Regime Stability and Presidential Government
The Legacy of Authoritarian Rule, 1951–90

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Abstract

Many scholars of comparative politics have argued that presidential democracies are inherently less stable and representative than parliamentary regimes. Other scholars, most notably Matthew Soberg Shugart and John Carey (writing in *Presidents and Assemblies*), have suggested that particular institutional designs, such as the concentration of legislative powers in the hands of the president and incoherent party systems, tend to lead to regime instability, rather than the adoption of presidential government *per se*.

This paper is an attempt to contribute to that debate by showing a different approach to the problem. Most previous studies have been qualitative in nature and have tended to focus on particular regions of the world; by contrast, I approach the problem using a quantitative approach that looks at democracies across the world since World War II. Despite some limitations in the data that were available for analysis, these results tend to reinforce Shugart and Carey's argument that presidential government, in and of itself, is not problematic.

One prominent debate in the comparative politics literature has been over the comparative merits of presidential and parliamentary systems of governance in democracies. Until the early 1990s, it was generally believed (see, e.g., Lijphart 1999; Linz 1978, 1990) that parliamentary systems were inherently more stable than presidential systems. However, Shugart and Carey (1992) advanced the debate by demonstrating that it was not presidential systems *per se* that were unstable, but that particular configurations of presidential powers—particularly, the concentration of legislative powers in the hands of the executive (against the advice of James Madison in *Federalist* 51)—that was particularly problematic. However, the underlying question remains unsettled in that there has been no comprehensive cross-national comparison of regime stability that takes into account both the existence and powers of a presidency[1]. This paper seeks to redress that balance by including virtually all democratic states within the international system in a cross-national duration analysis of regime stability.

Theoretical Background. Since the Second World War, political scientists have sought to explain the causes for democratic regime breakdown, both seeking reasons for the rapid collapse of democratic states in Europe during the interwar years and seeking to find ways to stabilize democracy

in both newly-independent and older countries.

Juan Linz's discussion of regime breakdown (in Part I of Linz and Stepan 1978) suggests that regimes fail when "[u]nsolvable problems, a disloyal opposition ready to exploit them to challenge the regime, the decay of democratic authenticity among the regime-supporting parties, and the loss of efficacy, effectiveness (particularly in the face of violence), and ultimately of legitimacy" (75) produce an environment making it likely for democracies to fail. Most quantitative studies have focused on indicators of the latter three phenomena, particularly by looking at the ability of governments to manage economic and social problems—in particular, focusing on the outputs of policy. However, institutional variables have also been important; historically, perhaps the most widely-debated has been the decision to adopt a presidential form of government.

The Presidential-Parliamentary Debate. Traditionally, the literature has argued that presidential government is inherently less stable than parliamentary regimes. This argument has its origin in a more general problem that has been identified: the "exportation" of institutions by advanced industrial societies—particularly the United States—to contexts in which they may not be appropriate. For example, in a somewhat broader context, Arend Lijphart argues that Britain's "Westminster" model of majoritarian democracy was inappropriate for Northern Ireland, during its period of "home rule" from 1949 until the early 1970s, because of the presence of a relatively large Catholic minority population with very diffrent interests than the majority Protestants (1999: 32–33). Majoritarian structures, such as presidential regimes, are in this view incompatible with plural societies.

Nowhere has this critique been more forcefully argued than by Linz in various contexts. In particular, two articles written by Linz, "The Perils of Presidentialism" (1990a) and "The Virtues

of Parliamentarism," (1990b) generally support the parliamentary form of government over presidential systems. In the first article, Linz argues that presidential systems have two major faults: they are inherently inflexible and rigid, due to the relatively strong constitutional underpinnings required by presidential systems, and presidential elections foster a "winner-takes-all" mentality that can exclude other groups from government. Linz restates his arguments from "Perils" in his second article, there emphasizing that his purpose is not to make blanket statements about existing regimes, but rather to provide prescriptive guidance based on the likelihood of particular outcomes. He also responds to a criticism that his sample was biased towards Latin America by claiming that most of the world's presidential systems are located there and that he "also had in mind" some other cases. His argument, originally advanced in *The Breakdown of Democratic Regimes* (Linz and Stepan 1978: 71–74), has been popularized elsewhere since.[2]

Lijphart produces a more nuanced picture of presidential and parliamentary systems in his chapter on executive-legislative relations (Chapter 7) in *Patterns of Democracy*. He argues that systems in which there is a balance of power between the executive and the legislature are inherently more consensual than executive-dominant systems, which tend to be majoritarian in nature. This appears to be the exact opposite of Linz's argument, which emphasizes the inclusive nature of parliamentary systems against the exclusive nature of presidential systems. To some extent, the two authors are discussing different things: Lijphart emphasizes the separation-of-powers aspects of the system, whereas Linz seems to focus more on the role of elections. Lijphart uses two measures of cabinet stability as the basis for his measure of executive dominance, although he adjusts the measures, mainly to compensate for the effects of presidential systems (which begs the question of why he included presidential systems in the analysis of cabinet dominance). He

also establishes a typology of forms of government (1999: 119), although most of the "types" have no examples (and many are nonsensical, as he himself admits). Lijphart appears to weigh in on both sides of the presidential-parliamentary debate; he argues that presidential systems tend to be more consensual, but also argues that a separate presidency can distort parliamentary systems by creating an alternate center of power.

Przeworski et al., in *Democracy and Development* (2000), using an event history modelling approach (as opposed to the less quantitatively rigorous approaches employed by Linz, Lijphart, and other scholars) also find that presidential regimes are more prone to breakdown than parliamentary regimes, even when controlling for the wealth of the state. According to them, at all levels of per capita income, parliamentary government is less likely to experience breakdown than presidential government; presidential regimes are also more sensitive to multipartism and religious heterogeneity. However, they find that parliamentary governments tend to be less stable in the face of economic crisis than presidential regimes (2000: 131). They conclude that "[p]residential democracies are simply more brittle [than parliamentary and hybrid systems] under all economic and political conditions" (2000: 136). Stepan and Skach (1993) have similar findings when they restrict their universe to democracies that emerged after 1945 and focus on relationships between the party system and institutional type; however, Power and Gasiorowski (1997; also Gasiorowski and Power 1998) find no significant relationship between regime breakdown and the choice of presidential government among consolidated democracies, using three different operationalizations of consolidation.

The most well-known response to these arguments is from Shugart and Carey, in *Presidents and Assemblies* (1992), where they weigh in on the presidential side of the debate, arguing

that existing studies of presidential systems ignore many important factors, namely institutional design and electoral rules. They classify existing criticisms of presidential systems as falling into three categories: the problems of temporal rigidity (fixed terms), majoritarianism, and dual democratic legitimacy, and acknowledge that those who have identified these problems do have some legitimate arguments, but that they often overstate their case. Shugart and Carey also argue, based on evidence of regime breakdowns separated by prior regime type, that parliamentary systems are not as "safe" as their proponents tend to believe. Furthermore, the authors argue that there are four distinct advantages of presidential systems that are lacking in parliamentary ones: direct accountability of the executive, identifiability of the outcomes of elections, the presence of mutual checks on power, and the potential role of the president as an arbiter in the system. The authors present the hybrid type of premier-presidentialism as a potential solution to the criticisms of pure presidential systems that still incorporates the advantages of a separate presidency.

Their work also includes a more comprehensive look at the nature and characteristics of presidential systems. Chapters 5 through 7 of *Presidents and Assemblies* include a more thorough examination of these systems, including an overview of the various constitutional designs of presidential systems, a discussion of the relative powers of the executive and legislature to dissolve each other, and an examination of the legislative powers of presidents (such as vetos, budgetary prerogatives, and decree authority). Shugart and Carey combine measures of these powers in chapter 8 to form two indices of the legislative and non-legislative powers of presidents in various regimes, and then examine how well these indices explain regime breakdowns, finding that presidential systems with few legislative powers in the hands of the president tend to be less susceptible to breakdown than those granting wide powers to the presidency.

In chapter 9, Shugart and Carey examine the relationship between efficiency (that is, programmatic parties) and the strength of presidential legislative powers, finding that more authority is delegated to the president (in the form of legislative powers) when the legislature is comprised of parties lacking internal cohesion; Shugart and Carey argue that this is the "inefficient secret": legislators in states with weak parties delegate national issues to the presidency so they can focus on patronage and other localist concerns to retain their positions in the legislature. The authors conclude that chapter with a set of recommendations for "effective presidentialism." These chapters provide a fairly concise outline of the formal institutional powers of presidents. They further expand on their analysis in *Executive Decree Authority* (1998), although there they mainly focus on the legislative powers of presidents.

Scott Mainwaring (1993) also examines the effects of a large number of parties on presidential systems. He argues that Linz's critique of presidentialism must be refined in that it is the combination of multipartism (the presence of more than two major political parties) and presidentialism that presents the most serious challenge to democratic stability. Mainwaring believes that multipartism is problematic because it increases the likelihood of deadlock and ideological polarization and requires the formation of interparty coalitions to pass legislation. He, like Shugart and Carey, emphasizes the importance of institutional arrangements in analyzing the form of presidential systems and their stability.

Bernhard, Nordstrom, and Reenock (2001), tackling the question of whether regime choice affects economic performace, adopt a somewhat different approach: instead of treating presidentialism as an independent variable on its own, they combine its effects with a party system indicator to adopt a five-point scale of majoritarianism-pluralism which they use as the institutional variable

in an event history model; they also adopt a longer timeframe, 1919–95, in analyzing their data. Their model indicates (indirectly, as their findings on executive form are confounded by party system effects because of the interactive quality of the independent variable) that parliamentary regimes tend to be more successful in dealing with the consequences of economic growth, while presidential regimes are more resistant to breakdown in the face of economic crisis.

Perhaps the most notable omission from these works is any attempt to account for past authoritarian rule in the state. Linz and Stepan (1996: 55–65) suggest that the both duration and type of authoritarian rule affect the challenges facing newly democratic states; furthermore, the actual institutional forms adopted by new democracies may be dictated by the departing authoritarian rulers, often in an attempt to perpetuate their rule (see, for example, O'Donnell and Schmitter 1986; Mainwaring 1992). Clearly, the effects of past authoritarianism may significantly affect the prospects of democracy in any state, presidential or parliamentary.

Hypotheses and Variables. The following research hypotheses follow from the existing literature; their operationalization is discussed in greater detail below:

1. Countries with lower levels of economic development will tend to have more unstable regimes. For the purposes of this paper, the natural logarithm of the per-capita gross domestic product of a nation will be used as an indicator of economic development.

2. Countries that are less connected to the global economy through trade will tend to have less stable regimes. This paper operationalizes trade as the relative percentage of a country's exports and imports to its GDP.

3. Regimes with more contentious legislative bodies tend to be more unstable. Contention in the

lower house of the legislature is represented by Laakso and Taagepera's "effective number of parties" measure, which indicates the number and relative strength of the parties in the legislature. This relationship is believed to be more pronounced in presidential regimes.

4. Countries with greater heterogeneity in their populations will be more unstable than more homogenous states; for this purpose, the index of ethnolinguistic fractionalization and an indicator of religious fractionalization will provide indicators of the potential for ethnic strife.

5. Countries with smaller populations tend to be more unstable than more populous countries; the natural log of the national population is used as an indicator.

6. Countries with a history of authoritarian rule will tend to have more unstable regimes. This factor is operationalized by two variables: the number of authoritarian regimes in the state between 1951 and the year being analyzed, and the percentage of years during that period the country was governed by an authoritarian regime.

7. Countries with greater population growth will have more unstable regimes. The annual rate of population growth is used to represent this concept.

8. Regimes tend to stabilize over time; thus, the risk of regime failure should decrease over time. (This effect is generally described as "democratic consolidation.") We can test this effect using the shape parameter p of a Weibull regression model.

9. Finally, the existent literature contends that presidential regimes are more unstable than parliamentary regimes; this is operationalized by a dummy variable in the model representing presidential regimes.

The independent variables that are used to operationalize these hypotheses are fairly straightforward, and are summarized in Table 2. The most important independent variable is the democratic regime type, either presidential or parliamentary, as coded by Alvarez et al. (1999). A regime is classified as "presidential" if the president was the effective executive of the state during the period of time in question.[3] The variable is dummy-coded, with 1 indicating a presidential regime. The inclusion of this variable provides a test of the hypothesis that regime type matters.

[Table 1 about here.]

Other institutional variables are believed to be important as well. The party system is believed to have important effects on regime stability; in particular, a large number of parties at the national level is believed to be incompatible with presidential democracy, and this has been empirically demonstrated by several scholars (Mainwaring 1993; Jones 1994, 1995; Filippov et al. 1999); hence, it seems reasonable to include the "effective number of parties" (Laakso and Taagepera 1979) measure as an indicator of multipartism in the lower (or only) house of the legislature.[4] Since this variable is expected to have particular effects on presidential systems, it will be included both as an independent variable and in an interaction with the regime type dummy. While party systems are affected by the presence of a presidential regime (Anckar 2000; Jones 1994, 1995), thus suggesting a degree of collinearity between regime type and party system, we would expect both factors to have separate impacts on regime stability as well.

Also included are controls for national economic conditions, past authoritarian experience, and population. Democratic regimes—like all regimes—are generally more likely to fail when facing economic challenges, such as high inflation, an economy very open to external influences,

and rapid population growth. Accordingly, variables indicating the rate of growth in consumer prices and population are included, as well as an indicator of the relative percentage of the country's GDP (gross domestic product) to its exports and imports and an indicator of per capita GDP (relative to the United States in that year, at purchasing power parity). I also include indicators of ethnolinguistic and religious fractionalization, as a country's heterogeneity may be a factor that leads to societal breakdown[5]. Controls for countries that had experienced authoritarian rule in the recent past were also included: the indicators were the number of past authoritarian regimes in the post-1950 period and the percentage of years from 1950 (or the year of independence for the state) until the year of analysis the country was authoritarian.

The unit of analysis is the regime-year. Regimes are institutional systems that may span multiple governments; for example, one can speak of a continuous American regime since 1789, although that regime has encompassed multiple governments and survived civil war and invasion. A new regime may arise through breakdown, as defined below, or a significant change in the constitutional system of the state, such as the transition from the Fourth Republic to the Fifth Republic in France, or the peaceful replacement of the communist regimes of several Eastern European states with parliamentary and presidential democracies in the late 1980s and early 1990s. The universe of cases is all democratic regime-years between 1950 and 1990; a regime was considered democratic if it met the criteria for democracy specified by Przeworski et al.[6]

The dependent variable of interest is regime breakdown. A regime breakdown has occurred if an extraconstitutional usurpation of power in the national executive has occurred; this concept includes the typical *coup d'état* as well as other situations, such as the "self-coup" by Alberto Fujimori in Peru, which did not lead to a change in the executive but did substantially shift power

from one branch of government to another.

Data and Methods. This analysis relies on a number of sources for data, most notably the ACLP Data Set (Alvarez et al. 1999). While the presence of multiple sources does introduce challenges, including inconsistent cross-country coverage, these disadvantages are outweighed by the more comprehensive timespan available and the presence of additional variables of interest, particularly as statistical controls, in the model.

Regime breakdown is almost always[7] dichotomous: a regime either fails or it does not. The most common approach to estimating equations with dichotomous dependent variables is to use either logit or probit procedures; in this case, with corrections for the use of a cross-sectional time series data set. However, regime failure is a relatively rare event; predicting rare events with logit or probit models is inherently problematic, as independent variables will rarely explain much of the variance (for some of the issues, see King and Zeng 2001).

An alternative approach that is increasingly common in political science is to use a survival, event history, or duration model (Allison 1984; Cox and Oakes 1984; Yamaguchi 1990). These regression models were designed by biostatisticians to estimate the effects of particular treatments on the morbidity of certain diseases. These models have been applied by economists and political scientists to problems similar to that here: the effects of independent variables on the duration of a particular phenomenon (Bennett 1999; Box-Steffensmeier and Jones 1997). A duration model is well-suited to the problem at hand: predicting the time to failure of regimes based on societal and institutional factors. Several duration models are often used in the literature, the most common of which is the Cox proportional-hazards model; a Weibull regression model is employed in this analysis, as has become increasingly common in the social sciences[8]. These estimators also account

for censored data, such as regimes that did not break down during their existence, such as France's Fourth Republic, or which have not failed yet, including many of the industrialized democracies. In this instance, the Weibull model is used in the "accelerated failure-time" metric, as has become common in political science.[9] As the same country can appear multiple times as different regimes, White (heteroskedasticity-consistent) standard errors clustered by country were used to estimate the significance of coefficients.

The sample of countries studied was taken from the ACLP data set[10]; those regimes that were democratic, according to Alvarez et al.'s criteria, were selected for this analysis. Table 1 lists the 101 democratic regimes included in the ACLP data set.[11] 100 of these regimes are analyzed in this paper; the data are incomplete for Pakistan (1947–55).[12]

Findings. Table 3 suggests that there is a zero-order relationship between the type of regime and regime breakdown; the probability of observing so many breakdowns of presidential regimes by chance is less than one percent.

[Table 2 about here.]

However, when subjected to a multivariate model, the regime type variable is not statistically significant (even though its sign does indicate that presidential regimes are less stable than parliamentary regimes, we can have no statistical confidence in that result). The complete results of a Weibull regression model for all 100 included regimes appear in Table 4.

[Table 3 about here.]

As expected, development and trade lead to greater regime stability, regardless of the type of regime. Not surprisingly, I also find that the degree of ethnolinguistic fractionalization of a

society is significantly related to regime breakdown: more fractionalized societies are more prone to regime failure. The effect of past authoritarian regimes is also as we might suspect: regimes established in countries with a history of past authoritarian rule are significantly more prone to failure.[13]

Contrary to Mainwaring (1993) and Jones (1994, 1995), presidential regimes do not appear to be particularly prone to failure when there are a large number of parties represented in the legislature. This finding may be a result of how the effective number of parties measure is coded, however; for example, France's effective number of parties is inflated by the center-right's split between the RPR and UDF, yet those parties (at least during the period analyzed here) formed a coalition that presidents could rely upon to vote as if they were a single party. Mainwaring and Jones' findings suggest that presidents, like prime ministers, need to form coalitons to rule effectively, and those coalitions are easier to form when fewer parties are represented in the legislature or parties have weak discipline. Perhaps a better measure of partisan division in the legislature would provide more evidence supporting their analysis.[14]

Finally, the shape parameter p of the Weibull model ought to be discussed. Significant, positive values of the natural logarithm of p, as indicated by the model, indicate that regimes "fatigue" over time—that is, regimes become more prone to failure. The literature on democratic consolidation and institutionalization predicts the *exact opposite effect*: that democratic regimes should be stabilized over time as regimes become routinized and increase their administrative capacity.[15] However, the Wald test of this parameter does not approach traditional levels of statistical significance.

Discussion. The most salient finding of this paper is that, even controlling for other factors, pres-

idential regimes do not appear to be more prone to breakdown than parliamentary regimes. This finding is contrary to most of the extant literature, so it is worthy of additional discussion.

My hypothesis is that other studies have found an effect of regime type because there is an spurious relationship between regime breakdown and regime type: during the post-World War II era, presidential regimes have predominantly been established in states with a history of past authoritarian rule. By failing to control for past authoritarian rule, other studies have come to what appear to be erroneous conclusions.[16]

However, there is a reasonable objection to this hypothesis: states with presidential regimes break down because they continue to adopt presidential regimes that break down and lead to authoritarian rule; this argument suggests that if their past regimes had been parliamentary, they would not have broken down in the first place. Unfortunately, this contention is difficult to test, as most countries that have historically had parliamentary regimes revert to parliamentary regimes when becoming democratic, and a history of presidential regimes begets future presidential regimes. Of the countries in the ACLP data set, only five (Ghana, Nigeria, Pakistan (twice), South Korea, and Suriname) adopted a different form of regime after a return to democracy than the one that preceded authoritarian rule.[17] Regardless, this counterargument would not really explain why the *percentage of years* a regime was authoritarian in the past would affect regime breakdown; a model only including that indicator of past authoritarianism still finds no significant relationship between regime type and breakdown. Put simply, the evidence that past authoritarianism causes breakdown is more plausible than the evidence for a specific form of regime. Of course, "past authoritarianism" *per se* doesn't cause anything; I suspect that it promotes citizen attitudes that find authoritarian rule to be an acceptable alternative to democracy when democratic regimes encounter problems (indeed, this

effect has been found in a large number of regimes, particularly in Latin American and Asian countries with a history of democratic reversal). To put it bluntly, citizens of countries with a history of authoritarian rule are more likely to want a government that can "make the trains run on time" and not really care whether that government is democratic or not (see Huntington 1991: 253–58).

Another important finding of this paper is the impact of trade on democratic stability. While scholars in international relations debate the existence of a "liberal peace," the results in this paper suggest that there is at least a "liberal domestic tranquility." While various activist groups may bemoan the triumph of global capitalism, the evidence suggests that democratic countries who adopt more open trade relations with the outside world may improve their stability.[18] In more concrete terms, the continued promotion of a Free Trade Agreement of the Americas (FTAA) may help promote the stability of democratic regimes in Latin America.[19]

Finally, the findings of this paper may be somewhat time-bound. While there is no expectation that including the 1990–2000 period would significantly affect the results, the exclusion of years prior to 1951 may be problematic; notably, Shugart and Carey (1992) suggest that the findings of other studies on regime breakdown are suspect because of the large number of parliamentary regimes that failed in the inter-war period (1919–39). The inclusion of additional years and regimes in this analysis would help improve confidence in its results.

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Notes

[1]Przeworski et al. (2000) addresses parts of this question, but does account for them fully.

[2]See, for example, Di Palma 1990: 54–55, who basically restates Linz's argument in a footnote.

[3]Lijphart (1999: 121–24) identifies a few unusual cases that must be accounted for in later periods. Most notably, the "premier-presidential" system used in France exhibits both "parliamentary" and "presidential" phases based on whether or not the president has support from majority coalition in the legislature. Taiwan's recent history reflects a similar situation, although with less willingness by the DPP president to accomodate a "parliamentarist" phase led by the KMT. I coded hybrid (or mixed) regimes as presidential for the purposes of this paper; the choice of coding does not significantly affect the results, as hybrid regimes are relatively uncommon. Uruguay's 1951–66 collegial presidency is considered to be a part of the traditional presidential regime that preceded and followed it; similarly, Switzerland's collective presidency is coded as a presidential regime.

[4]The effective number of parties measure is defined as

$$(\sum_j p_j^2)^{-1}$$

where p_j is the proportion of seats held in the legislature by the jth party. If each party holds an equal number of seats, the measure is identical to a count of the number of parties; when parties have unequal legislative strength, this measure weighs smaller parties as having lesser importance. Data for several countries were collected to augment Alvarez et al.'s dataset; sources included Banks 1976, Nohlen 1993, Pakeman 1964, and Silverstein 1977.

[5]The measure of ethnolinguistic fractionalization was taken from Alvarez et al. 1999; missing entries were added using the *World Factbook* (2000 edition) as a reference for 12 countries. Easterly and Levine (1995) define ethnolinguistic fractionalization as the probability that two randomly selected members of a population will be from a different ethnolinguistic group. Formally, ethnolinguistic fractionalization can be defined as

$$1 - \sum_j p_j^2$$

where p_j is the proportion of the population comprised by the jth ethnolinguistic group. Religious fractionalization is calculated similarly, using the share of the population that is Catholic, Protestant, Moslem, and from another (or no) religion; this is the same coding used by Przeworski et al. (2000) for their RELDIF variable.

[6]Specifically, a regime is considered not to be democratic if the chief executive was unelected, the legislature was unelected, there is only one political party (or no political parties), or there has been no alternation in power in the regime's history (Przeworski et al. 2000: 18–30.)

[7]There are some exceptions; Boris Yeltsin's forcible dissolution of the Russian Parliament in 1993 can be seen either as a Fujimori-style "self-coup" or as the removal of unelected legislators from an otherwise democratic system; the case of India's 1975–77 state of emergency is also somewhat problematic and will be discussed below.

[8]Similar results to those presented here were obtained with Cox and lognormal models; Collett (1994) argues that the Weibull model is often a more efficient estimator than the Cox model. The Weibull curve also approximates the expected incidence of regime breakdown over time; the greatest risk of breakdown is expected to be near the beginning of the regime's history, with greater stability over time as democratic consolidation takes place. However, an argument could be made that there is an initial "honeymoon" effect, suggesting another parameterization might be more appropriate. Unfortunately, the ability to empirically distinguish between duration model parameterizations is very limited in most circumstances. For more discussion of these issues, see Zorn 2000.

[9]This choice of parameterization makes the meanings of the signs of the coefficients consistent with more common models, such as ordinary least squares regression.

[10]The ACLP data set is not entirely comprehensive; a number of "microstates" are excluded from their data. There is no reason to expect that their inclusion would lead to any substantive differences in our results.

[11]Unlike Alvarez et al., I coded India's 1975–77 state of emergency as a regime failure; hence India appears as two separate democratic regimes. This choice of coding does not substantially change any of the results presented in the paper.

[12]Pakistan was nominally democratic during this period, but no national elections were held after independence.

[13]The sign of the interactive term in the model indicates that we might expect multiple authoritarian periods with long duration to promote stability. However, this coefficient must be interpreted as a "correction" to the effects of the number of past regimes and time under authoritarian rule; it merely indicates that the combined effect of the two variables is non-additive.

[14]A good starting point might be an extension of Laver and Schofield's (1990) work to coalition formation by presidents in legislatures. This finding suggests that premier-presidential systems ought to be more stable than pure presidential regimes, at least when under unified control of the executive and legislature, as the legislative majority supporting the premier can function as the president's supporting coalition.

[15]Prezowrski et al. (2000) find no duration dependence, also suggesting that democratic consolidation does not occur. However, Zorn (2000) suggests that findings of duration dependence are

highly sensitive to specification issues, so we should be cautious in drawing too many conclusions from these results. However, using several different specifications of key independent variables did not change the finding of some duration dependence.

[16]Przeworski et al. (2000: 128–36) do control for past authoritarian rule, but do not use presidential government as a dummy variable in a combined model; instead, they compare expected and actual regime failures for various subsets of democracies. The failure to subject presidential government to a true multivariate test somewhat undermines their conclusions.

[17]An attempt to account for past history of presidentialism by including an indicator of the percentage of democratic years a state was presidential fails due to high multicollinearity between this variable and the presidential regime dummy (Spearman's $\rho > .99$).

[18]This paper, however, cannot speak to whether freer trade will promote democracy in authoritarian states.

[19]The inclusion of a provision in FTAA that regimes ceasing to be democratic will have their membership in the association suspended can only hope to add to this effect.

Table 1: Democratic Regimes

Country	Start	End	Type
Argentina	1946	**1954**	presidential
Argentina	1958	**1961**	presidential
Argentina	1963	**1965**	presidential
Argentina	1973	**1975**	presidential
Argentina	1983	-	presidential
Australia	1901	-	parliamentary
Austria	1945	-	parliamentary
Bahamas	1978	-	parliamentary (1988–90 missing)
Bangladesh	1986	-	presidential
Barbados	1966	-	parliamentary (1990 missing)
Belgium	1919	-	parliamentary
Belize	1981	-	parliamentary (1989 trade missing)
Bolivia	1979	**1979**	presidential
Bolivia	1982	-	presidential
Brazil	1946	**1963**	presidential
Brazil	1979	-	presidential
Bulgaria	1990	-	parliamentary
Burma	1948	**1957**	parliamentary (1951 leg. missing)
Burma	1960	**1961**	parliamentary
Canada	1920	-	parliamentary
Chile	1932	**1972**	presidential
Chile	1990	-	presidential
Colombia	1958	-	presidential
Congo-Brazzaville	1960	**1962**	presidential
Costa Rica	1949	-	presidential
Czechoslovakia	1990	-	parliamentary
Denmark	1901	-	parliamentary
Dominican Republic	1966	-	presidential
Ecuador	1948	**1962**	presidential
Ecuador	1979	-	presidential
El Salvador	1984	-	presidential
Finland	1944	-	parliamentary
France	1875	1957	parliamentary
France	1958	-	hybrid
Germany (FR)	1949	-	parliamentary
Ghana	1970	**1971**	parliamentary
Ghana	1979	**1980**	presidential

Democratic Regimes (continued)

Country	Start	End	Type
Greece	1949	**1966**	parliamentary
Greece	1974	-	parliamentary
Grenada	1984	-	parliamentary
Guatemala	1945	**1953**	presidential
Guatemala	1958	**1962**	presidential
Guatemala	1966	**1981**	presidential
Guatemala	1986	-	presidential
Honduras	1957	**1962**	presidential
Honduras	1971	**1971**	presidential
Honduras	1982	-	presidential
Hungary	1990	-	parliamentary
Iceland	1944	-	hybrid
India	1947	**1975**	parliamentary (first election 1952)
India	1977	-	parliamentary
Ireland	1921	-	parliamentary
Israel	1948	-	parliamentary
Italy	1946	-	parliamentary
Jamaica	1962	-	parliamentary
Japan	1952	-	parliamentary
Luxembourg	1870	-	parliamentary
Malta	1964	-	parliamentary (1990 missing)
Mauritius	1968	-	parlimentary
Netherlands, The	1870	-	parliamentary
New Zealand	1907	-	parliamentary
Nicaragua	1984	-	presidential (1990 trade missing)
Nigeria	1960	**1965**	parliamentary
Nigeria	1979	**1982**	presidential
Norway	1885	-	parliamentary
Pakistan*	1947	**1955**	parliamentary (no elections held)
Pakistan	1972	**1976**	hybrid
Pakistan	1988	-	parliamentary
Panama	1952	**1967**	presidential
Papua New Guinea	1975	-	parliamentary (first election 1977)
Peru	1956	**1961**	presidential
Peru	1963	**1967**	presidential
Peru	1980	**1989**	presidential
Philippines	1946	**1964**	presidential (1951–52 leg. missing)
Philippines	1986	-	presidential
Poland	1989	-	hybrid

Democratic Regimes (continued)

Country	Start	End	Type
Portugal	1976	-	hybrid
Sierra Leone	1962	**1966**	parliamentary
Solomon Islands	1978	-	parliamentary (1989–90 missing)
Somalia	1961	**1968**	hybrid
South Korea	1960	**1960**	parliamentary
South Korea	1988	-	presidential
Spain	1977	-	parliamentary
Sri Lanka	1948	**1976**	parliamentary
Sudan	1986	**1988**	parliamentary
Suriname	1975	**1979**	parliamentary
Suriname	1988	**1989**	hybrid
Sweden	1918	-	parliamentary
Switzerland	1870	-	presidential
Thailand	1975	**1975**	parliamentary
Thailand	1983	-	parliamentary
Trinidad and Tobago	1962	-	parliamentary
Turkey	1961	**1979**	parliamentary
Turkey	1983	-	parliamentary
Uganda	1980	**1984**	presidential
United Kingdom	1911	-	parliamentary
United States	1870	-	presidential
Uruguay	1942	**1972**	presidential
Uruguay	1985	-	presidential
Vanuatu	1980	-	parliamentary
Venezuela	1959	-	presidential

Although the start date of some regimes is before 1951, no data are analyzed for years prior to 1951.
1958 indicates a regime breakdown in that year. If a year is specified and is not bold, that indicates a transition from one democratic institutional configuration to another.
- indicates that the regime survived past 1990.
* indicates that data for this regime is incomplete for all years and thus the regime is excluded.

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Independent Variable	Range		Mean
GDP per capita (relative to United States)	0.025	1	0.453
Annual population growth rate	–4.255	24.79	1.486
Trade (imports+exports/GDP)	8.2	211.9	59.75
Ethnolinguistic fractionalization	0	0.9	0.277
Religious fractionalization	0	0.741	0.308
National population (ln)	4.500	13.65	8.959
Rate of executive turnover	0	0.975	0.229
Number of past authoritarian regimes	0	5	0.425
Percentage of past years authoritarian	0	97.06	11.88
Effective number of leg. parties	1	14.39	3.082
Presidential regime (dummy)	0	1	0.379

Table 2: Summary Statistics for Independent Variables

Institutional Type	Observed Breakdowns	Expected
Parliamentary	14	22.89
Presidential or Hybrid	26	17.11
Total	40	40.00

$$\Pr(\chi^2(1) > 8.51) < 0.004$$

This table shows expected breakdowns by regime-year (assuming equal probability of regime breakdown across regime types) versus actually observed breakdowns.

Table 3: Regime Type and Breakdown: log-rank test for equality of survivor functions

Variable	Coefficient	Std. Error	p
GDP per capita (relative to United States)	5.104	1.696	0.003
Annual population growth rate	0.065	0.101	0.519
Trade (imports+exports/GDP)	0.025	0.007	0.001
Ethnolinguistic fractionalization	–1.923	0.858	0.025
Religious fractionalization	–0.919	0.670	0.107
National population (ln)	0.311	0.091	0.001
Rate of executive turnover	–0.875	0.595	0.142
Number of past authoritarian regimes	–0.754	0.515	0.143
Percentage of past years authoritarian	–0.015	0.005	0.002
No. past auth. regimes × pct yrs auth.	0.017	0.009	0.080
Effective number of leg. parties	–0.085	0.101	0.402
Eff. num of parties × pres. regime	0.184	0.166	0.266
Presidential regime (dummy)	–0.483	0.601	0.422
Constant	–0.022	1.080	0.984
log p	0.332	0.197	0.091
Number of regimes	100		
Number of failures	39		
Number of observations	1631		
Log likelihood	–68.448		
Likelihood ratio test	$\Pr(\chi^2(13) > 224.28) < 0.001$		

- Positive coefficients indicate increases in the independent variable contribute to stability; negative coefficients indicate a negative relationship between the variable and stability.
- Standard errors are heteroskedasticity-consistent standard errors, adjusted for clustering by country.
- log p indicates whether the risk of breakdown is dependent on the passage of time; if $\log p > 0$, a regime is increasingly likely to fail over time, while $\log p < 0$ indicates regimes become less likely to fail over time.

Table 4: Weibull regression estimates: democratic regimes, 1951–90