

The Lifespan of Written Constitutions

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INTRODUCTION

According to an old joke, a patron goes into a library and asks for a copy of the French Constitution, only to be told that the library does not stock periodicals. The joke feeds the Anglo-American habit of needling France, in this case suggesting a country with suspect democratic credentials, more concerned with fashion and form than substance. Yet France is more typical of national constitutional practice than the United States with its venerable 218-year old constitution. By our estimate, national constitutions have lasted an average of only seventeen years since 1789.¹ This is an unsettling estimate of life expectancy for a document whose basic functions are to express guiding national principles, establish basic rules, and limit the power of government – all of which presuppose constitutional longevity.

Of course, the optimal lifespan of a constitution is not obvious, and in some cases there are very good reasons for a comprehensive review, if not replacement, of constitutions after some period of time. On balance, however, constitutions that endure should be more likely to promote effective, equitable, and stable democracy. With this background assumption, which we examine in more depth below, we explore the constitutional chronologies of nation-states in order to understand the origins and durability of constitutional systems. How durable are constitutions and what factors lead to their demise? In particular, our concern is whether aspects of the *design* of constitutions have any significant effect on constitutional durability net of other risk factors.

These questions are not merely of academic interest. Recent constitutional drafting exercises in Afghanistan (2003) and Iraq (2004 and 2005) have been central milestones of American foreign policy. Each of these efforts sought to solve particular institutional problems,

¹ The median lifespan is only eight years, while the mode is a miniscule one year.

with different levels of success.² It is, of course, too early to say whether either of these constitutions will survive to adulthood, but circumstances do not appear propitious in either country. In a far less volatile context last year, the 1997 Constitution of Thailand—considered by many a model of institutional design adopted with extensive citizen participation—died a peaceful death in a bloodless coup at the age of nine (Harding 2001; Ginsburg 2007). Indeed, given our estimated mortality rates, it is likely that constitutional replacement will be under way at any given moment *somewhere* in the world. Understanding what leads to such instances, and in particular whether design choices matter, has the potential to inform a science of constitutional design (Horowitz 2001).

Any such epidemiological analysis requires an accurate historical census, a resource heretofore unavailable. As part of a large-scale research project, we have identified every major constitutional change – whether replacement, amendment, or suspension – in every independent state since 1789. We have also acquired the text for nearly every “new” constitution, as well as that for a large majority of amendments, and have recorded aspects of their design that our theory would predict to be relevant to constitutional longevity. Our analysis suggests a revision of the conventional wisdom regarding constitutional (and, more generally, *institutional*) change. The common intuition – rarely tested systematically – is one of sticky institutions that are unstuck only by cataclysmic world events, such as wars and economic crises. We find that constitutions are, as suspected, vulnerable to such crises. However, important design and

²The particular approach of the Iraqi constitution—postponing most of the crucial decisions until after a post-constitutional election that the Sunni had no hope of winning—may have exacerbated the political conflict there. Meanwhile in Kabul, the new Afghan constitution, adopted in 2003, appears to be faring much better. Although the security situation is worsening as of this writing, President Karzai has exploited constitutional power to appoint governors to consolidate his hold on power and sideline numerous regional warlords who had been considered the largest threat to the country’s stability. One might see contrast these two cases by characterizing the greatest threat to the Afghan constitution as exogenous to the constitution, while the greatest threat to the Iraqi constitution is endogenous.

process elements can add tens of years to constitutional lives, perhaps allowing the charters to survive even these intense shocks. We show why this is so.

The paper is organized as follows. Part 1 discusses definitional issues surrounding constitutions. Part 2 takes a detour into normative arguments about endurance, motivating the empirical inquiry that follows. Part 3 draws on the literature on self-enforcing institutions to lay out a theory of constitutional endurance. Part 4 discusses the data and a model, and Part 5 presents our results. Part 6 concludes.

1. CONCEPTUALIZING CONSTITUTIONS

Our focus is on formal written constitutions, deliberated and adopted as such. We emphasize this choice since the flood of institutional research in the social sciences over the last two decades has expanded and diluted the concept of the constitution. For many, constitutions have become shorthand for political institutions more generally (e.g., Persson and Tabellini 2003).³ We recognize that this expansive definition is appropriate for many purposes. However, the content of written constitutions can vary, and equating institutions with constitutions can be misleading. Some countries such as Britain and, until recently, Saudi Arabia, have “unwritten” or uncodified constitutions. To add even more confusion, countries like New Zealand and Canada accumulate a set of important documents over a period of years until at

³ In some sense, this echoes the view of Dicey (1960:23): “Constitutional law, as the term is used in England, appears to include all rules which directly or indirectly affect the distribution or the exercise of the sovereign power in the state.” See generally Palmer 2006a and 2006b. Recent written constitutions such as Brazil’s 1988 document, which attempt to constitutionalize nearly every aspect of public life, have not helped to circumscribe the definition.

some point, scholars determine that the collection is too important *not* to be a constitution (Palmer 2006b).

It is also the case that in any constitutional system the language of constitutional text is modified and interpreted by political actors. In the United States, of course, judges of the Supreme Court have filled in the details of the vague 18th century document to make it suitable for modern life. They have done so notwithstanding the lack of explicit textual basis for constitutional review. In other countries, such as Great Britain, political practices may evolve and be accepted as “constitutional” even if never written into law. These norms are sometimes called constitutional conventions (Horwill 1925:21; Elster n.d.). Such central practices to British government as the requirement that a monarch must sign bills that pass both houses of parliament remain unwritten, yet there has been no transgression of this norm since 1708. The scope of the unwritten constitution poses daunting challenges to comparative research, and for this reason we exclude the United Kingdom from the analysis in this paper.⁴

We can move towards a definition by identifying exactly what it is constitutions do. Arguably, the most important (and defining) attribute of constitutions is that they limit the behavior of government. That is, they generate a set of inviolable principles to which future law and government activity more generally must conform. This function, that of constitutionalism, is vital to the stability of democracy. Without a commitment to higher law, the state operates for the short-term benefit of those in power or the current majority. Those who find themselves out

⁴ Fortunately, the vast majority of countries have discrete documents that the average observer would recognize as Constitutions. Our focus is on *written* constitutions (see Elster 1995: 365). We undertake this decision for pragmatic reasons, but also because written constitutions are discrete acts of institutional design, and hence of qualitatively different character than gradual interpretive adjustments, even if their formal status and practical impact are identical. On Unwritten Constitutions, see Thomas C. Grey, *Origins of the Unwritten Constitution: Fundamental Law in American Revolutionary Thought*, 30 STAN. L. REV. 843 (1978); Larry Kramer, *Foreword: We The Court*, 114 HARV. L. REV. 4, 16-32 (2001) (describing “customary constitution” in Anglo-American tradition).

of power may find themselves virtually unprotected, which in turn may make them more likely to resort to extra-constitutional means of securing power. By limiting the scope of government, constitutions make government possible (Sunstein 2001; Przeworski 1991; Weingast 1997). A second function that constitutions serve is the symbolic one of defining the nation and its goals. A constitution operates as a device that declares the legitimacy of the perhaps fledgling or rudderless state. This function is particularly important for young states whose citizens have strong ethnic or communal identities that may compete with their loyalty to the state. A third and very practical function of constitutions is that they define patterns of authority and set up government institutions. Even a dictatorship needs established institutions through which to govern. (While the mere process of defining an institution involves *some* constraints on its behavior, these are conceptually distinct from *substantive* limits on government action incorporated into the notion of constitutionalism).

The functions described above are not exclusively played by constitutions, and statutes or organic laws can play similar functions of limiting government, entrenching policies and defining the nation. Are such documents constitutional? In some sense, yes, in that they play a constitutive or constitutional function, and scholars wrestle with the precise boundaries of the constitutional concept. For example, Professor Young adopts precisely this functional approach to describing the United States' "Constitution Outside the Constitution."⁵ In a critical sense, however, such quasi-constitutional documents differ from the formal constitution. For one thing, they are usually not adopted in the formal and often deliberate manner that typically (although certainly not always!) characterizes the process of constitution making. More importantly, even

⁵ Ernest A. Young, *The Constitution Outside the Constitution*, 117 YALE L. J. 100 (2008); see also Bruce Ackerman, *The Living Constitution*, 120 HARV. L. REV. 1737 (2007). An early version of this argument is found in Tiedeman, *THE UNWRITTEN CONSTITUTION OF THE UNITED STATES* (1890); see also William Bennett Munro, *MAKERS OF THE UNWRITTEN CONSTITUTION* (1928).

in those countries where organic lawmaking is entrenched, they can usually be abrogated more easily than can a constitution. This idea of entrenchment is an important contributor to the status of the constitution as higher law. We see constitutions as not only being higher law (a characteristic that they may share with organic acts and other rules) but of being *highest* law.

In short, it is important to distinguish between “Big C” Constitutions and the “little c” constitutional structure of a country (see also Strauss 2001; Voigt 1999:198). Our focus in this paper is on the former. The latter might include rules setting up fundamental political institutions, such as electoral systems, or authoritative interpretations of the written constitution such as supreme court decisions. While in theory these “constitutional” rules ought to be analyzed as well, the conceptual difficulty of determining the precise scope of the small-c constitution, as well as the methodological challenge of identifying and locating the various acts that compose it, argue against using it for comparative analysis at this stage. In contrast, the deliberate, public, and discrete character of the big-C constitution yields an objective historical record of activity across a wide set of cases that is invaluable to the analyst of institutional reform. (We should note also that in the empirical analysis that follows, we do attempt to take into account the possibility of informal amendment of the constitution through judicial interpretation.)

We identify constitutions in the data that follow by a set of three conditions. The first is sufficient to qualify the document as a constitution, while the others are alternative sufficient conditions if the first is not met. Constitutions are those documents that either:

- (1) are identified explicitly as the “Constitution,” “Fundamental Law,” or “Basic Law” of a country; OR

- (2) contain explicit provisions that establish the documents as *highest* law, either through entrenchment or limits on future law; OR
- (3) change the basic pattern of authority by establishing or suspending an executive or legislative branch of government.

This set of conditions is similar to that used by Elster (1995: 364) and helps us to resolve problematic cases.⁶ For example, in the Israeli case, we treat the constitution as the series of Basic Laws (condition 1), even though all are passed by ordinary parliamentary majority and thus do not meet condition 2 and few of them meet condition 3. In the case of Saudi Arabia, the holy Quran is the highest law and there is no formal constitution; however, we treat the three 1992 Royal Decrees establishing the basic system of government, provinces and the consultative majlis (assembly) as constituting the government (Aba-Namay 1993). This is a case that meets condition 3 but not 1 or 2. Fortunately, at least for analytic purposes, formal constitutions are the norm and defining a state's constitution is largely straightforward.

To conduct the analysis we have collected data on the constitutional history of every independent state (as identified by Gleditsch and Ward 2006) from 1789 to 2006.⁷ For each country, we record the promulgation year of *new*, *interim*, and *reinstated* constitutions, the year of *suspension*, and the year of any *amendments* (defined below). The promulgation of new, interim, and reinstated constitutions marks the beginning of *constitutional systems*; these systems end when replaced by another new, interim, or reinstated document or when they are formally

⁶ Our definition differs slightly from that of Elster's recent draft *Unwritten Constitutions*, which makes regulation of ordinary law the crucial condition. Our definition is shared by Negretto (2006:5) however.

⁷ Gleditsch and Ward (2006) catalog the existence of states from 1816-2006. For the years between 1789 and 1816, we use data about the birth of states from the Issue Correlates of War Project, or ICOW (Hensel 2006).

suspended. This definition of constitutional lifespan has the virtue of clarity, although it may err on the side of formalism in cases in which a constitution ceases to be effective as a practical if not legal matter. Our census reveals a universe of 792 new constitutional systems, of which 518 have been replaced, 192 are still in force, and 82 have been formally suspended, ultimately to be replaced. We have collected the constitutional text for 652 new constitutions and the text or summary information for 1223 out of the 1677 amendments, from which we construct several variables of interest.

In our formulation, the distinction between an “amendment” and a “replacement” is important. We call a constitutional change an “amendment” when the actors follow the amending procedure of the existing constitution and a “replacement” when they undertake revision without following such procedure.⁸ Thus, the U.S. Constitution is a replacement and not an amendment of the Articles of Confederation, as initially envisioned, precisely because the founders ignored their original charge and its accompanying procedures. Of course, we should note that “replacements” and “amendments” are sometimes only nominal distinctions. Some countries (e.g., South Korea) thoroughly revise a constitution with a set of amendments,⁹ while others (e.g., Afghanistan in 1990) make minor changes to a document and yet christen a new constitution. In general, however, new constitutions reflect a significantly more extensive overhaul compared to amendments. Across a set of 92 attributes from our data on the characteristics of constitutional texts and their amendments, replacement constitutions correlate with their predecessor at 0.53 while documents following a year of amendments correlate at 0.98 with the pre-amendment document.

⁸ For events whose exact process is unclear, we rely upon the nominal classification as it appears in historical texts, a classification that likely matches our criteria.

⁹ South Korea’s six republics have each involved complete constitutional overhauls adopted through the formal process of amendment of the previous constitution.

Reconstructing constitutional chronologies for all independent states is not a simple matter and we rely upon a collection of cross-national, regional, and country-level sources in order to compile the data. The magisterial *Constitutions of the Countries of the World* (Flanz and Blaustein 1971-present) provides invaluable background information for most countries. Other useful cross-national and regional sources include Maddex (2001), Fitzgibbon (1948), Peaslee (1950-1971), and the Political Database of the Americas at Georgetown. Of course, country-level studies are at the root of these multi-country sources and we use these more specific studies when possible (available).¹⁰

2. THE MERITS OF CONSTITUTIONAL LONGEVITY

Before examining the causes of constitutional longevity, we must briefly consider the normative question: how long *should* constitutions last in a democracy? For those who use the American document as the standard, the answer may well be “forever.” Surely, however, longevity is not desirable as an end in and of itself. Constitutions are designed to stabilize and facilitate politics, but there is certainly the possibility that constitutions can outlive their utility and create pathologies in the political process that distort democracy. Such constitutions surely deserve replacement. One can even make a plausible case, as Dahl (2001) and Levinson (2006) have, for a comprehensive review – if not abrogation -- of the bargains struck in Philadelphia in 1787.¹¹

¹⁰ While we are confident that we have identified nearly all “new” constitutions in the world, it is quite possible that we have overlooked a fair number of amendments, especially older ones, simply because they are less well- documented.

¹¹ See also Larry Sabato, A MORE PERFECT CONSTITUTION, . For a rebuttal of Levinson’s views, see Cass Sunstein, *It Could Be Worse*, 235 THE NEW REPUBLIC 32-36 (2006).

The touchstone for arguments about constitutional endurance has been Thomas Jefferson, who famously argued against entrenchment in his debates with Madison, and derided those who “look at constitutions with sanctimonious reverence, and deem them like the arc of the covenant, too sacred to be touched.”¹² Jefferson believed in automatic expiration of laws, including the constitution, so that present day majorities could not bind future ones. To be sure, Jefferson recognized that *some* durability in laws was desirable, and thought democracy was the key criteria of optimal duration. The current majority could bind itself and current minorities, but could not bind future majorities or minorities. The optimal term for constitutions was nineteen years, a figure he based on an estimate of how long a majority of adults alive at any one time would expire, according to contemporary European life expectancies.¹³ He contemplated a that such a scheme would engender greater levels of civic participation and engagement, as citizens were called on to consider and deliberate over fundamental principles more frequently.

Jefferson’s position initially seems somewhat silly. Why should we artificially jettison a perfectly functioning constitution simply because it has reached a certain age? Furthermore, it is unclear exactly what Jefferson contemplated would happen upon the expiration of the current laws. As Strauss (2003) points out, reverting to yet earlier laws only compounds the problem.¹⁴ The dead governors of the living are replaced by the even-more dead.

One also wonders, if Jefferson’s plan had been implemented, whether re-deliberation would in fact produce different results than we already observe. Given what we have learned in recent decades about our cognitive reasoning processes, one might be skeptical that Jefferson’s re-deliberation would produce anything other than a blessing of the previous rules. We are

¹² Letter to Samuel Kercheval, July 12, 1816.

¹³ Thomas Jefferson to James Madison, September 6, 1789; Letter to Samuel Kercheval, July 12, 1816.

¹⁴ Yarbrough (1998: 122) believes Jefferson was not so proposing.

endowed, for example, with a status quo bias that causes us to stick with earlier choices, often without conducting a full evaluation of the merits.¹⁵ “Loss aversion,” the preference for avoiding current losses rather than obtaining unrealized gains, may prevent those with a share of the current distribution of gains from choosing to modify institutions.¹⁶ Ascribing functionality to current institutions may, under certain circumstances, keep us at a “local maximum” and prevent us from switching to a superior set of institutions.

Yet these very biases may lean in favor of forcing the polity to engage with fundamental principles. Surely the existence of biases that favor current institutions are not an argument for *avoiding* reconsideration of the status quo. For the alternative is simply to accept suboptimal conditions indefinitely. Thus Jefferson’s idea may not be as odd as it initially seems. There may be merit in pre-committing ourselves to cast our eyes higher and to consider the possibility of global, rather than local, maxima.

Against the virtues of periodic constitutional renewal, one can marshal theories that privilege endurance. One might be called a Burkean theory, though it traces back to at least Aristotle’s *Politics*. Aristotle argued that the strength of law lies in citizens’ habits of obedience, which are the force that gives law power. Instability in law, he argued, can weaken the notion of law itself.¹⁷ He recognized, to be sure, the need for ongoing interpretation in the context of application of law, a feature demanded by the general character of law itself. But frequent change in the primary rules would seem to undercut the ability of law to inculcate habits of obedience.

¹⁵ William Samuelson & Richard Zeckhauser, *Status Quo Bias in Decision Making*, 1 J. RISK & UNCERTAINTY 7, 8 (1988) (“Faced with new options, decision makers often stick with the status quo alternative . . .”).

¹⁶ Daniel Kahneman, Jack L. Knetsch & Richard H. Thaler, *Anomalies: The Endowment Effect, Loss Aversion, and Status Quo Bias*, 5 J. ECON. PERSP. 193, 194-99 (Winter 1991).

¹⁷ *Politics* II.8. See Schwartzberg (2007: 62)

Madison picked up on this theme in Federalist 49, rebutting Jefferson's critique of entrenchment in *Notes on the State of Virginia*: "as every appeal to the people would carry an implication of some defect in the government, frequent appeals would, in a great measure, deprive the government of that veneration which time bestows on everything, and without which perhaps the wisest and freest governments would not possess the requisite stability." Madison also worried about the dangers of engendering conflict and partisanship through calling into question fundamental rules:

The danger of disturbing the public tranquility by interesting too strongly the public passions, is a still more serious objection against a frequent reference of constitutional questions to the decision of the whole society. Notwithstanding the success which has attended the revisions of our established forms of government, and which does so much honor to the virtue and intelligence of the people of America, it must be confessed that the experiments are of too ticklish a nature to be unnecessarily multiplied. We are to recollect that all the existing constitutions were formed in the midst of a danger which repressed the passions most unfriendly to order and concord; of an enthusiastic confidence of the people in their patriotic leaders, which stifled the ordinary diversity of opinions on great national questions; of a universal ardor for new and opposite forms, produced by a universal resentment and indignation against the ancient government; and whilst no spirit of party connected with the changes to be made, or the abuses to be reformed, could mingle its leaven in the operation. The future situations in which we must expect to be usually placed, do not present any equivalent security against the danger which is apprehended.¹⁸

Madison ties constitution-making to crisis and is concerned that constitutional reform without crisis may become overly tainted with self-interest. He is certainly correct that constitutions tend to be written following catastrophic events. While the urgency of the situation can, of course, repress passions and encourage agreement, it can also prevent rational consideration of alternative institutional arrangements.¹⁹ There is, in short, a risk that enforced redeliberation will

¹⁸ Federalist 49. See discussion in Yarbrough 1998: 117-124

¹⁹ Elster *supra* note 4.

produce a configuration that is inferior to the status quo ante. Far better to encourage only gradual change, a theme taken up contemporaneously by Burke.

The emphasis in Burke and Aristotle on habits of obedience can be translated into modern institutional language. Written constitutions do not specify all the details of their institutions. Even if they did, it seems quite clear that simply stipulating the organization and relationships among governing institutions is not enough to ensure their implementation. A certain degree of habituation must occur before the institutions can take shape. These processes take time, and exhibit what we might call constitution-specificity, a quality of being organically related to the constitutional schemes they inhabit.

To illustrate, consider one set of institutions nowhere mentioned in the American constitution: political parties. As Madison's quote above makes clear, the founders distrusted political parties. Yet by all accounts the existence of parties has a constitutional character, facilitating the operation of many of the formal institutions of government. The existence of parties has become a constitutional norm, so that more recent constitutions spend some time on their definition and regulation. Political parties are also organically related to the constitutions they inhabit. American parties, for example, reflect the country's federal structure and the rules of competition laid out in the Constitution. Should the formal institutions change, party structure and the party system itself would very likely change as well.

The same argument could apply to many other crucial political institutions that make for effective governance—including the independence of the central bank, the presence of interest groups, or the structure of legislative committees—yet may not be mentioned in the constitution at all. In turn, their evolution requires a stable constitutional environment. One of the reasons

that the U.S. Constitution “works” is that American political life has grown around it and adapted to its extremely idiosyncratic edicts.

Constitution-specific institutions will tend to reinforce existing political arrangements. As these collateral institutions develop, they develop constituencies that invest in their processes and structures, and will resist efforts to overturn or modify basic structures too drastically. They also have a crucial stake in enforcing the constitution, potentially restricting sovereign power. Tying actors’ hands with respect to the rules of the game compels them to compete with more democratic methods. Periodic changes in the fundamental rules, on the other hand, might encourage opportunistic elites to engineer institutions for their short-term benefit.

Next, consider briefly a constitution’s function as national symbol. Besides the important role constitutions play in defining and limiting government structures, many believe that constitutions play a critical role in “constituting” the polity. By serving as a national symbol, constitutions can help instill in the citizenry a sense of shared identity. A strong attachment to the state, whatever its pathologies, is critical to democracy. This is especially a concern in multiethnic states in which the state competes with other groups for loyalty. If citizens do not have a commitment to, or cannot agree on, the sovereignty of the state, then the very basis for participation and citizenship unravels (Rustow 1970; Linz and Stepan 1996). As Dahl (1989: 207) puts it, “the criteria of the democratic process presuppose the rightfulness of the unit itself.” In states in which commitment to the state is in question (e.g., contemporary Iraq), an enduring constitution can become an important source of national unity, generating veneration. This in turn will help enforcement. If citizens are the ultimate enforcers of the constitution, as we argue below, longevity may be helpful in that citizens learn over time what the document requires, and develop a stock of cooperation useful for enforcement.

A separate rationale for endurance comes from the economic sphere. Since at least Weber (1977), social scientists have been concerned with the relationship between constitutions and capitalism (Persson and Tabellini 2003). Clearly constitutions provide a substantive basis for regulation of economic activity, and so we ought to expect that constitutions that, for example, protect property rights and create structures for the enforcement of contracts will facilitate capitalist development (North 1991). Even independent of their content, however, some stability in the basic rules should facilitate investment. This is particularly true with regard to foreigners, who rely on constitutional and legal provisions as signals as to government policy, and may be unable to avail themselves of locally based alternative enforcement schemes to have contracts upheld. In short, constitutional stability may provide the necessary predictability for capitalism to flourish, in which case we ought to observe a correlation between constitutional duration and long-term investment.

We have canvassed sound theoretical arguments both for and against endurance. Our own view on the merits of longevity is an instrumental one. Enduring constitutions, from our perspective, are useful to the extent that they produce other goods that a polity might value, such as democratic stability, observed limits on government behavior, and economic growth. Alas, we cannot appeal to any systematic evidence from the literature in favor of any connection between constitutional longevity and any of these things. Indeed, despite the massive volume of work on the endurance of democratic regimes, the relationship between constitutional duration and democratic stability or wealth is virtually undocumented. While it is beyond our mission in this paper to assemble such evidence, it seems worthwhile to examine some of the basic empirical associations between constitutional duration and these other goods that seem desirable. We bear in mind, of course, that endogeneity concerns prevent us from making any causal inferences.

Nevertheless, if our normative intuitions are even remotely sound, one should see an empirical relationship between constitutional duration and both economic development and democratic stability. We provide some suggestive evidence here.²⁰

Constitutional Duration and Investment: First, consider foreign investment. We divide constitutions into two groups, those lasting longer than the mean lifespan of 17 years and those which do not. Foreign direct investment (FDI) averages \$US1.54 billion/year for constitutions lasting longer than 17 years and only \$US0.38 billion/year for constitutions lasting 17 years or less.²¹ Looking at the bivariate relationship, Figure 1 presents data on the average FDI for all countries with a constitution of a particular age.²² Figure 1 confirms that short-lived constitutions are not associated with high levels of investment, but also suggests the relationship is not linear. Rather, there is some threshold beyond which constitutions must endure in order to provide the necessary stability to attract foreign investment, but returns do not continue to increase after that point. We also understand that it is difficult using this evidence to have confidence in the causal relationship—no doubt constitutional stability is also a *product* of investment as well as a cause. Nevertheless, the correlation is sound enough to support our normative intuition that it is worthwhile to try to understand longevity.

Figure 1 here

Constitutional Duration and Democratic Stability: Figure 1 also shows the relationship between constitutional duration and democracy, using Polity scores as a metric.²³ We also

²⁰ Note: we exclude the United States in the following discussion as an outlier.

²¹ FDI data is from the World Development Indicators published by the World Bank (2000). The World Bank gathered FDI data for more than 100 countries, on average, each year between 1970 and 2000.

²² The mean FDI for age zero uses data from all 783 constitutional systems, but the mean FDI, or polity score, for ages 165-173 only use data from one constitutional system (Belgium_1832).

²³ The Polity IV project scores every independent country on a scale of -10 (most autocratic) to 10 (most democratic) from 1816-2004 (Marshall et al. 2006).

observe a strong association between long-lived constitutions and democracy. Once over a certain threshold, however, the relationship ceases to be linear (though it is more so than FDI). This suggests, again, that some constitutional duration may matter for producing democracy.²⁴

Constitutional change and regime change would seem to be so closely related that a word of distinction seems warranted. From a rather broad perspective we should expect that countries with a high degree of constitutional instability will also display a high degree of democratic instability. In fact, volatility in democracy scores (as measured by Polity) is highly correlated with constitutional instability ($r = 0.54$). The strength of the relationship between volatility in democracy scores and constitutional turnover invites the question of whether regime change and constitutional change are one and the same. Are constitutions simply the written reflection of real political change on the ground? If so, then our analysis reduces to one of explaining regime durability. In fact, the two constructs are closely related but not synonymous. Constitutions will often coincide with regime transition. However, it is equally likely that authoritarians and democrats will share the same constitution and that the same regime type will be responsible for multiple constitutions. One can begin to understand these dynamics by observing trends in the level of democracy and the incidence of new constitutions within individual countries. Figure 2 presents such data for six countries, Brazil, Chile, Japan, the Dominican Republic, France and Colombia. Democracy (Polity) scores are plotted across time and vertical lines mark the promulgation of “new” constitutions.

Figure 2 here

²⁴ Using regime-type, as measured by Cheibub and Gandhi (2004), constitutions written under democratic regimes have a significantly longer lifespan than those written under authoritarian regimes ($t=7.71$ and $p<0.00$). Specifically, constitutions written under democratic regimes last, on average, 17 years longer than those written under authoritarian regimes.

For the most part, new constitutions in these countries correspond with major shifts in the structure of authority (i.e., regime). The dates of each of Brazil's constitutions, for example, mark the milestones of its democratic history almost perfectly. As one would imagine, however, most countries exhibit exceptions to this rule. Chile's 1980 constitution, commissioned by Pinochet, dutifully institutionalizes the authoritarian practices initiated by the coup in 1973. Curiously enough, however, the Pinochet document has endured through the transition to democratic rule, albeit with significant amendments. Colombia is another exception, but in the other direction, in that its multiple regime transitions have occurred under a single constitutional regime. These phenomena, as we shall see, are fairly uncommon in Latin America, where most major shifts are celebrated with new constitutions. Sometimes constitutions are rearguard actions: the Japanese Constitution of 1889 served to consolidate an authoritarian structure around the Meiji empire in the face of demands for greater democracy. But Japan's overall history has been one of punctuated equilibrium, with jump-shifts in a democratic direction marked by constitutional change. French history also shows significant shifts in levels of democracy around the time of constitutional change, with new constitutions corresponding to the oscillation between republic and empire. As the Dominican case makes clear rather emphatically, however, regime change is not a necessary condition for constitutional change. The Dominicans have written 29 constitutions since 1844 (the most of any country), during which time the regime pattern has remained consistently authoritarian.²⁵

It may well be that, as Jefferson suggested, democratic states *can* function effectively with a high degree of constitutional turnover. Our data, however, suggests that they cannot, or at

²⁵ Haiti ranks third all time in the number of constitutions with 24, which along with the experience of neighboring Dominican Republic, renders the island of Hispaniola home to 7% of the world's constitutions since 1789!

least have not. France is one of the few stable democracies to have maintained democracy through periodic revision of its founding document, and France's level of stability is still well above average. Moreover, while some countries with strong democratic traditions *may* be able to withstand a certain degree of revision, fragile democracies in the developing world likely cannot afford such a luxury. In fact, the evidence presented above suggests the democratic and economic future of these developing countries may depend, at least partially, on the endurance of their constitutions.

3. WHY MIGHT CONSTITUTIONS ENDURE?

The heart of our inquiry is to understand why some constitutions endure and others do not. We assume that constitutions are bargains among elites that are meant—at least by their authors—to be enduring. They vary widely in their level of inclusion. Many constitutions are crafted by a small set of leaders in a back room. Others are inclusively generated and endorsed enthusiastically by the public in a referendum.

3.1 Constitutions as Coordination Devices

We share the view, articulated clearly by Hardin (1989), Przeworski (1991), and Weingast (1997), that successful constitutions serve as coordination devices that render their underlying political bargains self-enforcing, meaning that they must be equilibria from which no party has an incentive to deviate. Self-enforcement is important because, unlike normal contracts, there is in most circumstances no external guarantor who will enforce the constitutional agreement, independent of the parties. Even though constitutional bargains may have relative winners and relative losers, they will endure to the extent that the losers either (1) believe they are better off

within the current constitutional bargain than in taking a chance on negotiating a new one; or (2) are unable to overthrow the existing order.

Stability of the bargain depends on the winners upholding the commitments and limitations embodied in the constitution, so that they do not provoke losers to resort to extra-constitutional action. In democracies, enforcement of these constitutional limitations ultimately relies on citizens (Ordeshook 1992; Weingast 1997, 2005). If they can coordinate, citizens can prevent the government from imposing costs on them and violating the political bargain. If they cannot coordinate, democracy may not be stable, as the government will continuously adjust the bargain in its favor with political acquiescence. The coordination problem is that citizens, having disparate interests, will be unlikely to reach agreement on their own as to what constitutes a violation of the constitution, and on when and how to enforce the bargain. A willingness to stand against the government requires a belief that others will join the citizen; otherwise the potential protestor will fear ending up in jail while oppression continues. When all citizens coordinate their expectations that others will join in the protest, however, the expectations become self-fulfilling and government will refrain from violating the bargain.

Written constitutions can assist citizens in overcoming the coordination problem by providing a definition of what constitutes a violation by government, thus providing a focal point for enforcement activity (Carey 2000; Strauss 2001, 2003: 1731-35; Samaha 2008: 50). By stipulating the rules and defining violations, they increase everyone's perceived likelihood that others will join them in enforcing against violations. Hence "parchment barriers" may matter, not because of any magical power contained in their words but because their role in facilitating coordination on the part of potential enforcers. This framework helps us understand why *written* constitutions may be important components of constitutional democracy: they provide the focal

point for coordination and enforcement. As Strauss (2003: 1719) has noted, it is sometimes more important that matters be settled than that they be settled right.²⁶ The written text serves as a focal point for coordinating, eliminating potential disagreements and providing a structure for future interaction. The framework also helps us to understand why constitutional democracy is so rare in general: resolving the coordination problem among citizens to enforce limits on government behavior is extremely difficult, and the mere presence of a written constitution is no guarantee that coordination will in fact occur.²⁷

3.2 Sources of Incompleteness

Even if a constitution is self-enforcing at its birth, it may not remain so. This section draws on the literature of incomplete contracts to try to understand the pressures for constitutional renegotiation. A central problem for constitutional endurance is that, although the constitutional bargain may be an optimal arrangement for the parties at the time it is drafted, it may not remain optimal at some future time (Ordeshook 1992).

Suppose we have three groups, which we will call Sunni, Shiites and Kurds. The Shiites are a numerical majority. They would like a constitutional arrangement in which they dominate the other groups, but have to choose between crude force and inducing the others to join in a constitutional arrangement. The latter is preferable for a variety of reasons: international

²⁶ The quote is attributed to Justice Brandeis, *Burnet v. Coronado Oil and Gas Co.*, 285 U.S. 383, 496 (dissenting).

²⁷ This function, of course, need *not* be played by a written text. It is perfectly possible that common understandings of the constitution will focus on unwritten norms as opposed to the written text. It may also be the case that understandings of the text deviate significantly from the clear meaning of the words. The important thing is that coordination does in fact occur, whatever its origin. But a writing will help citizens to agree on what constitutes a violation, memorializing the unwritten understandings that are what in fact sustain political society.

legitimacy, economic stability, and security, for the smaller groups have the capacity to engage in some level of violence if their demands are not met.

Each group comes to the negotiating table to bargain. The bargaining process is costly, because it requires negotiation and the expenditure of political resources. (Furthermore, each bargainer must be concerned with ensuring that his supporters can be delivered, a problem we set aside). The parties at the table will conclude a bargain or not, based on an expected stream of benefits to particular groups net the transaction costs of negotiation. In the example above, it is likely that the Shiites will get the lion's share of the spoils, but will also have to provide enough benefits to their smaller counterparts to induce them to choose to abide by the constitution.

Should they conclude a bargain, it will of necessity be incomplete, in that the parties will be unable to specify every future contingency.²⁸ One reason it will be incomplete is the familiar one of transaction costs of negotiating terms of a deal. Parties that seek to specify every contingency will never conclude an agreement. Beyond the costs of negotiation, we focus on two types of obstacles to specifying a complete constitutional contract.

First, there is uncertainty about future payoffs, which may vary with exogenous factors. For example, every country is embedded in an international environment over which it lacks complete control. The international environment is particularly fickle; its one enduring feature is "persistent uncertainty." (Koremenos 2005). New technologies are invented, new threats emerge, and new powers arise that affect the costs and benefits of cooperation *within* states. These factors can influence the relative payoffs to parties to the constitutional bargain.

²⁸ See also Persson et al. (1997) (arguing that the separation of powers scheme provides a mechanism to create default rules to fill gaps.) There is an odd argument in that it does not seem to recognize that agreements are negotiated by parties, not powers. They also fail to consider gaps in the separation of powers scheme itself. See also Gillette (1997) (incomplete agreements in the federalism context).

Suppose, extending my earlier example, that the Shiites are the majority, but the Kurds are geographically concentrated in an oil-producing area. In bargaining, the Kurds are concerned that the Shiites will dominate the country's politics and so negotiate a provision that oil taxes will be locally administered and retained. The Shiites agree and the bargain is concluded. However, a year after the adoption of the constitution, world oil prices fall as a result of the perfection of hydrogen technology. Kurdish revenues decline precipitously and the relative wealth of the two groups diverge, with the Shiites becoming richer and Kurds are poorer. The Kurds now face pressure to renegotiate.²⁹ Exogenous change means that even endogenously stable constitutions may come under pressure for renegotiation. Our examination of constitutional histories confirms that constitutions frequently appear to die because of exogenous shocks, such as wars, regime change, and shifts in the boundaries of the state.³⁰

Another source of incompleteness is awareness of one's negotiating partner's type. This is the problem of hidden information. A party to constitutional negotiation may misrepresent her own endowments and intentions for strategic reasons.³¹ Suppose, in the example above, the Shiite ethnic group does not have accurate information on the extent of oil deposits in the territory of Kurdistan. It negotiates the revenue deal expecting to obtain sufficient funds for its needs from customs and other revenue sources. After the constitution is adopted the Kurds gradually reveal that the amount of oil was in fact much higher than anticipated and as a result local revenues will be greater than those obtained from all other sources combined. In this

²⁹ More closely related to the discussion of international factors, one can imagine that rising military pressures from a proximate neighbor (Turkey) might induce one group (the Kurds) to be more dependent on the power of their co-nationals, and affect the division of the constitutional surplus.

³⁰ See *infra*, section 3.6. Our initial inquiry suggests that financial crises are not generally sufficient to overturn constitutions.

³¹ See generally Ian Ayres and Robert Gertner, *Filling Gaps in Incomplete Contracts: An Economic Theory of Default Rules*, 99 *YALE L.J.* 87, 100-103 (1989).

example, hidden information led to a miscalculation of relative costs and benefits. One can imagine that if the miscalculation is severe enough, the Shiites will seek to renegotiate the deal.³² Even if they do not, the difference between expected and actual revenue streams may eventually increase Kurdish power to the point where they are in a position to demand a better overall deal. Thus hidden information at the time of drafting can exacerbate pressures on the constitution later on.

In general, time has different, and probably offsetting, effects on the problems of hidden information and exogenous shocks. As parties interact in performing the terms of the constitutional bargain, they are likely to reveal information to each other more fully than can be done in the bargaining phase. They may even develop the constitutional equivalent of a “course of dealing,” a set of informal norms that supplement their formal arrangements. As time goes on, information on the “type” of partner they have is likely to increase. The problem of hidden information is particularly severe in the first period of constitutional performance, and we have many examples of constitutions that die in their first year of operation, particularly in the context of failed peace agreements. On the other hand, time exacerbates the problem of incomplete information associated with exogenous change. Future contingencies grow more difficult to predict with time, as more and more exogenous factors arise and interact with each other in complex ways. Thus we should see that problems of exogenous shocks increase over time, while

³² A related source of incompleteness, that we do not address in detail here, is bounded rationality. As the quote from Madison above illustrates, writers on constitutional drafting processes frequently invoke “passions” as an issue to be grappled with. There is a fear that the heat of the moment could lead the drafters to make poor choices, or be unable to accurately calculate costs and benefits. Elster (1995); Sunstein (2000). If cognitive biases lead parties to underestimate future benefits and overestimate costs, a deal will not be struck at all. But in the reverse situation, parties will conclude a bargain they are then disappointed in, and seek to renegotiate.

those of hidden information decrease over time. We set aside the specific tradeoffs, assuming that they more or less cancel out.

3.3 Why Standard Solutions Do Not Work

One standard answer to the problem of incomplete information is to write loosely defined contracts that allow flexible adjustment over time as new information is revealed. The parties will be able to specify performance within general parameters in light of changing circumstances. There is, however, a well known risk of moral hazard from such loosely specified contracts. If performance is not precisely specified, one might claim that circumstances have changed in order to take a greater share of the constitutional surplus. Indeed, knowing that this is a possibility down the road, a party might seek to conceal its intentions and endowments from its constitutional partners during negotiation. Trying to address the problem of incomplete information through drafting flexible “framework” constitutions, then, may exacerbate strategic problems of hidden information.

The reverse is also true. A standard response to the problem of hidden information is to write a more complete agreement specifying contingencies. By forcing the other party to reveal information during negotiation, one can minimize strategically generated surprises down the road. But this solution to the problem of hidden information, in turn, exacerbates the risk of rigidity in the face of exogenous change. The more one tries to solve one problem, the more one exacerbates the other. Constitutions that can solve the problem of hidden information while remaining flexible would seem to have a significant advantage.

Another standard solution to problems of hidden and incomplete information is to rely on third parties. Analogizing to contract law, one might imagine a theory of constitutional review

in which the courts seek to correct bargaining problems down the road (Scott 2003). In such a case, the role of the court would be to provide default rules that reflect its understanding of the position the parties would have bargained to, should they have had all the information at the time. In contract theory, courts playing this role can provide a disincentive for negotiating parties to hide information from the other party.

There are significant problems, however, with expecting courts to be able to play this function for constitutions. First, there are capacity issues in which the courts may be unable to determine what the appropriate rule is. Second, in the constitutional context, no matter what decision the court makes, the relevant parties still face the second-order decision as to whether or not to comply with the court decision. That is, there is no guarantee that the decision will be followed and there is no external enforcer of the court decision. One must thus return to the incentives of the parties to understand constitutional endurance. Finally, the assumption that constitutional courts are able to correct bargaining problems of hidden information is problematic because courts are not automatically granted the power of judicial review. Indeed, the existence of a constitutional court is itself the product of the constitutional negotiation, a term over which parties will bargain (Ginsburg 2003).

To summarize, two sources of uncertainty, caused by variance in exogenous parameters and by strategic incentives to hide information, mean that parties are unable to produce a complete constitutional contract. For each of them, information revealed later in time may affect the parties' perceptions of the arrangement, putting pressure on bargains that may have been self-enforcing at the time they were written.

3.4 Renegotiation and Breakdown

In considering whether to renegotiate, parties will consider their position in the current bargain, comparing it with expected outcomes of a constitutional renegotiation. Change in the constitution, however, is not costless. Amendment processes vary widely in their difficulty and complexity, and this will be a factor that affects a decision to seek to change the terms. We discuss this further below. Even more costly than amendment is total replacement, which is typically more costly because there are more issues to bargain over, and putting all the issues on the table renders the bargaining results less predictable *ex ante*.³³

If the expected payoff of constitutional renegotiation (conceived of as the set of all possible alternatives multiplied by their probabilities of obtaining, less negotiation and switching costs) exceeds the current stream of benefits, parties will opt for renegotiation. Once a party seeks renegotiation, it must consider what means to use. Here the constitution itself comes into play, for it will typically have provisions to amend its terms. There are two primary mechanisms by which constitutional change occurs: formal amendments to the text, and informal amendments that result from interpretive changes. We expect that flexibility in these mechanisms of amendment will facilitate renegotiation.

Sometimes, however, infra-constitutional means of adjustment may be unavailable. This may be because a counter-party controls crucial institutions such as the legislature or courts that are necessary for formal or informal amendment. In such circumstances, the party may simply transgress the constitution and see if other parties acquiesce. Here the logic of coordination takes over. If the citizens or opponents can coordinate among themselves, they can refuse the

³³ Thus we expect that the costs of renegotiation increase with the scope of the current bargain.

proposed change by enforcing the terms of the constitution. In these instances, the original constitution survives, enforced. If coordination does not occur, the constitution may be replaced.

Consider as an example an executive who wishes to extend his term in power, a frequent scenario well illustrated by recent events in both Venezuela and Pakistan. The executive may be induced to seek an extended term by his own thirst for power, or because of external shocks such as military crises that disrupt the constitutional equilibrium, rendering it prohibitively costly for the executive to work within constitutional limits conceived under more stable conditions. Having made the decision to extend his term, the executive has two choices regarding his treatment of the constitutional order. One option is to retrofit the constitution to his current behavior, either by amending the constitution or securing an interpretation of it that is favorable to his transgression. A second option is to bypass the constitution either by declaring the current constitution null and void and commissioning its replacement or suspending it, formally or informally, in order to act without any constitutional limitations. Extra-constitutional action, by either replacement or suspension, results in constitutional death, although in cases of *informal* suspension, we might think of the constitution as persisting unresponsively on life support.

The decisions of whether or not to act within the parameters of the constitution and, subsequently, which specific intra- or extra- constitutional action to take depend on the executive's expectations of the enforcement of constitutional limits by others. An expectation of strong enforcement will affect the executive's decision up and down the decision tree. If constitutional transgression is likely to be contested, the executive might decide to forgo transgression altogether, thus maintaining the original equilibrium. Similar considerations also enter the calculus as to *how* to modify existing arrangements if that path is chosen. Given an expectation of strong constitutional enforcement, the executive will prefer to remain within the

constitutional order, choosing to retrofit the constitution to accommodate her transgression through amendment or interpretation rather than to suspend or kill the constitution. In situations of low enforcement, in contrast, it may be easier to replace the document than it is to alter it, regardless of how low the amendment or interpretation costs may be.

To summarize, this model of constitutional transgression leaves us with three general propositions regarding the lifespan of constitutions.

- (1) Strong *enforcement* mechanisms will decrease the probability of transgression *and* extra-constitutional replacement;
- (2) External shocks and crises will increase the probability of transgression, as will characteristics of the state that lead to such crises; and
- (3) Conditional on transgression, easily *adaptable* constitutions will decrease the probability of replacement.

These are general expectations, of course, and in the next sections we turn to the specific mechanisms of crisis, enforcement, and adaptation in order to understand the processes in more detail and to generate specific hypotheses regarding observable risk factors.

3.5 Investigating Mortality: Shocks and Structure

Our theoretical framework implies a set of general propositions that we specify more fully here. Analytically, it is useful to organize risk factors into three categories. Constitutional lifespans will depend on, (1) the occurrence of shocks and crises (*precipitating events*); (2) structural attributes of the constitution, namely its detail, enforceability and its adaptability; and (3) structural attributes of the state.

The duality between shocks and structure runs through other accounts of institutional change. Many of these accounts, such as those influenced by the concept of “punctuated equilibrium” in evolutionary biology, tend to emphasize shocks over structure (e.g., Krasner

1984). Some scholars have suggested that, as a result, the literature on institutional change has underestimated change unassociated with crisis (Cortell and Peterson 1999; Pierson 2004). We are open, then, to the possibility that constitutional replacement can occur absent any immediate crisis.

An understandable presumption is that exogenous shocks are a sufficient, perhaps even necessary, cause of constitutional change. Peter Russell (1993: 106) articulates this notion most emphatically: “No liberal democratic state has accomplished comprehensive constitutional change outside the context of some cataclysmic situation such as revolution, world war, the withdrawal of empire, civil war, or the threat of imminent breakup.” Our reading of constitutional histories confirms that constitutions frequently appear to die because of exogenous shocks, such as wars, regime change, and shifts in the boundaries of the state, but we are in a position to subject this presumption to closer scrutiny. Linking a precipitating event to the time of death, we recognize, does not constitute a complete autopsy. In retrospect, it is easy to attach too much explanatory power to events simply because of their coincidence. A civil war which seems to have so obviously foretold the end of a constitutional system will seem lethal (to the constitution) only afterwards.

The crucial question we wish to consider is whether there are features of the constitution that can help it to endure in the face of pressures. Many constitutions may indeed withstand exogenous shocks while others fall. Also, some events (e.g., such as coups) are likely to result, to some degree, from underlying instability produced by constitutional provisions and therefore may be endogenous. These possibilities imply a clear set of theoretical and analytical strategies in assessing cause of death. The first is, rather obviously, to identify and measure the effect of *all* crises, not just those events in periods coinciding with constitutional demise. The second is to

investigate the underlying structural causes of constitutional instability. These structural risk factors may be aspects of constitutions that render them more or less resilient than others, or some political, social, or economic conditions of the state that are more hospitable to constitutional survival. Thus, we begin with a very simple model in which we posit that certain precipitating factors (events) will increase the risk of mortality. Some of these factors we assume to be exogenous to the constitutional system, while some at least to some degree mediate aspects of the constitutional system. We posit a set of structural risk factors that have both direct effects on mortality and indirect effects, via certain precipitating factors. Below, we identify a set of precipitating events as well one of structural risk factors.

3.6 Precipitating Causes of Constitutional Death

We have rather strong intuitions about what sort of events would destabilize constitutional systems. They should be those that significantly alter the balance of power within either the regime or the state. It is not hard to assemble a list of such events, as they constitute the milestones of a state's political history. Because we are interested in testing the explanatory power of these events against that of more structural factors, we prefer to err on the inclusive side with respect to such a list. For this reason, and for sheer historical curiosity, we reviewed the constitutional histories of all countries to inductively generate a set of immediate factors that lead to constitutional demise.

Military Subjugation. Defeat in war or takeover by an outside power indicates a failure of the current state and can lead to a new indigenous constitution or an occupation-imposed constitution. Such incidents often compromise the state's sovereignty and imperil the ruling elite, thus implying a reconsideration of the original bargain. Well known cases include Japan's

1946 Constitution and Iraq's 2005 Constitution. Others include Afghanistan 1979, Dominican Republic 1924, Haiti 1918 and 1932, and Cambodia 1981. A special case of crisis after a loss in war, but not direct occupation, would be Paraguay in 1940. Note that occupations may trigger new constitutions, but the resulting documents may be less stable than those originating under other circumstances, since enforcement is secured by an outside power that withdraws at some point. We return to this possibility in our discussion of enforceability below.

State Mergers and Secessions. Traditionally, one of the first acts of a new state is to write a new constitution. This moment – the “hour of the lawyers” in Dahrendorf’s (1990: 3) discussion of the stages of statehood – represents a strong signal of the state’s sovereignty as well as a covenant for the disparate factions that come together to form the state. Of course, states that came of age long before the ritualistic practice of constitution-making will have been deprived (mercifully?) of their “hour of the lawyers.” Some of these (Britain) never call in the lawyers, while others do so only much later: for example, Thailand’s first constitution was in 1932, though the state had retained independence since its establishment in current form in the 18th century. Our data show, in fact, that most states that emerge after 1789 write a new constitution within the first year of their birth while those states that predate the United States document wait an average of 85 years after 1789. It follows from these patterns that major changes in the territory of the state (to the extent that they approximate re-births) would require some reconsideration of the state’s fundamental document. Examples range from mergers in Arab world (e.g. the United Arab Republic in the 1960s, Iraq and Jordan in 1958, or North and South Yemen in 1991) to breakups of federations such as the Czechoslovakia or the Soviet Union.

Diffusion. Constitutions are highly symbolic and public documents. As such, it seems likely that the adoption of new constitutions in other countries (especially in geographically or culturally proximate countries) will increase the probability of a new constitution, a general process that some summarize as “diffusion” (see Elkins and Simmons 2005). Elster (1995: 368) has observed that constitutions tend to be written in waves, typically following the end of great conflicts like World War II and the Cold War. Indeed, the distribution of new constitutions across time shows a modest amount of temporal clustering, which would seem to suggest an interdependent process. Inspection of select cases suggests that this temporal clustering may well be something resembling diffusion. For example, Colombia’s 1990-91 reform allegedly triggered the idea of constitutional reform (albeit with ideologically distinct designs) for Hugo Chavez, the architect of Venezuela’s “Bolivarian” constitution in 1999, a constitution that has subsequently inspired rumblings of reform in Ecuador and Bolivia.³⁴

Regime Change. As described in some detail in section 2, regime and constitutional transition are closely related. In the analysis that follows, our intent is to understand the strength of this association, once we control for other factors, and whether democratic transitions are more likely to trigger new constitutions than are authoritarian transitions. Of course, the rich “transitology” literature reminds us that any transition effect may mediate those of underlying structural factors such as economic development.

Leadership Transition. Our reading of the historical record suggests that new constitutions sometimes result from transitions in executive leadership, especially when the change reflects an ideological or programmatic shift. For example, the alternation of power between liberals and conservatives in many Latin American countries in the 19th century often

³⁴ In an interview with Marta Harnecker (2002), Chavez credits the Colombian constitution as his inspiration for his political ambitions.

preceded constitutional change. Also, after the assassination of King Abdullah in Jordan in 1951, the passage of a new Jordanian constitution by his son and successor reflected a personnel shift. A constitutional change under these circumstances suggests a shift in the composition of the elite, at least compared to that of the group that reached the original constitutional bargain. It may follow that a constitution that perishes under these circumstances was never a highly consensual document or that its original drafting body was not especially representative. In other cases, a constitutional shift in concert with leadership change may be built into historical custom. The various Socialist constitutions, for example, seem to follow the installation of new leaders in the Soviet Union (1936, 1977) and China (1982), a practice that was often justified by the Marxist view of evolution in stages (see Go 2003). We should note that some of these leadership changes may be extra-constitutional (i.e., coups) while some may be constitutional transitions in power. In the case of coups, of course, the result may be regime change as well as simply a change in leadership.

Institutional Crisis. Another internal factor is major institutional crisis, irrespective of any ideological, leadership, or regime change. These crises often result from a disagreement about the rules among constituent parts of the state, on either a horizontal (e.g., across branches) or vertical (across jurisdictional levels) dimension. Typically, such disagreement comes in the form of disputes between the executive and the legislature (at least within democratic regimes) or between the central and sub-national governments. The United States case is instructive here. As is well-known, the Articles of Confederation suffered from a number of defects that hastened their demise. These concerned public finance, by which the national government could not raise taxes to provide for the common defense and other public goods; the inability to overcome internal barriers to trade; and the inability to issue currency. Without a strong central

government, the Articles did not provide for the generation of public goods, and provoked the writing of the constitution to remedy these defects. Another example is the demise of Indonesia's 1949 post-independence Constitution, federal in character, which was discarded in favor of a unitary constitution in 1955 following pressures for increased centralization. Besides center-periphery disputes, struggles between legislatures and executives often erupt into calls for a fundamental revision of the ground rules of their relationship (for example, the Philippines 1973 and France 1958).

3.7 Structural Sources of Constitutional Resiliency

The shocks that we describe above threaten the existing political order and undoubtedly have some effect on the lifespan of constitutions. Our crucial question concerns the degree to which underlying structural factors play a role in mortality. In particular, do aspects of constitutional design play a decisive role? Our theory suggests that constitutions need to resolve problems of hidden information, provide incentives for enforcement (particularly by citizens), and also need to provide for flexibility in the face of exogenous pressures. We expect that the *specificity* of the document, the *inclusiveness* of the constitution's origins, and the constitution's ability to *adapt* to changing conditions will be important predictors of longevity. We also expect that a set of structural conditions associated with the state render the constitutional system more or less stable. A set of factors that we do not consider, at least at present, are the functional provisions of constitutions (e.g., the nature of executive-legislative relations, federalism, rights, etc.).

3.7.1 *Constitution-level Structural Factors*

Specificity. One strategy that can help constitutions survive is to try to anticipate relevant sources of pressure and deal with them in the constitutional text, more fully specifying the constitutional bargain. It is particularly helpful with regard to solving problems of hidden information among the bargainers. By forcing counter-parties to consider various possible future shocks and scenarios, the drafters can minimize problems of strategic behavior and hold-up once the constitution comes into effect. We thus predict that specificity will be associated with constitutional survival. We use the term specificity in a general manner: we conceptualize it as involving not only detail with regard to particular terms, but also scope of the type of events the constitution covers. A broader scope of the constitution also indicates a certain amount of investment by the parties in negotiation, which may raise the prospective cost of re-negotiation.

Inclusion. It is very clear that constitutions throughout the world are treated with varying amounts of respect by citizens and elites alike. For some countries (e.g., the United States), the document is an important symbol of sovereignty and statehood; for others (e.g., many Latin American constitutions of the 1800's), the constitution is of considerably lesser stature. In part, the connection between legitimacy and survival is reciprocal: framers and citizens will be more attached to a legitimate document and documents that survive will in turn engender norms of attachment. Our theory suggests a further reason: constitutions whose provisions are known and accepted will more likely be self-enforcing, for common knowledge is essential to resolving coordination problems (Chwe 2003). This suggests that inclusion in the process of producing the constitution will help ensure enforcement by the public or other relevant actors.

There are two critical stages of the process, the writing and the approval stages, in which the degree of inclusion is manifest. With respect to the writing process, an extreme case of

secrecy might be Burma's current efforts. There, the military government has commissioned a constitution from a group of hand-picked authors (excluding members of the opposition party that won 80% of legislative seats in the last election) and cloistered the assembly in a remote location outside the capital. Of course, a degree of privacy can be quite useful under some circumstances (as scholars have noted of the Philadelphia convention), and documents arising from private settings may be legitimate as long as the group assembled is adequately representative (Elster 1991). In cases in which important factions are excluded (or, as is sometimes the case, exclude *themselves* as Sunni leaders did during the drafting of Iraq's 2005 document), legitimacy is severely compromised. The case at the other end of the spectrum from Burma may well be that of Brazil in 1987-88. The Brazilian constitutional convention was characterized by extraordinary public involvement, including the submission of citizen proposals, the result of which was one of the longest constitution in the world. It is an unwieldy document to be sure, but a highly legitimate one, and has endured significantly longer than has the typical Latin American constitution. The approval process can be just as important as the deliberative stage. Ratification by a non-rubber-stamping public or by an elected body that is inclusive or representative of the public confers legitimacy. Moehler (2007) reports survey evidence from a set of African cases that suggests that constitutions that are ratified by public referendum enjoy higher levels of legitimacy. Two specific hypotheses follow from this logic of enforcement and legitimacy. Constitutional durability should increase with the level of public inclusion during both (1) drafting stage and the (2) approval stage.

Adaptability. As described above, exogenous change puts pressure on constitutional bargains. The ability of a constitutional system to adapt to changes in its environment will determine whether it remains in equilibrium. There are two primary mechanisms by which

constitutional change occurs: formal amendments to the text, and informal amendment that results from interpretive changes. To a certain extent, these mechanisms are substitutes. If the methods of securing formal amendment are difficult (as in the United States, with its requirements of ratification by $\frac{3}{4}$ of state legislatures) there may be pressures to adapt the constitution through judicial interpretation. Ackerman's well-known account of constitutional change in the 1930s in the United States draws on such logic (Ackerman 1992). If, on the other hand, formal amendment is relatively simple, there may be less need for judicial or other institutional reinterpretation of the constitution.

Optimal adaptation thus results from the interaction of amendment rigidity and the possibility of reinterpretation of the constitution. The optimal level of flexibility is not universal, but determined in any particular constitutional situation by both exogenous factors (such as the rate of technological or environmental change) and endogenous factors (such as the level of responsiveness of political institutions under the constitution, and the level of inclusion at the outset of the constitution scheme.) A rigid constitution that fits its society well at the outset may be suitable if the rate of technological or environmental change is low. But the same constitution may perform poorly if change is rapid.

Constitutions that lack either flexible formal amendment processes or effective mechanisms of informal reinterpretation may not adapt to changing environmental conditions. We predict that such constitutions will force actors to take extra-constitutional action to secure changes and will thus die young.

3.7.2 State-level Sources of Constitutional Resiliency

We expect that some state environments will be more conducive to constitutional survival than others. One set of such factors, of course, includes those that promote stability by

mitigating internal conflict among groups. Such factors will sometimes be manifest in the crises that we specify above, but they likely affect constitutional lifespans directly as well. Without going very deeply into their theoretical moorings, we can specify several stabilizing factors that seem clearly relevant. One is the *age of the state*, with the expectation that older states have a stronger sense of national unity and have achieved some degree of accommodation among conflicting groups (whether they be culturally or politically based). One can conceive of older states as having a more established set of unwritten constitutional conventions that will allow for adjustment over time, and provide some insulation when shocks put pressure on the written bargain. Another factor may be the *level of development*. Notwithstanding a mountain of more nuanced theory and evidence regarding the relationship between development and regime change, a basic empirical finding is that development tends to stall political change, in whatever direction (Przeworski et al., 2000). One can think of development as indicating that current constitutional arrangements are successful at providing a stream of benefits to various players, such that their absolute status is more secure under the current bargain than it would be under alternative arrangements. Transition costs are also likely to be higher in richer environments, as the opportunity costs of negotiating basic principles are greater. Finally, *ethnic heterogeneity* is likely to promote instability, inasmuch as political competition often falls along ethnic lines. A large literature on ethnic conflict points to the difficulties of institutional design in such environments (Horowitz 1991, 2000).

4 ANALYTIC METHODS, MEASURES, AND DATA

We now return to our historical census to test the implications of our account with data on the characteristics of these constitutions, historical crises, and state-level predictors.

4.1 Estimation Issues

We use an event history model in order to estimate the duration of constitutional systems. A variety of methodological decisions arise, mostly regarding the treatment of time. The first issue concerns the unit of time, which for us is the year. Constitutional replacements, suspensions, or births that occur in the calendar year are counted as having occurred December 31 of that year. If multiple events occur during one year, we count only the last event in a given year. Thus, we ignore a handful of constitutional systems that begin in a calendar year but do not survive past December 31, and understate the frequency of amendment when a constitution is amended multiple times in a year. A second issue concerns censoring. All current constitutions are right-censored, since our observation period ends with 192 constitutions still alive. One of the principal benefits of event-history analysis is that it accounts for this sort of censoring as matter of course (see Box-Steffensmeier and Jones, 2004). Left censoring affects fewer of our cases, since our observation period almost entirely covers the universe of modern constitutions. For several cases, however, the constitution's promulgation predates the state's date of independence, a short time period for which we might observe mortality, but none of the risk factors.

Another issue concerns the effect of time on the baseline hazard. Specifically, do constitutions have an increased, decreased, or stable risk as they age? Our theory suggests cross-cutting influences, and we remain agnostic about their combined effect. On the one hand, as we point out above, one might suspect that constitutions are more likely to wither with age as their provisions and proclamations become increasingly out of step with reality, thus increasing the probability of transgression by some party. On the other hand, constitutions may crystallize with time, as they grow in stature and become enmeshed in the national culture and politics of the

country, thus increasing their legitimacy and enforceability. Of course, the effect of time may be non-linear. For example, the hazard rate may increase through the early years before reaching an age at which the constitution crystallizes and becomes relatively invulnerable. Another intriguing possibility is that there are certain ages or thresholds (corresponding to generational turnover perhaps) that are particularly difficult for constitutions. This sort of periodicity undergirds the critical juncture approach to political and constitutional development (e.g., Burnham 1970; Ackerman 1993). Our further analysis of the baseline hazard (see below) leads us to conclude that a declining hazard is the prevailing effect of time, and we thus report results for a Weibull model, although this distributional choice does not affect the results in significant way.

A fourth consideration concerns the specification of the independent variables with respect to time. First, in measuring the effect of events, we face the issue of how to specify the timing of their effects. The precipitating factors are events that, for the most part, occur within a single year. With respect to regime transition, however, change may be incremental and protracted (e.g., Mexico and Brazil) and specifying abrupt shifts is inappropriate. Where we can measure incremental processes, such as that of regime change, we do so as we describe below. Also, the effects of events can lag the event some unknown amount of time. Usually, for example, constitution-making is one of the first acts following regime change. In Chile, however, Pinochet's constitution did not come into effect until seven years after his *coup d'état*. For the most part, though, our reading suggests that constitutional events occur within two years of the occurrence of a precipitating factor, so we include two-year lags for several variables to account for these time differences.

A further issue concerns missing data. Due to the breadth of our study, many of the independent variables have at least some missing data. We report results for the full sample, using mean imputation, by year, to fill in the missing data. Such imputation tends to deflate the standard errors, creating the possibility for type-I errors (Allison 2001). As a result, marginally significant results should be treated with caution.

4.2 Measurement of Independent Variables

Table 1 summarizes the relevant concepts, their measures, and their predicted effect on constitutional survival (note that a positive sign indicates increased risk of death). Below, we describe these measures and their alternatives briefly, elaborating more fully those measures that we have developed ourselves as opposed to drawing from other sources.

Table 1 here

4.2.1 *Precipitating Factors*

Defeat in war is scored 1 if the country coded as having been “defeated in war” or the object of an “imposed settlement” according to information from the Correlates of War (COW) project. Our measure for the *change in state boundaries* (either by merger or secession) is from COW’s dataset for Territorial Change (Tir et al 1998). The *diffusion* variables are specified as spatial lags (see Simmons and Elkins 2004).³⁵ We test two simple measures: one of new constitutions globally and one of those in the neighborhood, defined as a country’s contiguous neighbors. Regime transition is measured by the yearly change in the Polity score. We construct two variables, in order to capture effects of transitions in both directions. Each variable, *democratic transition* and *authoritarian transition*, records the absolute magnitude of the change

³⁵ Democratic transitions, authoritarian transitions, coups, executive transitions, and internal crisis and conflict are all lagged, repeatedly, for two years. That is, an event occurring at time t is coded as occurring in t , $t+1$, and $t+2$.

in the democratic or authoritarian direction, respectively, with changes in the other direction coded as zero. We code *leadership transitions* in two different ways, in order to capture both constitutional and extra-constitutional changes. We measure extra-constitutional transitions with Arthur Banks' (2001) variable "coups" and constitutional transitions with Banks' variable "executive transition." We approximate *internal crisis* with an omnibus index in Banks that aggregates a set of events from assassination to strikes to demonstrations.³⁶

4.2.2 *Structural Factors*

We conceive of the *inclusiveness of the constitution* as stemming from the circumstances surrounding the writing and the ratification of the document. We measure the level of inclusion in the ratification process with a binary variable that codes whether or not the ratification procedure involves either public referendum or a publicly elected constitutional convention – both of which we view as strong legitimating procedures. The source for our coding is the ratification instruction in constitutional documents. We recognize that public involvement during ratification probably is more effective in democratic regimes than in authoritarian regimes, so we also include an interaction between public ratification and each country's polity score.

With respect to the drafting stage, we would ideally have some information on the level of inclusion in the group of constitution-writers. Such a measure is difficult to construct in systematic form (but see Widner 2006 for a promising approach to recent cases), so we utilize two proxy variables that should be broadly indicative of inclusion. The first is whether or not the state was occupied by a foreign power during or within the two years prior to a constitutional

³⁶ Banks' index sums the following events with their respective weighting in parentheses: assassinations (24), strikes (43), guerilla warfare (46), government crises (48), purges (86), riots (102), revolutions (148) anti-government demonstrations (200).

replacement (e.g., Japan 1946 or Iraq 2005), a variable we construct from historical sources. In all, we identify 89 episodes of occupation, 42 of which are associated with a new constitution. The second is the extent to which the context of constitution-making could be characterized as democratizing. We reason that those constitutions written under circumstances in which the state is moving (or has recently moved) towards democracy are more likely to utilize – or at least be perceived to have utilized -- inclusive processes. We measure this by calculating the total change in democracy (positive values meaning increased democracy) within one year of the constitution's promulgation.

Next, we consider *specificity*. Constitutions vary systematically in their level of detail. A tractable indicator of specificity is the length (in words) of the document. Brazil's constitution, running 41,404 words at its birth in 1988, is famous for having constitutionalized nearly every aspect of public life; Thailand's recently deceased constitution was just as long, with 336 articles and 142 pages in English translation. Some constitutions are surprising verbose, such as that of tiny Tuvalu, whose 34,801 words outnumber the island-nation's 11,992 inhabitants. By contrast, the U.S. Constitution, at a mere 10,165 words, is seen as providing a framework for politics rather than a repository of policies. Berkowitz and Clay (2005) argue that generality indicates flexibility and helps survival; they present evidence in the context of U.S. states that shorter constitutions are more durable. Our own theory is that specificity indicates investment in the constitutional bargain, while helping to resolve problems of hidden information. We thus predict that specificity helps survival. We wish to examine whether our hypothesis or that of Berkowitz and Clay holds in the broader universe of national constitutions.

We measure aspects of adaptability with three indicators. We measure the first, *ease of amendment*, using information on both the observed amendment rate, and the amendment

procedures of each constitution. The amendment rate itself is unsuitable, as it will be a function of many of the same factors that explain constitutional replacement. Our preference is for a measure of amendment ease based on amendment procedures. However, the comparative flexibility of the diverse set of procedural arrangements is not obvious *ex ante*. Our approach is to model the amendment rate and estimate the effects of particular amendment rules, net of other predictors. Thus, we regress the incidence of amendment on a set of amendment procedure variables as well as on a host of factors that should predict political reform more generally, including those factors included in our model of constitutional duration.³⁷ The unit of analysis in this model is the country-year, and the dependent variable is binary, coded one for each country-year in which an amendment occurred. We estimate the model with logit and include all of the independent variables from our principal model as well as several variables that capture the amendment procedure: the number of actors involved in various stages of the amendment process, the margin necessary to pass amendments through the legislature, and dummy variables to indicate the role of different bodies in the process. After estimating the model, we predict the probability of amendment by constraining all variables except the amendment procedures to their mean.³⁸

The primary mechanism for interpretive flexibility is the presence of a court empowered to conduct *constitutional review*. Courts can and do re-interpret texts in quite profound ways: our assumption is that this can provide for needed flexibility in the face of exogenous shocks. We construct a binary variable from our own data as to whether there is any judicial body entitled to conduct constitutional review, though we recognize that formal measures do not

³⁷ Lutz (1994) and Lorenz (2005) recommend roughly similar measures in another context.

³⁸ Our approach is akin to Two-Stage Least Squares (2SLS), albeit 2SLS “by hand,” which implies that we should adjust the standard errors of our estimates in the second stage equation. Such adjustment, however, is not straightforward in an event-history framework (see Achen 1987).

always capture the extent of observed judicial power to interpret the constitution (Ginsburg 2003).

A third measure of flexibility is legal tradition. Many believe that, regardless of the presence or absence of constitutional review, a legal tradition based on *common law* as opposed to *civil law* will better facilitate constitutional adaptation. The basic intuition is that common law practice will adhere more closely to actual social practice than will civil law rulings which tend to ignore precedent and *de facto* law (Mahoney 2001). Berkowitz and Clay (2005), for example, provide suggestive evidence that U.S. state constitutions with civil law origins are less stable. While we suspect that legal tradition may indeed be consequential, we are skeptical that the common law and civil law distinction adequately captures the relevant variation. Nevertheless, we include the distinction in the model in recognition of its importance to the broader literature in comparative law.

Regarding the structural attributes of the state, we measure *economic development* with a measure of energy consumption per capita (in 1000's of pounds of coal per capita per year). This measure correlates highly with GDP per capita, which is only available post-WWII. We utilize Fearon's (2003) measure of *ethnic fractionalization*, defined as the probability of selecting two individuals with different ethnicities when drawing randomly from the national population. This is in some ways an unsatisfactory measure, as we can imagine highly fractionalized environments that would produce constitutional stability (e.g. India) precisely because no single group can dominate the others. Nevertheless, we include it in the absence of any better measure. We capture *state development* with a measure of the age of the state, calculated from the independence dates in Paul Hensel's ICOW data, and *democracy* with the 0-20 Polity scale.

5 RESULTS

5.1 Baseline Estimates

Constitutions, in general, do not last very long. The mean lifespan across the world since 1789 is 17 years. The survival curve in Figure 3a provides a better sense of life expectancy. Interpreted as the probability of survival at a certain age, the estimates show that one-half of constitutions are likely to be dead by age 18, and by age 50 only 19% will remain. Infant mortality is quite high — a large percentage, approximately 7%, do not even make it to their second birthday. Also, we see noticeable variation across generations and across regions. For example, Latin American and African countries fit the joke of the French-constitution-as-periodical much better than does France itself. The mean lifespan in Latin America (source of almost a third of all constitutions) and Africa is 12.4 and 10.2 years, respectively, with 15% of constitutions from these regions perishing in their first year of existence. Constitutions in Western Europe and Asia, on the other hand, typically endure 32 and 19 years, respectively, and their lifespans are the least skewed. OECD countries have constitutions lasting 32 years on average, suggesting a development effect analogous to its well-known relationship with democracy. Finally, unlike the trend of improving human health, the life expectancy of constitutions does not seem to be increasing over the last 200 years. Through WWI, the average lifespan of a Constitution was 21 years, versus only 12 years since.³⁹ Of course, the various explanatory variables in our model are represented in different proportions within these historical eras, so a general inference of progressively shorter lifespans would be premature.

Figure 3 here

³⁹ Again, we note that these survival estimates account for right-censored cases.

Does the hazard rate (i.e., the probability of death) increase, decrease, or stay the same throughout the lifespan? Recall that we expect multiple competing effects of time, and are agnostic about their combined effect. Figure 3b plots the hazard rate (with 95% confidence intervals) over time. The hazard rate is an estimate of the probability a constitution will die at a certain age conditional upon its survival to that point, and represents the slope at each point in Figure 3a. We restrict this analysis to the first fifty years of a constitution's life, after which only 25% of constitutions remain and our confidence intervals are quite large. The two-humped shape suggests that constitutions are most likely to be replaced around age ten and age thirty-five. However, the risk of replacement is relatively high during most of this period, and it appears constitutions do not begin to crystallize until almost age fifty. Small samples do not allow us to describe the relative risks to those over fifty, except to emphasize that even these hardy seniors are not immortal. Sweden's constitution lasted 165 years only to be replaced in 1974 (Congleton 2003).

5.2 Estimates of Risk Factors

Table 2 presents the estimates from a Weibull model; semi-parametric models (such as the Cox Proportional Hazard) deliver approximately the same results. We report the hazard ratios, in which values over one should be interpreted as increased odds of constitutional demise and values below one as reduced odds. We include three models: one restricted to precipitating causes, one to structural factors, and one incorporating both sets of variables.⁴⁰

Table 2 here

⁴⁰ It might seem sensible to estimate separate models for democratic and authoritarian regimes. However, our theory would not predict there to be differences across regimes. Moreover, when we have estimated separate models based on regime-type, the effect of several precipitating factors varies by regime-type (e.g. internal crisis and conflict triggers new constitutions only in democratic regimes), but the effect of the structural factors is substantively the same.

The overall model statistics suggest that both the structural and shock factors are important predictors of mortality. The chi-squared statistics from a comparison of the log-likelihood of the full model with those of the shock-only or structure-only models are large and highly significant (148.754, d.f.=11 and 209.432, d.f.=14, respectively). Most of the effects in either of the shock-only or structure-only models are borne out in the full model. Not surprisingly we see at least partial support for our hypotheses concerning a number of politically salient precipitating factors. All of these coefficients are signed in the expected direction, except for global diffusion, whose effect is negative and significant in the full model. (The effect of neighborhood spatial lags, however, is as expected). Only three precipitating factors have coefficients that do not reach statistical significance (gain and loss of territory and democratic transition).

We find that several internal features of the constitution are strong predictors of durability, in accordance with our theory. In terms of *inclusion*, public ratification produces more enduring constitutions in democracies, but not in autocracies. This is intuitive: referenda in dictatorships do not genuinely confer legitimacy or facilitate collective enforcement of constitutional terms. We find that constitutions written in democratizing times are more resilient when precipitating events are included in the model. The most influential variables are clearly constitutional review and the ease of the amendment process, both of which decrease mortality. *Adaptability*, it appears, is crucial for constitutional survival. Figure 4 explores the size of these effects for several variables. In the case of amendment ease, an easily amended constitution (one whose probability of amendment is one standard deviation above the mean) has 70 percent chance of lasting until age fifty versus 13 percent for those whose amendment probability is estimated at one standard deviation below the mean. Consistent with our expectations (and

contrary to the findings of Berkowitz and Clay) we find that longer constitutions are more durable than shorter ones, suggesting that *specificity* matters.

Figure 4 here

Among the structural variables, several findings stand out. Ethnic fractionalization and wealth (as captured through energy consumption) have effects in the predicted directions (increasing and decreasing mortality respectively). We find no effect for common law, consistent with our own intuition and contra the well known results in the law and finance literature. We also note that the trend towards shorter lifespans over the two hundred years remains even after we control for a full set of covariates. Constitutions adopted from 1919-1944 are more vulnerable than are those adopted in earlier periods, and those adopted in the post-1945 period are more fragile still.

CONCLUSION

Our analysis of the constitutional life cycle leads us to think of constitutions as rather fragile organisms. Indeed, the average citizen outside of North America and Western Europe should expect to see her country cycle through six or seven constitutions in her lifetime. That estimate, of course, will depend on general levels of stability in any particular country. Those states that are the setting for crises such as war, internal violence, and coups should experience more frequent change. However, over half of the world's constitutions survive even these major shocks, prompting our inquiry into the internal characteristics that may support resilience.

Enduring constitutions share three important qualities that date back to the circumstances of constitutional birth. First, durable constitutions tend to emerge under conditions characterized by an open, participatory process – conditions that encourage enforcement of constitutional

terms. Second, durable constitutions tend to be specific, inducing the parties to reveal information and to invest in the negotiation process. Third, durable constitutions tend to be flexible ones, in that they provide reasonable mechanisms by which to amend and interpret the text to adjust to changing conditions. These findings have natural implications for constitutional design.

Participation in constitutional design is a topic that has generated a good deal of literature, much of it from a normative and theoretical point of view. Inclusive processes of constitutional design are assumed to promote values of deliberative democracy and generate more legitimate constitutions. Participation, however, can occur at various stages and through different modalities, ranging from public input at the early stages of drafting to ratification by referendum (Widner 2007). There has to date been virtually no comparative empirical examination of the effects of different models. Our result, though limited to public involvement in the approval stages of constitutional adoption, suggests that some of the claims of proponents of participation are meritorious and worthy of further exploration.

Our findings on the effect of specificity of constitutional texts contrast with earlier analyses drawn from U.S. state experience. Our theory is that more detailed bargains indicate sunk cost investment by the parties in the constitutional text and therefore relatively higher switching costs to produce a new bargain. Specific documents may also be particularly helpful for resolving strategic problems of hidden information during negotiation, preventing breakdown early in the constitution's life.

Formal flexibility of the constitution has an intuitive relationship with endurance. Our finding that formal flexibility is helpful for constitutional survival, however, seems to cut against the basic assumption that constitutions work through entrenching certain policies beyond the

sphere of ordinary politics. When combined with our result on specificity, we come to the counter-intuitive conclusion that constitutions work best when they are most like ordinary statutes: relatively detailed and easy to modify. We do not, of course, know whether there are significant *political* constraints that protect constitutional documents or provisions from frequent modification in practice. But our finding suggests that there are serious and perhaps underappreciated risks of brittleness in a world of constant change.

We close with a caveat. Although we believe that endurance is helpful, particularly for new democracies, we do not assert that the observed rates of mortality are sub-optimal across all cases. Evaluation of the optimal level of mortality requires examination of particular constitutional histories, work that would complement the large-n approach pursued here.

Figure 1: Constitutional Duration, FDI and Democracy

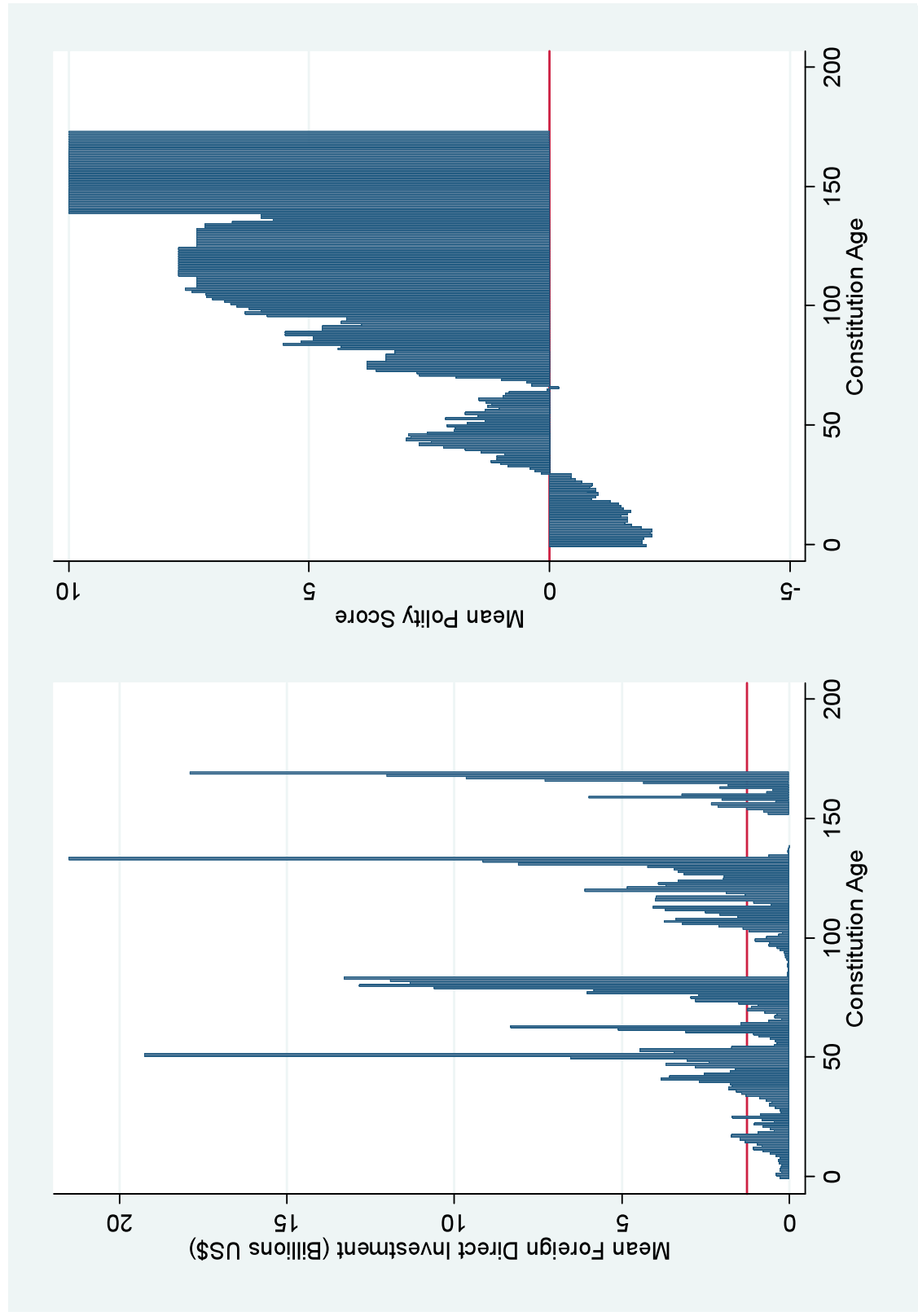
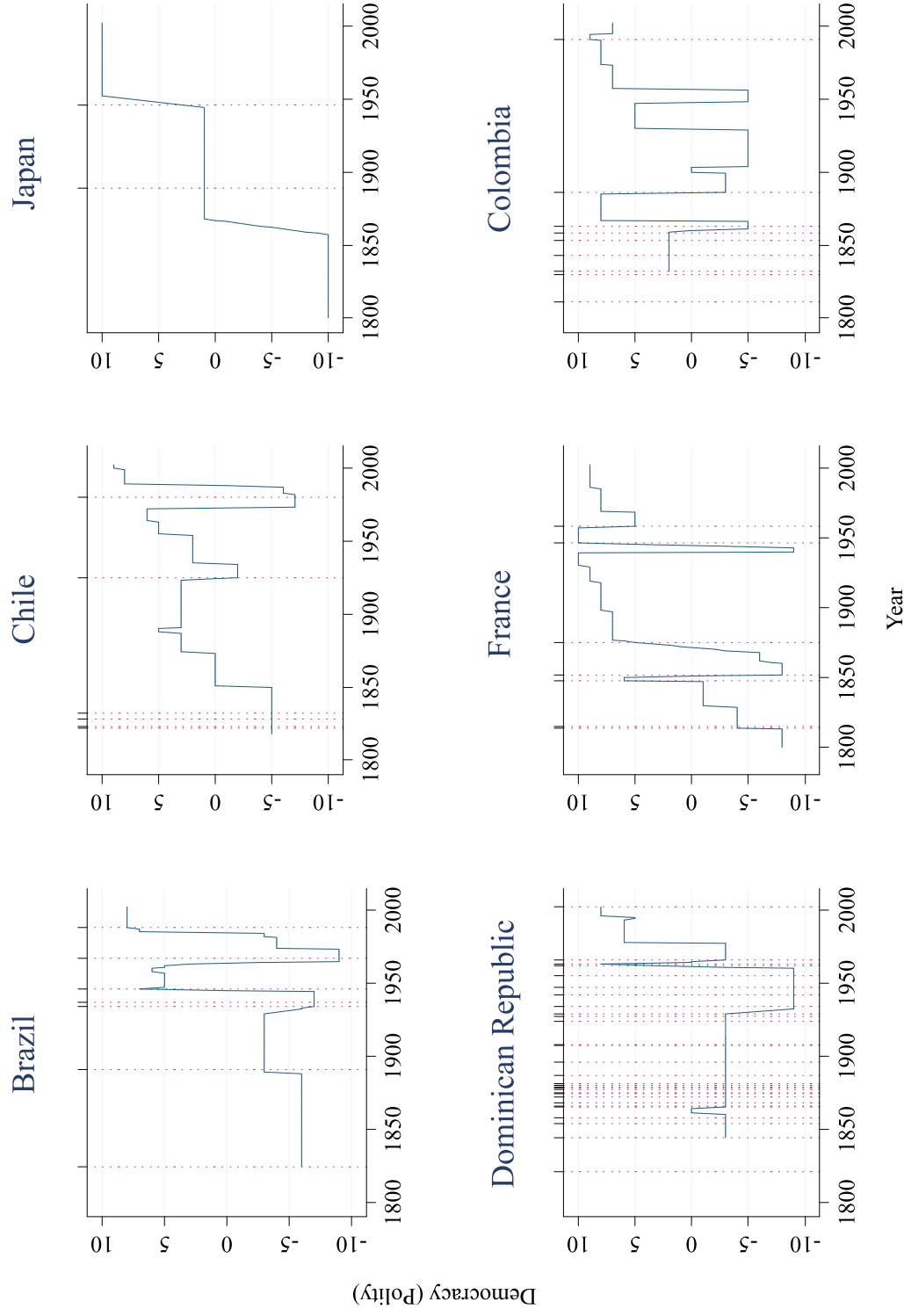


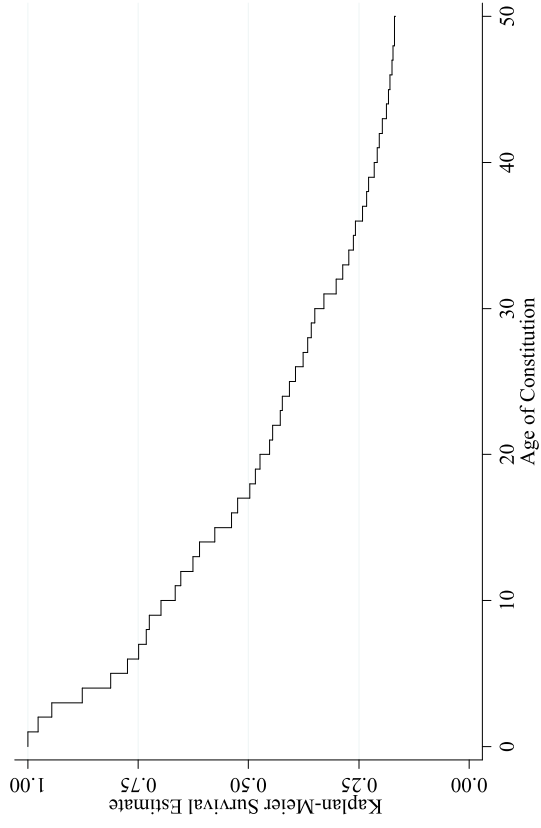
Figure 2 New Constitutions and Shifts in Authority Structure



* Horizontal lines represent democracy and vertical lines represent new constitutions

Figure 3 Survival and Hazard Estimates

a. Kaplan Meier Survival Estimate



b. Smoothed Hazard Estimate

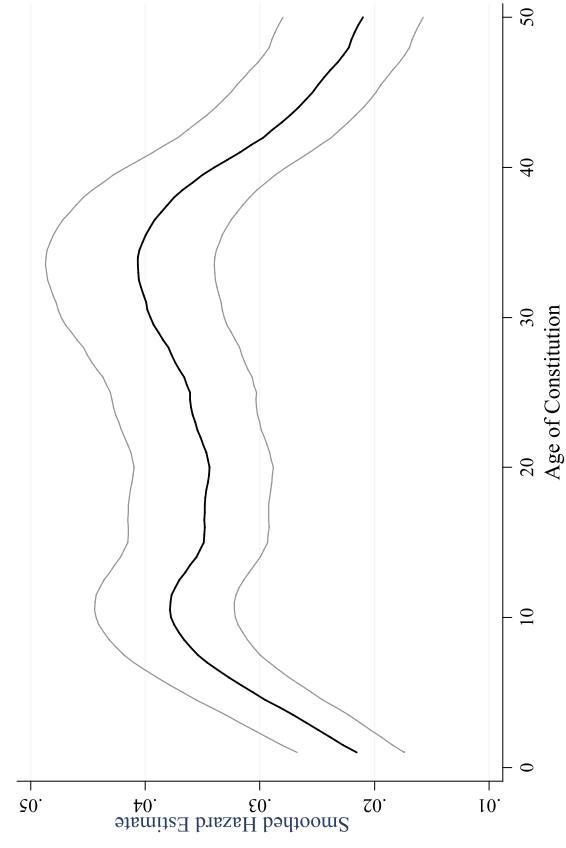


Figure 4 The Effect of Select Variables on the Survival Rate

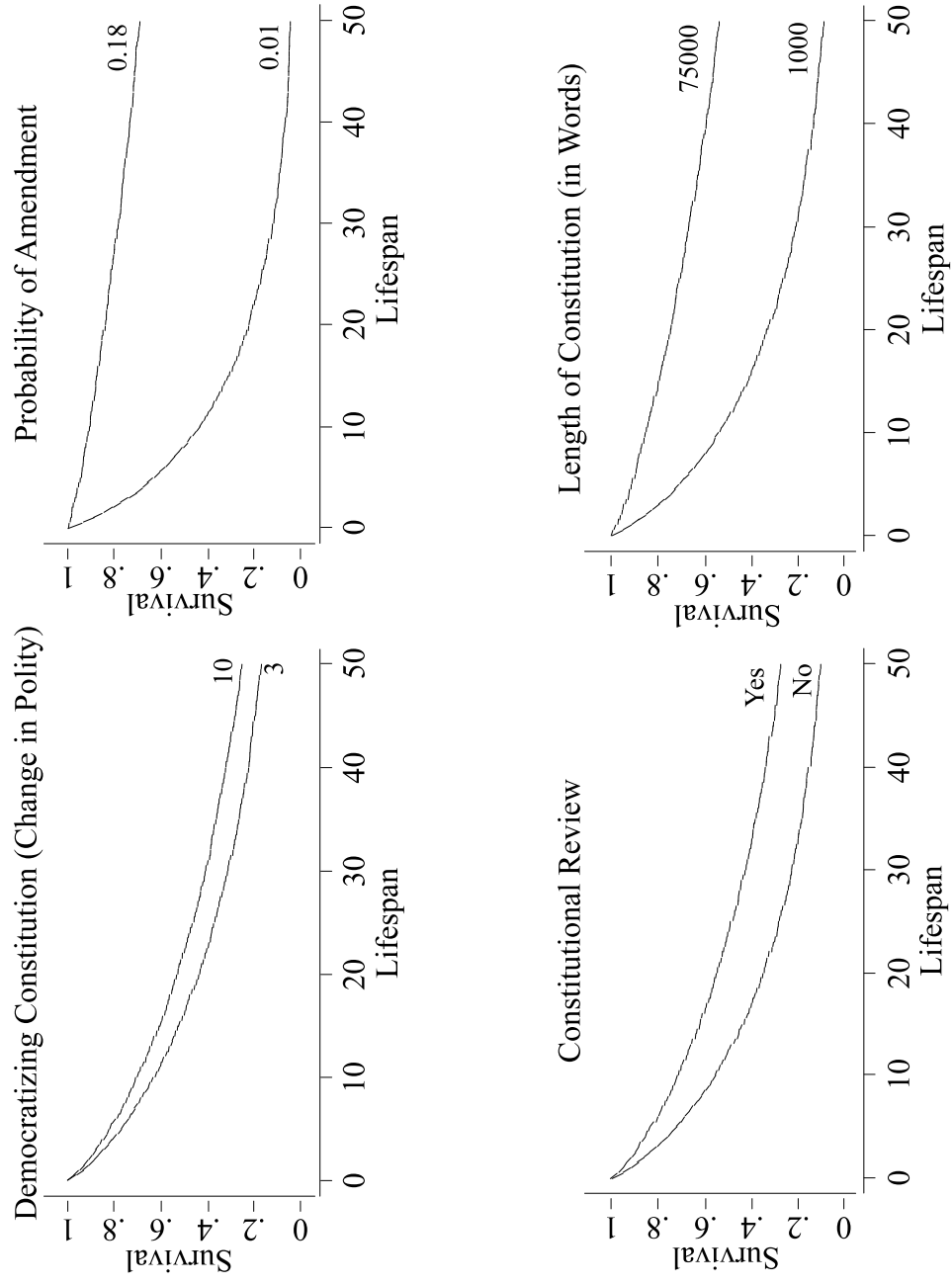


Table 1 Concepts and Measures

Category	Concept	Measure	Effect*	Source	
Precipitating Factors	Defeat in War	Defeat in a militarized interstate dispute dummy	+	COW	
	Gain of Territory	Gain of territory dummy	+	COW	
	Loss of Territory	Loss of territory dummy	+	COW	
	Global diffusion	No. of new constitutions within previous 5 years (global)	+	CCP	
	Neighborhood diffusion	No. of new constitutions among immediate neighbors within previous 5 years	+	COW; CCP	
	Democratic transition	Yearly change in democracy if towards democracy (zero otherwise)	+	Polity	
Authoritarian transition	Authoritarian transition	Yearly change in democracy if towards authoritarianism (zero otherwise)	+	Polity	
	Leadership transition	(a) Coup	+	Banks	
	Internal crisis or conflict	(b) Change in the effective executive	+	Banks	
		Banks' weighted conflict index (rescaled between zero and one)	+	Banks	
Specificity of the Constitution	Inclusiveness of the Constitution	Length of Constitution (rescaled between zero and one)	-	CCP	
		Ratification by public or constitutional convention	-	CCP	
	Indigenous character of Democratizing Constitutions	Ratification by public or constitutional convention in democratic regimes	-	CCP; Polity	
		Foreign occupation at time of drafting	+	COW	
		Change in democracy from the year prior to the constitutional event		-	Polity
Adaptability of the Constitution	Ease of amendment	Predicted amendment rate (rescaled between zero and one)	-	CCP	
	Constitutional review	Provision for a constitutional court or judicial review by an ordinary	-	CCP	

* (+) indicates increased risk and (-) indicates decreased risk

court

Legal tradition	Common law dummy	-	La Porta et al.
Structural Factors of the State	Ethnic Heterogeneity	+	Fearon
	Economic development	-	COW
	Level of Democracy	?	Polity
	State development	-	ICOW

Ethnic Fractionalization

Energy consumption per capita (rescaled between zero and one)

Polity Score

Age of state

Table 2 Predicting Constitutional Duration

	Precipitating Factors	Structural Factors	Full Model
Defeat in War	1.23 (0.20)		1.52** (0.25)
Gain of Territory	1.09 (0.25)		1.12 (0.26)
Loss of Territory	0.79 (0.23)		0.89 (0.26)
Global Diffusion	0.99*** (0.00)		0.99*** (0.00)
Neighborhood Diffusion	1.15*** (0.02)		1.12*** (0.03)
Democratic Transition	1.02 (0.02)		1.02 (0.02)
Authoritarian Transition	1.06*** (0.02)		1.09*** (0.02)
Coup	3.37*** (0.40)		2.21*** (0.27)
Change in Effective Executive	0.76*** (0.08)		0.83* (0.09)
Conflict Index	9.51** (8.62)		45.17*** (47.55)
Public Ratification		1.43** (0.25)	1.41** (0.25)
Public Ratification X Democracy		0.91* (0.05)	0.91* (0.05)
Indigenous Character of Constitution		1.20 (0.31)	1.04 (0.27)
Democratizing Constitution		0.99 (0.02)	0.96** (0.02)
Ease of Amendment		0.04*** (0.00)	0.05*** (0.00)
Constitutional Review		0.56*** (0.08)	0.57*** (0.08)
Legal Tradition		0.85 (0.11)	0.92 (0.13)
Specificity		0.17*** (0.10)	0.26** (0.14)
Ethnic Heterogeneity		2.56*** (0.49)	1.96*** (0.38)
Economic Development		0.17 (0.26)	0.04** (0.07)

Level of Democracy		0.99 (0.01)	0.99 (0.01)
Age of State		0.66 (0.34)	0.65 (0.34)
1919-1944		1.31* (0.19)	1.25 (0.19)
1945-Present		1.49*** (0.18)	1.72*** (0.27)
Observations	12454	12454	12454
Number of Countries	185	185	185
Number of Constitutional Replacements	571	571	571
Log Likelihood	-109.581	-79.242	-4.865
AIC	243.162	194.484	65.731

Odds ratios reported; standard errors in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

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