresolved. On one side of this debate are scholars such as Dahl (1971, 1989), Bollen & Jackman (1989), and Diamond (1999), who argue that the line dividing democracies from non-democracies is inherently fuzzy.⁴ In their view, the core procedural elements of democracy do not easily reduce

¹ This and all other counts of political regimes used here are based on the definitions and data sources described in the "Definitions and Measures" section of this paper.

² On the quality of democracy in many of the so-called "third wave" cases, see Diamond, Plattner, Chu, and Tien (1997), Zakaria (1997), Diamond (1999), and Carothers (2002, 2004), among others. On the vulnerability of many new democracies to instability and violent conflict, see Elkins (2000), Snyder (2000), Hegre et al. (2001), Goldstone and Ulfelder (2004), and Bates et al. (forthcoming).

³ For more on the Task Force, see <http://www.cidcm.umd.edu/inscr/stfail/>. The views expressed here do not represent the official views of the U.S. Government, the U.S. intelligence community, or the Central Intelligence Agency, which funds the Task Force's work.

⁴ Dahl (1971: 8), for example, labels the four corners of the two-dimensional space defined by his concepts of contestation and inclusiveness but notes that, "Perhaps the preponderant number of national regimes in the world

to yes/no formulations, so efforts to classify political systems in two categories will mask important variations in regime type. On the other side of the debate are scholars such as Sartori (1987: 184), who argues that political systems are “bounded wholes” characterized by essential elements that are either present or absent, and Przeworski et al. (2000), who claim that difficulties in placing regimes on one side or the other of a democracy/dictatorship dichotomy can only result from bad rules or insufficient information.⁵

Following Collier & Adcock (1999: 539), who argue that “how scholars understand and operationalize [democracy] can and should depend in part on what they are going to do with it,” we take a pragmatic approach to this question. Our choice is driven in part by the concerns of the Task Force’s sponsors, who have expressed more interest in models that can rank countries according to their relative likelihood of attaining a status that might reasonably be characterized as democracy than they are in models that emphasize smaller differences of degree. Our choice is also driven by the observation that most statistical models which use a scalar measure of democracy as the dependent variable implicitly assume that the forces driving movement along that scale are the same at all points on the scale, and that movement down is driven by the inverse of the factors driving movement up. Unfortunately, these assumptions do not fit any existing theories of democratization; no current theory suggests, for example, that the factors leading a ruthless dictatorship to loosen slightly its grip on society are the same ones (and in the same amounts) that push an already liberal democracy to consolidate fully. Taken together, these practical concerns prompt us to adopt a categorical approach to measuring political regimes, modeling the likelihood that a state will move in one direction or the other across a qualitative threshold representing the presence or absence of democracy.

To define democracy, we follow Schumpeter (1942) and Huntington (1991: 5-13), among others, and adopt an approach that emphasizes the procedure by which a government is chosen, rather than the apparent sources of that government’s legitimacy, or the ends toward which it works. Specifically, we consider political regimes to be democracies when *top government decision-makers are chosen through competitive elections in which most of the adult population is allowed to participate and vote*.⁶ This definition requires that regimes obtain some minimal degree of contestation (elections are competitive) and inclusiveness (opportunities for participation are broad) in order to be considered democratic. When regimes obtain both, we identify them as democracies; when they fall short on one or both dimensions, we do not.

Also consistent with much recent work on democratization, we treat autocracy as a residual category, defined primarily by the lack of democracy. Despite its residual status, however, autocracy is not without a unifying concept: *the absence of institutions that render a government*

today would fall into the [unlabeled] mid-area. Many significant changes in regimes, then, involves shifts within, into, or out of this important central area, as these regimes become more (or less) inclusive and increase (or reduce) opportunities for public contestation.”

⁵ See Vreeland (2003) for a strong critique of continuous measures derived from Freedom House and Polity data, and for an intriguing effort to generate a continuous measure from a binary definition.

⁶ Scholars have rightly cautioned against equating democracy with elections—an equation that Karl (1990) aptly calls the “fallacy of electoralism”—because a myopic focus on the process of casting and counting ballots may lead to the neglect of other institutions essential to the realization of democratic principles. Still, virtually every major definition of democracy put forward in recent decades identifies elections as the critical procedural component of this concept, and our approach is consistent with that pattern.

accountable to citizens.⁷ Autocracies vary widely in how they select their rulers and how much and what kinds of political participation they tolerate or encourage, and scholars have used these variations to identify distinct types of autocracy.⁸ Although these distinctions may be useful in identifying and explaining which authoritarian regimes are more susceptible to democratization, they are not essential to an effort to determine whether and when those transitions have occurred, so we do not attempt to elaborate a typology of autocratic regimes here.

To operationalize our definition of democracy, we use a pair of variables from the Polity IV data set that measure major elements of the concepts of contestation and inclusiveness which underpin that definition. For historical analysis of political regimes, Polity holds some significant conceptual and practical advantages.⁹ On the conceptual side, Polity was explicitly designed to capture elements of political systems highlighted by our definition of democracy (and many others). Based on theoretical elements originally described by Eckstein and Gurr (1975), Polity focuses on three authority patterns that organize political interaction in modern states: the process by which the government is selected (executive recruitment); relations among branches of government, and between the executive branch and other elements of political society (executive constraints); and the scope and character of political participation (political competition). While our definition of democracy does not refer to executive constraints, it is specifically concerned with the other two concepts that Polity measures.

The major practical advantages of the Polity data set are the historical depth and geographic scope of its coverage. Polity offers annual observations of all countries worldwide since 1800, a range achieved by few other cross-national data sets. Of particular concern for event history modeling, the historical depth of Polity's coverage dramatically reduces problems of left censoring by allowing us to establish regime histories as far back as 1800. This is an important consideration if we believe that regime duration and prior democratization have an impact on prospects for later transitions.

To determine whether contestation and inclusiveness are sufficient to qualify a country as a democracy, we use dichotomized versions of two Polity component variables.

- *Executive Recruitment (EXREC)*. This categorical variable is constructed by Polity from three components which measure different elements of the process involved in choosing the effective chief executive, including the occurrence and competitiveness of popular elections. To qualify as a democracy in our scheme, a regime must score 6 or higher on this variable, meaning that the chief executive is chosen through elections that are, to a meaningful extent, competitive, even if they are not fully free and fair. This cut point places on the democracy side of the ledger some instances in which an election was deemed free but not fair by independent observers; the outcome of an election was influenced by, not determined by, incumbent non-elected officials or foreign powers;

⁷ A focus on accountability as the key feature of democracy is suggested by Schmitter and Karl (1991).

⁸ See Diamond (1999), Geddes (1999), Linz and Stepan (1995), and Linz (2000) for efforts to develop sets of categories that approach typologies. Recent scholarship has often invoked new or additional categories on something of an ad hoc basis, coining terms like “electoral autocracy” or “competitive authoritarianism” to represent patterns that may have specific implications for the durability of authoritarian rule and potential paths to democracy, without attempting systematically to classify autocratic regimes.

⁹ See Jagers and Gurr (1995).

major opposition parties faced significant but not insurmountable obstacles to effective electoral competition and may even have carried out a boycott; or an election was held in a context of civil war or secessionism. According to the *Polity Dataset User's Manual* (Marshall and Jaggers 2002: 58), the key issue is whether the elections were free—even if not entirely fair—and matched candidates from at least two independent parties.

- *Competitiveness of Political Participation (PARCOMP)*. This categorical variable measures “the extent to which alternative preferences for policy and leadership can be pursued in the political arena” (Marshall and Jaggers 2002: 25). To qualify as a democracy, a regime must score above 2 on this variable, indicating that the government does not effectively suppress political participation. The regime may make some efforts to undercut its opponents, and competition may be poorly organized or even involve some persistent and overt coercion, but—and this is the key point—the regime does not effectively control political participation.¹⁰

Figure 1 charts counts of country-years in each of the possible combinations of EXREC and PARCOMP during the period 1955–2003. The blue columns represent cumulative counts of country-years falling on the democracy side of our threshold, and the brown columns show cumulative country-years of autocracy.

[Figure 1 about here.]

On the democratic side of the conceptual space, Figure 1 shows that the modal version of democracy since 1955 is the most liberal kind, with free and fair elections (EXREC = 8) and open, well-institutionalized political participation (PARCOMP = 5). This pattern illustrates the point that liberal democracy is akin to a final destination, and institutional arrangements that involve competitive elections but fall short of this “gold standard” have traditionally proved much more volatile. In concrete terms, that upper corner is populated mostly by wealthy countries that landed there before 1955 and never budged, thereby racking up long strings of country-years which, despite the relatively small number of countries involved, add up to a substantial total. The chart also shows that, among democracies falling short of the gold standard, factionalism is the typical pattern of political participation, and free and fair elections are the typical pattern of executive recruitment. In other words, more democracies fail to meet the gold standard because of defects in the character of political participation than do because of the quality of their elections.

¹⁰ The distinction between suppressed (PARCOMP = 2) and factional (PARCOMP = 3) participation is not always a sharp one in the real world, but it is an important one in our classification scheme, so it deserves some additional discussion. According to the *Polity User's Manual* (Marshall and Jaggers 2002: 27), “Suppressed competition is distinguished from factional competition by the systematic, persisting nature of the restrictions: large classes of people, groups, or types of peaceful political competition are continuously excluded from the political process,” as might be evidenced by: prohibitions on certain kinds of political organizations, either by the type of group or the people involved, that affect more than 20% of the adult population; prohibitions on certain kinds of political actions, most notably competing in elections; or systematic harassment of the political opposition, although this may also occur under repressed or factional competition, depending on the character of the regime and the opposition and the persistence of political groups.

On the autocratic side of the ledger, Figure 1 shows that the typical autocracy since 1955 combines repressed competition with a designated chief executive, a pattern common among long-lived single-party authoritarian regimes such as the USSR, China, and North Korea. The vast majority of autocracies are close to this modal form, combining unelected rulers of various stripes with tight proscriptions on political participation. The exceptions to this pattern fall into two areas: either an unelected chief executive presides over a system that allows substantial popular participation, as occurs in contemporary Jordan or Yemen; or, more rarely, a chief executive is chosen through competitive elections, but participation in those elections is so sharply restricted that the regime cannot be considered even minimally democratic, as was the case in Apartheid-era South Africa.

Our analysis of transitions to and from democracy is concerned with the occurrence and timing of movement back and forth between these two categories. Based on our definitions, we consider a transition from autocracy to democracy to have occurred when a government that was chosen through competitive elections replaces one that was not, and we refer to this event as a *democratic transition*. We consider a transition from democracy to autocracy to have occurred when an elected chief executive is replaced or supplanted by an unelected one, and we refer to this event as a *backslide*.¹¹ Applying our definitions to the Polity data, we count 80 transitions from autocracy to democracy and 60 transitions from democracy to autocracy during the period 1955-2003. A list of these events is provided as an appendix.¹²

Methods and Data

To explore the conditions under which transitions to and from democracy are likely to occur, we chose to use event history techniques. Event history models relate differences in the timing of a particular event across units or over time to a vector of independent variables, which may or may not change during the period of observation. Developed as a way to analyze influences on the life courses and mortality of individuals, event history analysis seems especially well suited to the study of the breakdown and persistence of political regimes. Furthermore, as Box-Steffensmeier and Jones (2004: 3-4) point out, event history analysis is inherently comparative because it uses information about many individuals over time; thus, “Not only can some claims be made regarding survival and risk, but also, explicit comparative inferences can be made regarding differences across the cases.”

More specifically, we have chosen to use a type of event history model called *discrete-time logistic regression*. In contrast to continuous-time event history models, in which transitions may occur at any moment, discrete-time models treat the event of interest as if it can only occur at discrete time intervals—say, once each year. This design is useful in situations where the

¹¹ We are aware that our use of the term “transition” in reference to a discrete event differs from common practice, in which the term is used to refer to a gradual and uncertain process that begins with authoritarian liberalization and ends with democratic consolidation. See Carothers (2002).

¹² Readers familiar with Polity will know that it also includes three codings—interruption (-66), interregnum (-77), and transition (-88)—where patterns of political authority are deemed either irrelevant or indeterminate. We considered movement into and out of interruption (foreign occupation) and interregnum (collapse of central state authority) to be censoring events rather than transitions. In cases coded by Polity as transitional, we used supplemental research to determine whether that period contained an event that met our definition of a transition, and if so, when it occurred.

variables of interest are only measured at discrete intervals, as is the case with much of the cross-national time-series data available to social scientists (Allison 1984, Yamaguchi 1991).¹³ In practice, a discrete-time logit model looks a lot like a logistic regression model estimated from time-series cross-sectional data. The conceptual distinction comes from the idea that the occurrence and timing of the event of interest (in this case, a regime transition) is controlled by an unobserved hazard rate, rather than a probability. As Allison (1984: 16) states, “In discrete time, the hazard rate is the probability that an event will occur at a particular time to a particular individual, given that the individual is at risk at that time.” In practical terms, this means the analysis only includes individuals “at risk” of experiencing the event of interest—for analysis of transitions to democracy, autocracies, and for analysis of transitions from democracy, democracies—rather than all countries and all years.

The core concept of event history analysis—an interest in the relationship between time and risk—implies that researchers implementing discrete-time logit models must explore the possibility of duration dependence, i.e., a consistent relationship between time at risk and the likelihood of an event’s occurrence. Texts on the subject recommend various approaches for dealing with duration dependence in discrete-time models: the addition to the model of a series of dummy variables representing each year (save one) of duration observed in the dataset; the specification of a functional form for duration dependence; the use of cubic splines, which are less constraining than a single functional form; use of the Cox model; or the application of conditional logistic regression to data matched on duration, an approach that, like the Cox model, treats any duration dependence as a “nuisance.”¹⁴

Unfortunately, most of the recommended approaches were not appropriate for our analysis. The dummy-variable approach was not an option because regime duration varied so widely in our samples that this technique would have required that we include nearly as many or more dummy variables than there were observed transitions. Approaches that treat duration dependence as a nuisance—the Cox model or its discrete-time analogue of conditional logistic regression—were not attractive to us because of our substantive interest in duration effects and our desire to use the resulting models for forecasting. So, we chose instead to include regime duration as a model parameter, deriving the functional form of those parameters in our two models from the usual combination of theoretical suggestion and empirical trial and error. To explore the possibility of nonproportional hazards—variation in the effect of a variable related to the age of the regime—we also tested for interaction effects between these duration parameters and other covariates.¹⁵

Our analyses relied on the Political Instability Task Force’s data set, which contains information on nearly 1,300 political, demographic, economic, social, and environmental variables for all countries of the world with populations larger than 500,000 during the period 1955-2003. Much

¹³ Continuous-time models, such as the Cox model, may 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, e.g., autocracies that endured for the same number of years. 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. Life tables generated from our data set indicate this is indeed the case.

¹⁴ All of these options are discussed in Box-Steffensmeier and Jones (2004), pp. 74-77.

¹⁵ See Box-Steffensmeier and Zorn (2001) for a discussion of the importance of testing for nonproportional hazards in political-science modeling and various techniques to do so.

of the information in this data set was drawn from existing databases provided by the World Bank, the United Nations, the U.S. Census Bureau, and other organizations and independent scholars, but members of the Task Force have also developed new data sets specifically for this project.

Results and Discussion

This section presents our models of transitions to and from democracy and discusses the implications of our findings for theories of democratization. Before presenting those models, however, we should say a bit about the criteria by which they were chosen.

Because our analysis was guided by two objectives that are often complementary but sometimes in conflict—to develop models that might be used as forecasting tools, and to identify causal connections that might inform policymakers—we used multiple and sometimes competing criteria to select our “final” models. First and foremost, we were concerned with retrospective accuracy. As with all Task Force modeling, our basic objective was to identify a set of variables that would most accurately distinguish transition years from non-transition years. The key metric in this regard was the c-score, a measure of overall goodness of fit for logistic regression models; variables that failed to produce significant improvements in the c-score were generally not considered for inclusion in the final model.

Our second criterion was theoretical validity. In practical terms, this meant two things. First, we only tested variables we thought we could explain. Second, we were inclined to include variables representing certain theoretical concepts as a matter of course, whether or not they significantly improved model fit. The major concepts that fell into this category were regime duration (a methodological as well as theoretical issue, given our use of event history models), economic development, and economic performance.

As a final cut, we were also aiming for parsimony. Task Force models are sometimes briefed to senior government and military officials. The more variables a model includes, the harder the briefer’s job becomes. Bearing this in mind, we sought to make our customer’s job as easy as possible without making major sacrifices in accuracy or validity.

Model of Transitions from Autocracy to Democracy

Table 1 details our model of transitions from autocracy to democracy. As the table shows, this model does quite well at distinguishing between transition years and non-transition years in the historical data from which it was estimated, accurately classifying nearly 80 percent of both types of cases when we select a cut point that roughly balances model sensitivity and specificity. Table 2 presents estimated odds ratios for all of the model variables to facilitate comparison of continuous and categorical variables and provide a clearer indication of the relative magnitude of the various effects.

[Tables 1 and 2 about here.]

Economic Development. Despite decades of research, social scientists remain uncertain about the relationship between economic development and democratization. Since Lipset first outlined the ideas that evolved into modernization theory, researchers have repeatedly confirmed his assertion (1963: 51) that, “The more well-to-do a nation, the greater the chances that it will sustain democracy.”¹⁶ At the same time, probably dozens of comparative and statistical studies have documented significant exceptions to this “stylized fact,” as Geddes (1999: 117) calls it, both in the form of individual cases as well as broader statistical patterns.

For modernization theorists, one of the most vexing findings in this vein concerns the relationship between per capita income and the likelihood that an authoritarian regime will experience a transition to democracy. Modernization theory clearly implies that as an autocracy grows wealthier, the prospects for a transition to democracy should also rise. According to some of the most influential statistical studies on transitions from autocracy, however, the opposite appears to be true. Hannan & Carroll (1981), for example, observe that higher levels of development are actually associated with a lower likelihood of democratization. In the same vein, Przeworski, Alvarez, Cheibub & Limongi (2000: 92–98) demonstrate that transitions to democracy are *least* likely to occur in rich autocracies; instead, it is the autocracies at intermediate income levels that are most likely to democratize, other things being equal. Once a regime has become democratic, the prospects that it will stay that way are strongly linked to the country’s per capita income, but the relationship between wealth and the end of autocratic rule seems more complex than Lipset’s terse statement implies.

Our research points toward one possible explanation for these seemingly contradictory results. According to our analysis, the relationship between economic development and prospects for a transition from autocracy to democracy is contingent upon a country’s political “life course”—specifically, whether or not it has ever been a democracy before. As Figure 2 shows, for countries with any history of democracy, higher levels of economic development—measured in our model by its infant mortality rate—are associated with a higher likelihood of democratic transition, as modernization theory predicts. In countries with no history of democracy, however, higher levels of development do not improve prospects for a transition; in fact, if anything, they appear to worsen those prospects.

[Figure 2 about here.]

This contingent relationship indicates that, for the past few decades at least, economic development has had little net effect on the timing of countries’ first attempts at democracy. For countries with democratic experience, however, economic development has conveyed a substantial democratizing advantage.¹⁷ Whatever the causal pathway involved, we believe ours is the first study to document this interaction effect, which could help to explain the durability of

¹⁶ Among the most influential quantitative studies documenting this relationship are those of Jackman (1973), Bollen (1979), and Burkhart & Lewis-Beck (1994).

¹⁷ We suspect that this relationship has to do with variation in the organizational and attitudinal legacies of prior attempts at democracy. In countries with more “modern” economies, groups with a potential interest in a return to democracy—including but not limited to opposition parties, labor organizations, and trade associations—are likely to have been stronger during previous episodes of democracy, and as a result they may find it easier to survive and act during the ensuing authoritarian interlude.

autocracy in places such as Singapore and the Middle East while also accounting for the broader, positive association between economic development and democracy.

Resource Rents. Although there is a substantial body of case studies and some comparative analysis on the political economy of rentier states, recent efforts to test this theory through cross-national statistical modeling have produced mixed results. In an innovative study, Ross (2001) appeared to confirm the argument that oil-related development outcomes hurt prospects for democracy, showing a strong, negative relationship between oil exports as a share of GDP and a country's degree of democracy. Jansen and Wantchekon (2004) find a similar relationship in their study of resource wealth and democracy in Africa. Herb (2005), however, uses a different measure of rentierism and an inventive approach to controlling for other wealth effects, and he finds weak support at best for the hypothesis that rentierism impedes the development of democracy.

We believe our event history analysis can help to resolve this debate—for the moment, anyway—by offering a better fit between theory and research design, and thus a more appropriate test of the argument. As we understand it, the application of rentier state theory to studies of democratic transitions is intended primarily to explain why authoritarian regimes with resource rents manage to endure in spite of the accumulation of wealth and trappings of modernization that are broadly associated with the development of democracy. In other words, rentier state theory—like many theories of democratization and political development more generally—is fundamentally a dynamic story of change or its absence among a subset of the world's regimes. If this interpretation is correct, then a design that examines the effect of resource rents on the degree of democracy among regimes at every point on the continuum is not an appropriate test of the theory. Instead, we ought to examine the impact of resource rents on the durability of authoritarian rule and timing of transitions to democracy.

Our model offers just such a test, and it supports the basic claim of rentier state theory. According to our analysis, autocracies that derive a larger share of their gross national income from mineral resources—especially hydrocarbons, but also metals and other mined minerals—are, other things being equal, less likely to transition to democracy, even when economic development and democratic experience are taken into account.¹⁸ Intriguingly, our analysis also suggests a new twist on rentier state theory: we find that the relationship between resource rents and the likelihood of a transition to democracy is mediated by prior experience with democracy. As Figure 2 shows, resource rents sharply reduce prospects for democratic transition in countries with no history of democracy, but they have a weaker impact on prospects for a transition in countries that have been democracies before. Apparently, once a state has attempted democracy, the political version of the “resource curse” is substantially weakened, or at least partially offset by the legacy of that prior democracy.

¹⁸ We tested measures of rentierism derived from several sources, including the World Bank's *World Development Indicators* and the U.S. Department of Energy's Energy Information Administration. The measure we used in our final model is derived from World Bank data on resource rents as a share of gross national income (GNI); specifically, we took the square root of the sum of fuel resources and other mineral sources as a share of GNI. We also tested a version of this measure that included rents from forest resources and found—consistent with Ross's (2001) hypothesis about differences between mineral and agricultural rents—that it did not improve model fit.

[Figure 3 about here.]

Civil Liberties. Autocracies in which citizens enjoy a higher level of civil liberties are more likely to transition to democracy, other things being equal. We used Freedom House's seven-point scale of civil liberties to measure this variable, but we treat the index as a categorical variable rather than a scalar one and combine some of the adjacent categories in order to capture nonlinearities in its effects. As Table 2 shows, autocracies that provide moderate protections for civil liberties (a Freedom House index score of 5) are more than three times as likely as the least liberal regimes to transition to democracy the following year, and autocracies that provide relatively strong protections for civil liberties (an index score of 4 or better) are more than 10 times as likely to transition.

The relationship we identify between civil liberties and democratic transitions is an intuitive one; regimes that are already relatively close to democracy are more likely to cross that line. Still, it is worth noting that we tested several similar and highly correlated variables—Freedom House's seven-point scale of political liberties, Polity's 10-point autocracy index, and Polity component variables measuring the extent, institutionalization, and character of political competition—and none of them was able to distinguish stable years from impending transitions as well as the civil liberties score. Taken together, these results suggest that expanded civil liberties play an especially important role in improving prospects for a democratic transition, either as a catalyst for that process or simply as a harbinger of it. In a broad sense, then, our analysis offers statistical supports for the conclusions of O'Donnell and Schmitter (1986: 10) that, "Once some individual and collective rights have been granted, it becomes increasingly difficult to justify withholding others. Moreover, as liberalization advances so does the strength of demands for democratization."

Collective Action. According to our analysis, other things being equal, autocracies that have experienced any significant non-violent collective action in the previous two years are roughly three times as likely to transition to democracy as those that have not.¹⁹ Unfortunately, our statistical analysis cannot tell us if contentious collective action helps to trigger regime change by prodding authoritarian regimes to reform, or if it is a symptom of deeper changes already underway that would have been sufficient on their own to bring about an attempt at democracy. We suspect the answer is a bit of both. Demonstrators are unlikely to turn out in significant numbers unless and until they believe it is reasonably safe to do so, but their actions sometimes force authoritarian rulers to adopt changes they might otherwise have hoped to avoid. Either

¹⁹ Our finding on collective action is based on variables in the Banks Cross-National Time-Series data set. We tested measures of anti-government demonstrations, general strikes, and riots alone and in combination, as single-year snapshots and three-year cumulative sums, and as any-vs.-none dummies and continuous measures. Results were generally consistent across these variations in measurement. In the Banks data set, an anti-government demonstration is defined as "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;" a general strike is defined as "any strike of 1,000 or more industrial or service workers that involves more than one employer and is aimed at national government policies or authority;" and a riot is defined as "any violent demonstration or clash of more than 100 citizens involving the use of physical force." All of the relevant variables are based on reports from the daily files of *The New York Times*.

way, the statistical relationship appears robust; more collective action is associated with improved prospects for a democratic transition.²⁰

What about violent collective action? We found that adding information about the occurrence of riots to a model that already captures the occurrence of non-violent collective action did not improve model fit. This result jibes with other recent research by Ulfelder (2005) showing that riots decrease prospects for authoritarian breakdown in military regimes, increase those prospects in single-party regime, and have no significant effect on personalist regimes. With such varied effects on the likelihood of authoritarian breakdown, it is not surprising that riots do not send a strong signal in an analysis of transitions to democracy.

Economic Performance. Our model indicates that autocracies are more likely to transition to democracy following years in which the economy declined, other things being equal. This finding is consistent with the conventional wisdom that poor economic performance begets political instability, and it echoes the findings of other researchers on the causes of regime breakdown in autocracies.²¹

Leadership Change. We find that autocracies are more likely to transition to democracy during the first several years of a new chief executive's tenure, other things being equal. This finding suggests that the accession process often provides a window of opportunity for would-be democratizers. In some instances, this relationship surely reflects the ascension of a "soft-liner" with an open commitment to democratization. Even in cases where the new leader has no interest in reform, however, the succession process apparently can create significant vulnerabilities, as new autocrats often must spend their first few years in office attempting to consolidate their authority.

International Effects. To capture the effect of changes in the international system associated with the end of the Cold War, our model includes a dummy variable flagging all country-years from 1989 onward. We chose to use 1989 as our break point because it was the year during which the USSR's foreign minister pronounced the so-called Sinatra Doctrine, effectively removing the threat of military intervention to prop up socialist regimes in Eastern Europe and elsewhere. For analysis of the opportunity for regime change in countries other than the Soviet Union, this shift in Soviet foreign policy, and not the ensuing collapse of the USSR, was the critical event—as

²⁰ We should point out that our results probably underplay the effect of contentious collective action, due to some unavoidable aspects of our discrete-time statistical design. To ensure that we are not counting turmoil aimed at a newly installed democratic regime, we did not count events that occurred in the same year as the transition to democracy. An "ocular" review of the data, however, suggests that several autocracies experienced a significant spike in demonstrations in the same year they transitioned. Examples include Albania in 1990 and again in 1997, Madagascar in 1991, and Nepal and Mongolia in 1990. While we suspect that nearly all of those demonstrations targeted the authoritarian regime, we cannot count those events in our analysis without risking errors of commission that would muddy any causal interpretations. Neither does our analysis include the demise of East Germany and the USSR, both of which occurred in the wake of huge spikes in protest activity, because those events are considered cases of state collapse and thus appear in the dataset as "right-censored" cases (i.e., cases where the state disappeared or observation ended without a transition to democracy having occurred).

²¹ See especially Haggard and Kaufman (1995) and Geddes (1999b). Gasiowski (1996), who also uses event history models, does not find evidence of a strong link between economic performance and transitions in a more democratic direction, but his analysis treats transitions from autocracy into a middle category, semidemocracy, and out of this middle category to democracy as the same type of event.

illustrated by the rapid-fire fall of Communist regimes in Europe soon after the Sinatra Doctrine was established.

In light of the temporal and regional clustering of democratic transitions in the Communist bloc and sub-Saharan Africa in the late 1980s and early 1990s, we also explored the possibility of contagion or demonstration effects from transitions to democracy in other countries. We were surprised to find no direct evidence of them, once domestic factors were taken into account. These negative findings certainly do not disprove the possibility of such effects, which could be operating indirectly through other variables, such as our measures of civil liberties and collective action. What's more, any contagion and demonstration effects immediately associated with the withdrawal of Soviet coercion—operative most obviously in Eastern Europe, but perhaps in Africa as well—are probably absorbed, at least in part, by our post-Cold War indicator. Still, our analysis does suggest that domestic factors, rather than shifts in the international environment, have played a more prominent role in determining the timing of most transitions to democracy over the past few decades.²²

Transitions from Democracy to Autocracy

Table 3 presents our model of transitions from democracy to autocracy, or backsliding for short. Despite containing just a handful of variables, this model accurately classifies roughly 85 percent of the historical cases from which it was estimated when we choose a cut point that balances sensitivity and specificity. Table 4 provides estimated odds ratios for the model variables to facilitate comparison of continuous and categorical variables and provide a clearer indication of the relative magnitude of the various effects.

[Tables 3 and 4 about here.]

Duration of Democracy. Our model indicates that the risk of backsliding from democracy to autocracy rises after two years and remains relatively high until a democracy is 15 years old. Once they have lasted at least 15 years, democracies rarely backslide. Between 1955 and 2003, we count just seven backslides in democracies more than 15 years old, and most of these marked the start of interludes of military rule in the 1960s and early 1970s.²³

Interestingly, the timing of the early jump in the risk of backsliding coincides with what is often the run-up to a partial democracy's second election (counting the founding election that marked the transition to democracy as the first one). Although our models do not show an explicit relationship between electoral cycles and transitions, it is reasonable to conclude that elections early in the life of a regime mark critical decision points not just for voters choosing among candidates, but also for elites choosing whether or not to continue playing by the new rules of the game.²⁴ In effect, elections force players to show their hands. When the opportunity for a voter-

²² Wejnert (2005) reaches the opposite conclusion in her analysis of diffusion effects, but she uses a continuous measure of democracy, making it difficult to compare directly her results with ours.

²³ The seven cases in question are Brazil 1964, Chile 1973, Fiji 1987, Gambia 1994, Peru 1968, Philippines 1972, and Uruguay 1973.

²⁴ We tested the effects of a variable indicating the occurrence of a national election and found no relationship to the risk of backsliding. This negative finding, however, should not be interpreted as evidence against a connection between electoral cycles and the prospects for backsliding. As it happens, a number of downward transitions since

induced change in government approaches, incumbents reluctant to leave office must decide whether to run that risk or to stack the deck in their favor. In countries where political competition is poorly institutionalized, elections can also spark unrest that provides military leaders with a rationale to scrap the game altogether. For democracies that survive those early trials, however, the accumulation of experience with democratic norms and practices could be expected to lead eventually to consolidation, which would manifest itself in a statistical model as a sharply reduced risk of backsliding.

Of course, this pattern in the duration of new democracies could also result from a selection effect. Imagine that partial democracies, from their birth, fall into one of two groups: those doomed to backslide, and those destined for democratic consolidation. If the doomed democracies generally backslide within 15 years of their birth, we would see the same sort of pattern. Our analysis does not tell us which one of these explanations is correct—whether all partial democracies follow a similar trajectory of early risk and later promise, or whether different classes of partial democracy simply have different life expectancies. Our informed guess is a bit of both; the most vulnerable democracies usually die quickly, but accumulated experience with democratic norms and procedures seems likely to benefit even the hardest cases.

Economic Development. Consistent with modernization theory (Lipset 1981, Diamond 1999) and other recent large-n statistical analyses (Przeworski et al. 2000), we find that wealthier democracies are far less likely to backslide to autocracy, other things being equal. To explore this hypothesis, we tested several highly correlated measures of economic development, including per capita income and urbanization, and (unsurprisingly) all of them produced similar results. Our final model uses a country's infant mortality rate as a proxy for its level of economic development.²⁵

Of course, the fact that this result is consistent with modernization theory does not mean that modernization theory is the only way to explain it. While our gross measure does not allow us to explore the causal pathway linking economic development to the survival of democracy, we suspect that, in addition to the changes in social structure, attitudes, and expectations spotlighted by modernization theory, economic development also shapes the durability of democracy through its relationship to state strength. Poorer states generally have weaker security apparatuses, making them more vulnerable to revolution, and the difficulty they have in paying their soldiers living wages often makes them more vulnerable to military coups. At the same time, incumbent chief executives and ruling parties in poor democracies often face an opposition that is hobbled by a lack of financing and mobilizational capacity, reducing the expected costs of

1955 have involved coups or unilateral actions by the ruling party or chief executive that pre-empted scheduled elections. Thus, the causality often seems to flow the other way: increased risk of backsliding means a greater likelihood that an election won't occur as scheduled.

²⁵ Our infant mortality data were provided to the Task Force by the U.S. Census Bureau. They are based on figures reported every five years by the United Nations, but they have been interpolated and adjusted to account for expected underreporting as well as calamities such as famine, drought, or war. To avoid conflating broader temporal trends with any effects from economic development, we considered using a normalized version of this variable, but we chose to rely on the raw estimates (logged) in order to test modernization theory, which emphasizes absolute levels rather than relative changes. When we added other measures of wealth or modernization to a base model that included infant mortality, we found that infant mortality remained highly significant while the other variable was generally not significant, and its addition failed to improve the fit of the model.

violating democratic procedures in order to remain in power. If anything, the vulnerability of poor democracies to authoritarian relapse seems over-determined, a point reflected in the large odds ratio associated with this variable in our model.

Factionalism. Democracies are far more likely to break down when participation in national politics is channeled through organizations that are organized around parochial interests and engage in polarizing, winner-take-all competition—a condition Polity labels “factionalism.” Recent examples of factionalism can be found in the polarization of Venezuelans following the election of Hugo Chavez in 1998, the ongoing confrontation between indigenous activists and wealthier lowlanders in Bolivia, and the bitter rivalry between supporters and opponents of Jean Bertrand Aristide that has beset politics in Haiti since the mid-1990s. Our model indicates that democracies beset by this sort of polarization are more than six times as likely to backslide as those that are not, even controlling for differences in wealth.

Polity’s decision to label this debilitating condition factionalism echoes Madison’s use of the term in Federalist No. 10.²⁶ As Madison’s (1961: 80) analysis implies, factionalism is probably so inimical to democratic survival because it demonstrates that political actors are willing to sacrifice the rights of other citizens and, indeed, the public good to the pursuit of narrow self-interest. When most political participation is channeled through factional organizations, the resulting “do-or-die” approach to politics often results in a tense standoff that can encourage the incumbent executive to usurp legislative authority in an effort to end the stalemate, to avert violence, or simply to defeat the opposition, or it can prompt a military or personalistic coup toward that same ends. Compromise would seem to be the antidote to factionalism, but, if Madison’s assessment of human nature is correct, then we cannot expect factions to stumble into this solution without being coaxed in that direction. Instead, institutions must be designed in such a way to mitigate the effects of factionalism. Which institutional designs are more effective at accomplishing this goal is an important topic for further research.²⁷

Horizontal Accountability. Our findings on the nature of the relationships between branches of government and prospects for democratic survival are ambiguous.²⁸ We used several measures to explore this idea of “horizontal accountability.”

- *Constraints on Executive Authority* (Polity). This variable is intended to measure the de facto autonomy of a country’s chief executive. Although it is conventionally treated as a numeric

²⁶ In Federalist 10, Madison (1961: 78) defines a faction as “a number of citizens, whether amounting to a majority or a minority of the whole, who are united and actuated by some common impulse of passion, or of interest, adverse to the rights of other citizens, or to the permanent and aggregate interests of the community.” In Polity, factionalism is identified by a coding of 3 on a variable measuring the competitiveness of political participation (PARCOMP). While PARCOMP is basically scalar—1 indicates fully repressed participation and 5 indicates fully open participation—the factional coding is probably best considered indicative of movement along an additional dimension related to the extent of political polarization. As such, we believe it is best treated in quantitative analyses as a separate indicator variable, as we do here.

²⁷ In Federalist No. 10, Madison identifies the combination of representative government and federalism as a check against factionalism in large societies, but the experience of the American Civil War suggests it is an imperfect solution, at best. Recent scholarship has focused on the electoral system as a critical set of institutions that can encourage or discourage factionalism in ethnically or religiously diverse societies. See Reilly (2003) for a thorough review on this subject.

²⁸ See O’Donnell (1998), Merkel (2004), and Goldstone and Ulfelder (2004), among others.

scale, we prefer to treat this Polity variable as a categorical measure. Alternate values on the seven-point measure are used to indicate change as well as level, making it impossible to sustain the assumption that the distances between the points on this “scale” are equivalent.

- *Legislative Effectiveness* (Banks). This categorical variable measures the relationship between a country’s legislature and chief executive, characterizing the legislature as non-existent, a rubber stamp, partially effective, or effective.
- *Political Constraints Index* (Henisz). Generally speaking, this index (POLCONIII) reflects the number of veto points in the political system, but it assumes that the incremental effect of additional veto points diminishes as the total number of veto points increases, and it accounts for the fractiousness or unity of the political opposition. A second version (POLCONV) adds information about the judiciary and federal units. Both versions use the Banks measure of legislative effectiveness as one of their components.

All of these variables are designed to capture similar patterns, yet our statistical models produced divergent results, depending on which one we used. None of these variables consistently proved significant at the $p < 0.05$ level when added to our base model. The Henisz measures of political constraints came closest, but doubts about the reliability of those data discouraged us from leaning too heavily on this finding. Our reluctance was reinforced by the weakness of the relationship between Polity’s measure of executive constraints and the risk of backsliding. No matter how we sliced it, the only hint of a relationship we could find involved an apparent increase in risk associated with countries scoring in the bottom three categories on this seven-point measure. This effect was not large, however, and very few countries scored so low, so we concluded that the addition of an indicator capturing this relationship would do little to help differentiate the most vulnerable democracies from the more stable ones.

For policymakers and practitioners interested in bolstering fledgling democracies, it is important to bear in mind that the sorts of political constraints captured in these various measures are not just a matter of institutional design. Instead, as Diamond (1999: 93-112) argues, the strength of those constraints depends at least as much on the real-world capabilities the legislatures, judiciaries, and political parties tasked with imposing those constraints in practice. Put another way, efforts to encourage the development of horizontal accountability do not begin and end with the drafting of a constitution. Most of the measures we tested attempt to capture this complexity by tracking de facto rather than de jure relationships between branches of government. Still, we suspect that the ambiguity of our findings is due at least in part to the difficulty of measuring these real-world patterns, which often vary not only over time but also across issue areas as well.

The ambiguity of the relationship also might stem from contingencies in the relationship between horizontal accountability and the fragility of democracy. Put in modeling terms, there could be an interactive effect that we have failed to measure. As Merkel (2004) argues, patterns of political authority that are conventionally considered dysfunctional may, under certain circumstances, represent an adequate and therefore stable institutional solution to local problems of effective governance—at least in the eyes of the actors with the ability to effect or block regime change. If this is so, then our models would have to incorporate measures of those local

problems of effective governance to specify properly any link between horizontal accountability and the risk of backsliding, and that task is beyond the reach of available cross-national data.

Presidential vs. Parliamentary Systems. Our analysis does not support the claim that presidential systems are more vulnerable to backsliding. A dummy variable distinguishing presidential systems from parliamentary ones fails to improve the fit of the model reported in Table 3 and is far from statistically significant.²⁹ We also wondered whether presidentialism might indirectly increase vulnerability to backsliding by heightening the risk of factionalism, reasoning that the concentration of political authority in a single office might encourage a winner-take-all approach to political competition. Using simple models of factionalism and its onset among democracies, we found no evidence that democracies with presidents as their effective chief executive are more susceptible to this malady.³⁰ Taken together, these results seem to support Carey's (1997: 80) claim that "the traditional distinction between presidential and parliamentary government...is of only limited value" because presidential systems vary so widely in the extent to which they give the legislature responsibility for policymaking and the composition of the executive branch.³¹

Economic Performance. Recent cross-national statistical analyses of democratic breakdown have confirmed the conventional wisdom: the worse a democracy's economic performance, the more likely it is to backslide. We control for this relationship in our model with a variable representing the average of the annual rate of change in GDP from the preceding two years—the same measure we used in our analysis of transitions from autocracy to democracy.³²

What is surprising in our results is the weakness of this relationship. Although the sign on the coefficient points in the expected direction, the magnitude of the effect from poor economic performance is not as substantial as we would have expected, and the variable is not conventionally significant. Juxtaposed to the strength of the effect from infant mortality, these results indicate that a country's level of economic development plays a much larger role than short-term economic trends in shaping the durability of a new democracy.

International Effects. We were surprised to find little evidence of direct effects from the international system on a country's vulnerability to backsliding. We tested a number of variables that could serve as proxies for international connectedness—including trade openness, diversity of trading partners, telecommunications traffic, and even counts of Internet hosts—and none of them proved significant when added to our base model. We also looked for regional effects

²⁹ To distinguish presidential from parliamentary democracies, we relied on a Banks variable that identifies the type of executive, recoding it as a dummy variable equal to '1' where the effective chief executive was a president and equal to '0' in all other situations, most of which identify a premier as the person in charge. For the logic behind the argument that presidential systems are especially vulnerable, see Linz and Valenzuela (1995).

³⁰ In addition to our dummy for presidential systems, the models we used to test this hypothesis included infant mortality, regime duration, and country age. One model used the onset of factionalism as its dependent variable ($n = 2,017$, 73 onsets), while the other used factionalism status ($n = 2,623$, 670 country-years of factionalism) and added a lagged dependent variable. The presidentialism indicator was not statistically significant in either formulation.

³¹ Tsebelis (2002) makes a similar point.

³² See Linz (1978) and Diamond (1999: 78-88) for theoretical discussions of economic performance and the survival of democracies. Gasiorowski (1996) and Przeworski et al. (2000) confirm this relationship in their cross-national statistical analyses of transitions from democracy to autocracy. We tested various measures of short-term economic performance in addition to the one used in our final model, and they all produced fairly similar results.

related to recent regime transitions or the prevalence of democracy in nearby states, and neither factor provided any analytical bite.

As with our analysis of transitions from autocracy to democracy, the only explicitly international variable that proved significant was a dummy variable flagging country-years in the post-Cold War period. We suspect that this finding captures the intersection of a pair of trends that did not start with the collapse of the USSR but were certainly accelerated by that event. The first trend is the expansion and deepening of what might facetiously be labeled the “democracy-industrial complex”—the legions of advocacy groups, election monitors, consultants, trainers, coaches, and the like engaged in promoting and defending democracy around the world. The rapid, global adoption of the Internet and mobile telephony is not the cause of this trend—as Keck and Sikkink (1998) show, transnational advocacy networks are hardly a new phenomenon—but information and communications technologies may be facilitating their efforts, at least in more developed countries. The second relevant trend is the transformation of democracy promotion into an international norm, or in Sen’s (1999) terms, a “universal value.” As McFaul (2005: 156) points out, ongoing changes in ideas and expectations mean that, “Even many autocratic states now feel compelled to invite international monitors to observe their elections, a normative pressure that did not exist just a few decades ago.”

Although neither of these trends is a necessary or a sufficient condition for the survival of democracy, we suspect that their intersection is probably helping to tip the balance in marginal cases away from authoritarian relapse in ways that were impossible when international tensions made this sort of direct activism much more difficult. In real-world terms, this reduced risk is evident in the fact that military coups seem to have been supplanted by presidential resignations as a safety valve for democracies under pressure. Bolivia’s revolving presidency and the resignation in 2005 of Ecuador’s president Gutierrez are emblematic of this new pattern. Only in sub-Saharan African cases such as Guinea-Bissau and Central African Republic have we continued to see direct military intervention in purportedly democratic politics, and it is telling perhaps that, in both of these instances, that intervention was popularly viewed as a welcome corrective to the grand corruption of elected incumbents.

Conclusions

While our models of transitions to and from democracy generally confirm the conventional wisdom on democratization,³³ we think they also suggest some interesting twists on established themes. Our finding on the contingent nature of the relationship between economic development and democracy is perhaps the most intriguing, and we expect that our negative findings on contagion effects and the vulnerability of presidential systems will also attract some interest.

What distinguishes our research from many of the scholarly studies cited in this paper, of course, is the explicit intention of our sponsors in the US Government to use the resulting models as forecasting tools. It is too soon to tell how these models will perform in that regard; there simply has not been enough time since the end of our period of observation to apply the model and assess the results. And, while both of the models do an excellent job classifying the historical

³³ This is not an ambitious statement. See Geddes (1999a).

data from which they were estimated, we would be the first to acknowledge that in-sample accuracy is not necessarily a good predictor of forecasting performance.

Beyond those obvious caveats about model accuracy, we would like to offer an additional caution to anyone who might seek practical guidance from our research—or, for that matter, any other large-n, cross-national analysis of regime transitions. While some or even many of the variables in our models might seem amenable to deliberate manipulation, our analysis has not directly accounted for the effects (positive or negative) of various interventions on the prospects for a regime transition. Consequently, we believe that these variables and the assessments of prospects for regime transitions they can be used to produce are better understood as the backdrop against which policy actions or other types of interventions might play out, rather than levers that might be pulled in an effort to manipulate the timing and direction of political change.

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Table 1. Model of Transitions from Autocracy to Democracy

Variable	Coeff.	S.E.	p
Intercept	-7.562	1.697	< 0.0001
Regime Duration	0.435	0.152	0.0043
Post-Cold War	1.374	0.313	< 0.0001
Monarchy	-2.397	1.053	0.0228
Any Prior Democracy	3.211	1.951	0.0997
Infant Mortality	0.083	0.326	0.7997
Infant Mortality * Any Prior Democracy	-0.572	0.449	0.2030
Resource Rents	-0.584	0.190	0.0021
Resource Rents * Any Prior Democracy	0.514	0.214	0.0164
Civil Liberties: Moderate	1.289	0.467	0.0058
Civil Liberties: High	2.349	0.449	< 0.0001
Any Nonviolent Collective Action	1.105	0.296	0.0002
New Chief Executive	0.904	0.295	0.0022
GDP Growth	-0.095	0.028	0.0007
<i>Model Summary Statistics</i>			
c-score			0.89
n (transition years)			66
n (non-transition years)			1,695
% transitions correct			78.79
% non-transitions correct			78.88
cut point			0.04

Table 2. Estimated Odds Ratios for Variables in Model of Transitions from Autocracy to Democracy

Variable	Odds Ratio
Civil Liberties: High	10.47
Civil Liberties: Moderate	3.63
Post-Cold War	3.95
Any Nonviolent Collective Action	3.02
New Chief Executive	2.47
Regime Duration*	1.68
GDP Growth**	0.60
Monarchy	0.09
<i>Interaction Effects</i>	
Infant Mortality, Any Prior Democracy**	0.65
Infant Mortality, No Prior Democracy**	1.07
Resource Rents, Any Prior Democracy**	0.77
Resource Rents, No Prior Democracy**	0.12

* Odds ratio compares cases at 75th and 25th percentiles.

** Odds ratio compares cases at 25th and 75th percentiles.

Table 3. Model of Transitions from Democracy to Autocracy

Variable	Coeff.	S.E.	p
Intercept	-10.926	1.319	< 0.0001
Duration of Democracy: < 3 years	-13.639	447.4	0.9772
Duration of Democracy: 3-14 years	0.971	0.446	0.0296
Post-Cold War	-0.801	0.338	0.0180
Factionalism	1.882	0.402	< 0.0001
Infant Mortality	1.510	0.298	< 0.0001
GDP Growth	-0.049	0.031	0.1158
<i>Model Summary Statistics</i>			
c-score			0.91
n (transition years)			49
n (non-transition years)			2,173
% transitions correct			85.71
% non-transitions correct			85.73
cut point			0.03

Table 4. Estimated Odds Ratios for Variables in Model of Transitions from Democracy to Autocracy

Variable	Odds Ratio
Factionalism	6.57
Infant Mortality*	4.53
Duration of Democracy: 3-14 years**	2.64
GDP Growth*	0.95
Post-Cold War	0.45

* Odds ratio compares cases at 75th and 25th percentiles.

** Reference category is 15+ years.

Figure 1. Patterns of Executive Recruitment and Political Participation, 1955-2003

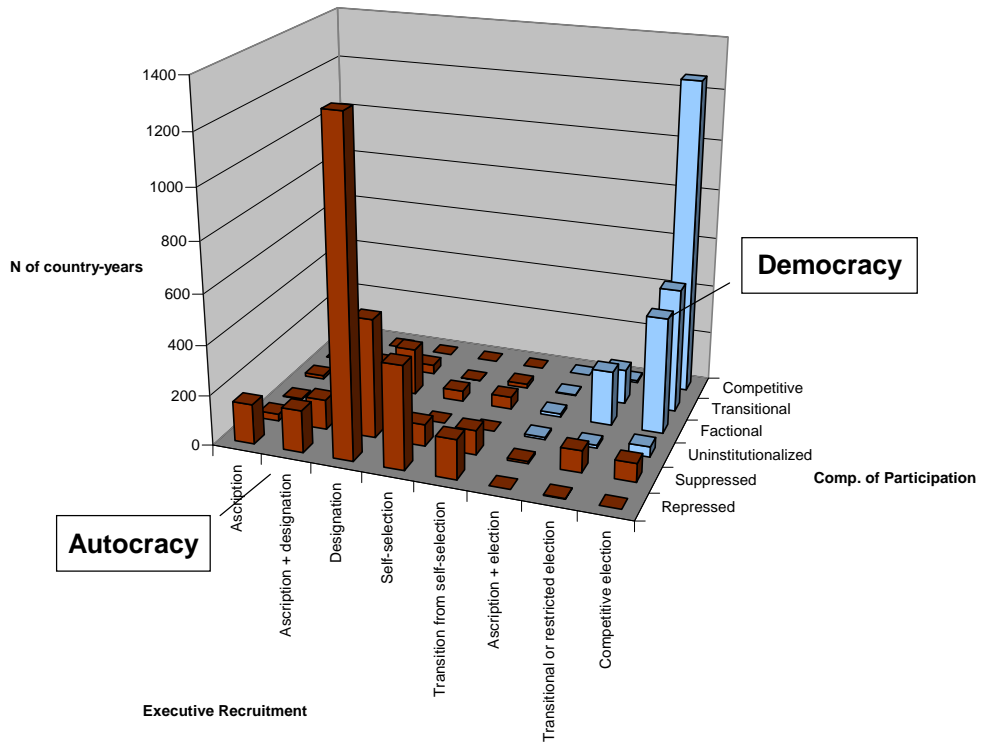


Figure 2. Economic Development and Prospects for a Democratic Transition

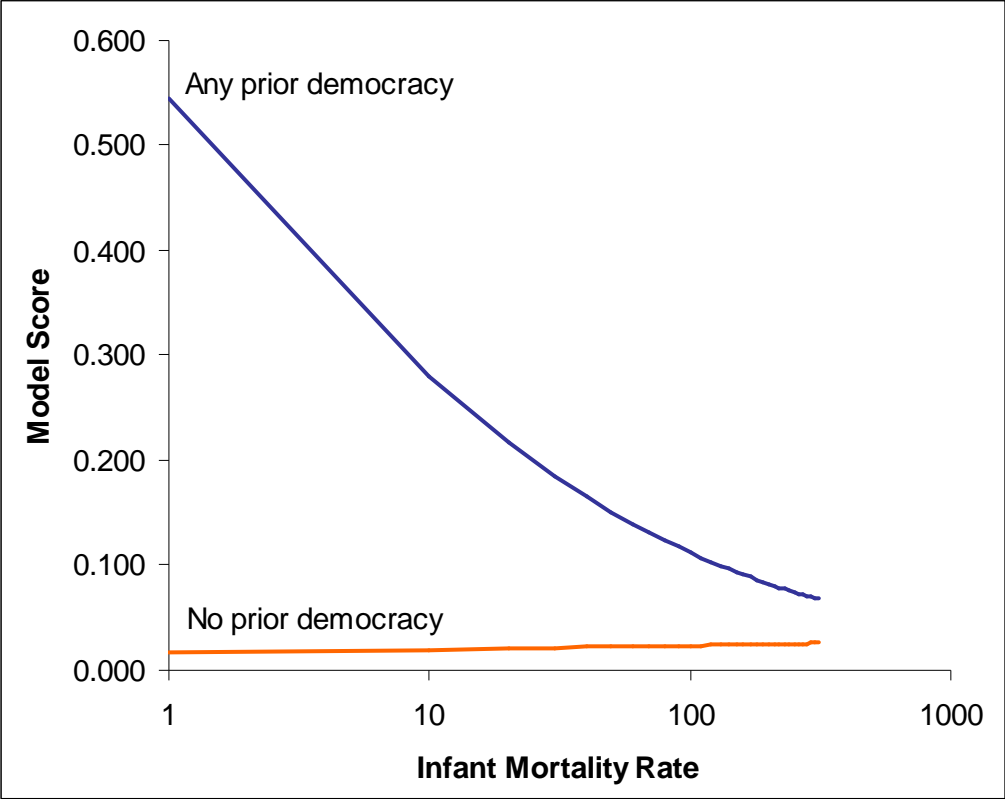
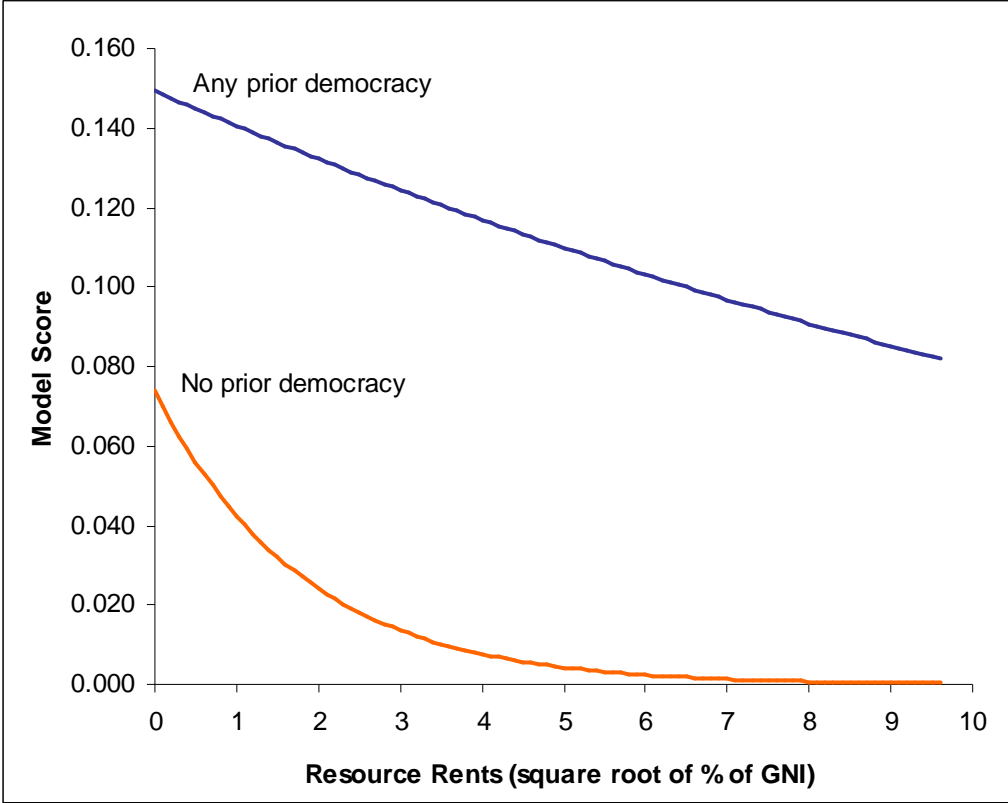


Figure 3. Resource Rents and Prospects for a Democratic Transition



Appendix: List of Transition Events

Transitions from Autocracy to Democracy, 1955-2003

Country	Year	Duration of Non- Democ.	Any Prior Democracy
Albania	1990	77	0
Albania	1997	2	1
Argentina	1973	31	1
Argentina	1983	8	1
Armenia	1998	3	1
Bangladesh	1991	18	1
Benin	1991	29	1
Bolivia	1982	47	1
Brazil	1985	22	1
Bulgaria	1990	72	1
Burkina Faso	1978	18	0
Burundi	1993	31	0
Central African Republic	1993	33	0
Chile	1989	17	1
Colombia	1957	10	1
Comoros	1990	15	0
Congo-Brazzaville	1992	30	1
Cote d'Ivoire	2000	40	0
Croatia	2000	10	0
Czechoslovakia	1990	43	1
Dominican Republic	1962	118	0
Dominican Republic	1978	16	1
Ecuador	1968	8	1
Ecuador	1979	8	1
El Salvador	1982	141	0
Fiji	1990	4	1
Ghana	1979	20	0
Ghana	2001	21	1
Greece	1974	26	1
Guatemala	1966	13	1
Guatemala	1985	12	1
Guinea-Bissau	1994	20	0
Guyana	1992	27	0
Haiti	1990	41	1
Haiti	1994	4	1
Honduras	1981	46	1
Hungary	1990	124	1
Indonesia	1999	55	0
Iran	1997	197	0
Kenya	2002	39	0
Korea, South	1960	13	0
Korea, South	1963	3	1
Korea, South	1988	17	1
Lesotho	1993	24	1
Madagascar	1992	33	0
Malawi	1994	30	0
Mali	1992	32	0
Mexico	1994	172	0
Mongolia	1992	69	0

Morocco	1963	8	0
Mozambique	1994	20	0
Nepal	1959	159	0
Nepal	1990	31	1
Nicaragua	1990	152	0
Niger	1992	32	0
Niger	1999	4	1
Nigeria	1979	14	1
Nigeria	1999	17	1
Pakistan	1962	5	1
Pakistan	1988	12	1
Panama	1989	22	1
Paraguay	1989	50	1
Peru	1980	13	1
Peru	1993	2	1
Philippines	1986	15	1
Poland	1989	54	1
Portugal	1975	50	1
Romania	1990	132	0
Senegal	2000	41	0
Sierra Leone	1996	30	1
South Africa	1994	84	0
Spain	1977	39	1
Sudan	1965	8	1
Sudan	1986	18	1
Taiwan	1992	44	0
Tanzania	2000	39	0
Thailand	1969	169	0
Thailand	1974	4	1
Thailand	1978	3	1
Thailand	1992	2	1
Turkey	1961	2	1
Turkey	1973	3	1
Turkey	1983	4	1
Uruguay	1985	13	1
Venezuela	1958	128	0
Yugoslavia	2000	9	0
Zambia	1991	20	1
Zimbabwe	1980	11	0

Transitions from Democracy to Autocracy

Country	Year	Duration of Democ.	Total Spells of Democracy
Albania	1996	7	1
Argentina	1976	4	3
Armenia	1996	5	1
Azerbaijan	1993	2	1
Bangladesh	1974	3	1
Belarus	1995	4	1
Benin	1963	3	1
Brazil	1964	17	1
Burkina Faso	1980	3	1
Burma	1962	15	1
Cambodia	1997	5	1
Central African Republic	2003	11	1

Chile	1973	39	2
Comoros	1999	4	2
Congo-Brazzaville	1963	3	1
Congo-Brazzaville	1997	6	2
Ecuador	1961	14	1
Ecuador	1972	5	2
Fiji	1987	17	1
Gambia, The	1994	30	1
Ghana	1981	3	1
Guatemala	1974	9	5
Guinea-Bissau	2003	10	1
Haiti	1991	2	2
Haiti	1999	6	3
Korea, South	1961	2	1
Korea, South	1972	10	2
Laos	1960	6	1
Lesotho	1970	4	1
Morocco	1965	3	1
Nepal	1960	2	1
Nepal	2002	13	2
Niger	1996	5	1
Nigeria	1966	6	1
Nigeria	1983	5	1
Pakistan	1958	11	1
Pakistan	1969	8	2
Pakistan	1977	6	3
Pakistan	1999	12	4
Panama	1968	14	1
Peru	1968	38	2
Peru	1992	13	3
Philippines	1972	29	2
Sierra Leone	1967	7	1
Somalia	1969	9	1
Sudan	1958	3	1
Sudan	1969	5	2
Sudan	1989	4	3
Swaziland	1973	5	1
Thailand	1971	3	1
Thailand	1976	3	2
Thailand	1991	14	3
Turkey	1960	15	1
Turkey	1971	11	2
Turkey	1980	8	3
Uganda	1966	4	1
Uruguay	1973	22	1
Zambia	1972	8	1
Zambia	1996	6	2
Zimbabwe	1983	4	1