

The Lifespan of Written Constitutions

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ABSTRACT

How long do constitutional systems persist and what explains their demise? We propose a theory of constitutional longevity in which elements of constitutional design have a substantial effect on mortality, in addition to the understandable risks of major destabilizing events such as wars and economic crises. We test the empirical implications of the theory with a new set of data on the chronology and content of constitutions. We find that major exogenous shocks do indeed destabilize the constitutional order, but that a significant number of constitutional deaths occur absent any such cataclysmic event. Importantly, we find that certain design features of the constitution (or its adoption process) decrease mortality, perhaps even allowing the system to sustain intense shocks. We emphasize two features, in particular, that serve as sources of stability: (1) the degree of *inclusion* during the adoption of the charter and, (2) *adaptive* mechanisms such as a flexible amendment procedure. We conclude with a discussion of the value of constitutional stability.

1. INTRODUCTION

According to an old joke, a patron goes into a library and requests 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, or at least fragile, democratic foundations. Yet the French experience is more typical of national constitutional practice than is that of the United States with the latter's 217-year old constitution. By our estimate, more than one-half of constitutions will not survive to see their twentieth birthday.¹ Some will find this to be 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.

However, 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 the founding document. 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 in the concluding section, we explore the constitutional chronologies of nation-states in order to understand the origins and endurance 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 of merely academic interest. Given our estimated mortality rates, it is likely that constitutional replacement will be under way at any given moment *somewhere* in the world. Delegates to constituent assemblies, round tables, and elite talks on constitutional re-design often hear testimony from scholars, who do not always have systematic evidence to relate regarding the consequences of constitutional choices. Assuming that drafters desire to see their creation endure, it behooves us to provide some guidance as to the various risks to constitutional life.

¹ Estimates from a survival model for all independent states since 1789 (see below).

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 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.

2. 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 some scholars, constitutions have become shorthand for political institutions more generally (e.g., Persson and Tabellini 2004).² In many cases, such shorthand is appropriate. However, the content of written constitutions can vary, and equating institutions with constitutions can be misleading. Consider, for example, that only 33% of self-proclaimed “constitutions” currently in force include provisions specifying the selection process of legislators – a central institutional concern, if not, evidently, a constitutional one.³ One can further appreciate the variance in content simply by observing the length of constitutional texts, which by our

² Dicey’s (1960:23) view represents this generalist conception: “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.”

³ As calculated from the authors’ dataset (identifying information suppressed).

estimates can range from 165 words in Bhutan’s parsimonious 1907 document to 115,325 in India’s rambling 1947 charter (as amended to 2002).

A focus on the formally encoded charter runs the risk of ignoring important and, seemingly, “constitutional” laws. Many countries, for example, enact a parallel set of “organic laws” or “institutional acts” that serve a constitutive or organizational function. While these laws share some attributes of a constitution in that they define patterns of authority and establish institutions, they lack some quintessentially constitutional qualities. For one thing, such measures are usually not adopted in the formal and deliberate manner that typically (although certainly not always!) characterizes the process of constitution making. More importantly, even in those countries where organic lawmaking is entrenched, such laws can usually be abrogated more easily than can a constitution. This idea of entrenchment is important 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.

We also recognize that *de facto* constitutional law will sometimes differ from *de jure* constitutional law. In any constitutional system the language of constitutional text is modified and interpreted by political actors. In the United States, for example, 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 an 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. Doctrine, then, can be as important as scripture (to follow Levinson’s (1988) helpful metaphor).

In short, it is important to distinguish between “big C” Constitutions and the “small c” constitutional structure of a country. Our focus is explicitly 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. These “constitutional” rules are undoubtedly consequential. Indeed, to foreshadow an element of our theory, we recognize that aspects of the small-c constitution – such as interpretations resulting from constitutional review – may even be instrumental in preserving the source document. However, the conceptual difficulty of determining the precise scope of

the small-c constitution, as well as the empirical challenge of identifying and locating the various acts that compose it, argue against treating it as an analytic unit for large-n studies. 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.

2.1. Identifying Constitutions

We identify constitutions in the data that follow by a set of three conditions, any one of which is sufficient to qualify the document(s) as a constitution. Constitutions consist of 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 criteria used by Elster (1995: 364) and helps us to resolve problematic cases such as Canada, New Zealand, and Israel.⁴ In the Israeli case, for example, we define the constitution as the series of Basic Laws (as per 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

⁴ This is also the definition used by Negretto (2006: 5) in his parallel study of modern Latin American constitutions.

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.⁵

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 2006.⁶ 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 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.⁷ Thus, the US constitution is a replacement and not an amendment of the Articles of

⁵ Roughly 90 percent of constitutional materials in the sample qualify based on condition 1. The other ten percent qualify based on conditions 2 or 3. We exclude the United Kingdom from our sample.

⁶ 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).

⁷ 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.

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,⁸ 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.

2.2. Constitutional Change versus Regime Change

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 regime instability. In fact, a history of volatility in democracy scores (as measured by Polity) is moderately correlated with a country’s probability of constitutional replacement ($r = 0.54$). The strength of this relationship invites the question of whether regime change and constitutional change are one and the same. If so, then our analysis reduces to one of explaining regime durability, for which theory and evidence are legion. In fact, the two constructs are closely related but not synonymous. Constitutional replacements occur within three years of a regime transition in roughly one half of cases of democratic transition and one-third of cases of authoritarian transition.⁹ Regime change, then is not a sufficient condition for constitutional change, but nor is it a necessary one. Of the total number of constitutional replacements, about one half come into force within three years of a transition. One can understand these dynamics more concretely by observing

⁸ South Korea’s six republics have each involved complete constitutional overhauls adopted through the formal process of amendment of the previous constitution.

⁹ Transitions are defined as a move from three or more points on the Polity scale.

trends in the level of democracy and the incidence of new constitutions within individual countries.

Figure 1 presents such data for six countries, Brazil, Chile, Japan, France, the Dominican Republic, and Colombia. Democracy (Polity) scores are plotted across time and vertical lines mark the promulgation of “new” constitutions.

Figure 1 here

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 institutionalized the authoritarian practices initiated by the coup in 1973. 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.¹⁰

¹⁰ 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!

3. EXPLAINING CONSTITUTIONAL ENDURANCE

3.1. Background Considerations: Shocks versus Structure

In our theoretical approach we are quite consciously open to the possibility that constitutional drafters can affect the durability of their designs. The alternative, perhaps prevailing, view is that constitutions are almost entirely at the mercy of *fortuna*, coming and going only as major world events wash them away. This latter view, it would seem, is based not only on the transformative power of wars, economic crises, and the like, but also on the widespread assumption that institutions are sticky and constitutions the stickiest of them all. Consequently, many accounts of institutional change, such as those influenced by the concept of “punctuated equilibrium” in evolutionary biology (e.g., Krasner 1984), tend to emphasize shocks over structure. An understandable presumption, then, 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.” Such a view, in which constitutional change is merely epiphenomenal, would seem to render constitutional design irrelevant to constitutional mortality.

Nevertheless, our theory (which we introduce below) suggests several risk factors inherent in constitutions themselves that merit investigation. It is possible, moreover, that the general expectation regarding the power of shocks is just that, an expectation – a highly intuitive one, perhaps, but one that has not yet been empirically validated. Some scholars have suggested as much, arguing that the literature on institutional change has underestimated change unassociated with crisis (Cortell and Peterson 1999; Pierson 2004). In the case of constitutional change, any such error would be fully excusable, as no systematic empirical test of constitutional duration is on record as far as we know. Indeed, our own knowledge of select cases leads us to respect the power of shocks in inducing change. However, 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 constitutions) only afterwards. Also, some events (e.g., political coup) are likely to result, to some degree, from underlying instability produced by constitutional provisions and therefore may be merely mediating factors. These possibilities imply a clear set of analytical strategies in assessing cause of death. The first is to identify and measure the effect of all crises, not just any 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 that render the state more or less hospitable to constitutional survival. The test of our theory follows this more comprehensive analytical approach.

3.2. A Theory of Constitutional Change

We have strong *a priori* reasons to suspect a number of risk factors, as we describe in some depth below. As it happens, we are also immersed in the cases (all too well, perhaps), and have developed some *a posteriori* insights. In the course of assembling a complete constitutional chronology, we have read the historical accounts of nearly every constitutional death since 1789. At the risk of bringing an indictment based on these impressions, it is impossible to ignore three clear insights from these accounts. First, our reading affirms that wars and other crises play *some* role in a non-trivial number of deaths. Second, and perhaps more unexpectedly, many constitutional deaths seem to come at the hands of ambitious executives for whom the constitution is an unwanted constraint. Third, some states are more or less prone to instability, a chronic instability that manifests itself in multiple crises and, therefore, multiple constitutional replacements. These *a posteriori* insights, together with the behavioral assumptions we advance below, help inform our theory.

We argue that one can trace *most* decisions to replace a constitution back to a prior decision of the executive of whether or not to transgress constitutional limits.¹¹ We formalize this causal logic in Figure 2, which depicts the executive's decision calculus.¹² We assume, with some confidence, that the executive values power and that her thirst for power occasionally extends beyond the prerogatives granted her in the constitution. This tension introduces the potential for constitutional transgression. The nature of these transgressions may vary in severity and substance, from the infringement of individual rights to the defiance of term limits. Importantly, they may also vary to the degree that the acts are *recognized* as transgressions by citizens and other officials. For now we leave these potentially consequential variations aside. In general, whether the executive chooses to transgress constitutional limits depends on the costs and benefits of transgression compared to those of the status quo (that is, constitutionally limited government). A constitutional equilibrium of no transgression obtains under circumstances in which the utility of maintaining the original bargain is greater than that of transgression.

Figure 2 here

The utility of transgression will often co-vary with the incidence of external shocks and events, whether economic or political. These sorts of shocks often disrupt the constitutional equilibrium, rendering it prohibitively costly for the executive to work within constitutional limits conceived under more stable conditions. The most obvious example is military crisis, which often tempts the executive to pursue security and stability at the expense of individual rights or limits on executive power such as scheduled elections. These circumstances, and their pressure on constitutional limits, will be familiar to scholars. One can think of Lincoln's suspension of *habeas corpus* during the civil war, the relaxing of privacy constraints on law enforcement investigations in the post-9/11 environment, or Indira Gandhi's suspension of elections in India during her period of emergency rule in 1975-77. Shocks may also have the effect of displacing sitting executives or shifting the balance of power among ruling elites. As a

¹¹ Our view of constitutional transgression owes much to insights in Weingast (1997; 2005).

¹² We emphasize that not all constitutional replacements will follow this logic.

result, new executives may be less likely to respect standing constitutional limits than would their predecessors.

External shocks, then, will potentially induce transgression, although the executive may conceivably be tempted to transgress absent any such shocks. The principal factors that would constrain transgression are (1) the probability that other actors enforce constitutional limits and punish or inhibit the transgressor, and (2) the flexibility and adaptability of constitutional limits. These costs, or constraints, are evident if we continue along the executive's decision tree to node 2 (again, Figure 2). Having made the decision to transgress, the executive has two choices regarding his treatment of the constitutional order. One option is to retrofit the constitution to his current behavior (i.e. transgress through intra-constitutional means), either by amending the constitution or securing an interpretation of it that is favorable to his transgression. (We are not asserting that all amendments or interpretations are motivated by the desire of a leader to extend his or her power, only that *some* amendments and interpretations serve this purpose.) A second option is to bypass the constitution (i.e. transgress through extra-constitutional means), 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. Enforcement, as we shall see, is not a trivial issue and its peculiar manifestation in constitutions has direct implications for the specific hypotheses elaborated below. 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. Such factors enter the calculus further down the tree as well. 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.

These choices (at both junctures) also depend on the transaction costs of a retrofit (adaptation). As we shall see, the ease of both amendment and interpretation varies considerably across constitutional systems. *Ceteris paribus*, the lower the transaction costs of adaptation, the more likely the executive is to choose adaptation at the second juncture. These costs will also, of course, factor into the earlier decision to transgress, to the degree the ease of adaptation leads the executive down the transgression path at all. Note that at this point we make no contention regarding the interaction of enforcement and transaction costs. In any given case, one effect may substitute for the other, but we assume that they are independent. For example, in situations of low enforcement, 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) External shocks and crises will increase the probability of transgression, as will characteristics of the state that lead to such crises;
- (2) Strong *enforcement* mechanisms will decrease the probability of transgression *and* extra-constitutional replacement;
- (3) Conditional on transgression, easily *adaptable* constitutions will decrease the probability of replacement.

These are general expectations, of course, and in section 4 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.

4. AN ELABORATION OF THE MODEL AND ITS EMPIRICAL IMPLICATIONS

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 enforceability and its adaptability; and (3) structural attributes of the state.

4.1. Precipitating Events

We have rather strong intuitions about what sorts of events would destabilize constitutional systems. They should be those that are likely to lead to unrest or a shift in the balance of power, either one of which can potentially lead the sitting executive (or new executive) to justify extra-constitutional action. 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 err on the side of inclusion in specifying them.

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) description 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 (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.¹³

Regime Change. As described in some detail in section 2.2, 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.

¹³ In an interview with Marta Harnecker (2002), Chavez credits the Colombian constitution as his inspiration for his political ambitions.

Leadership Transition. Our reading of the historical record suggests that new constitutions sometimes result from abrupt 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 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).

4.2. Structural Sources of Resiliency within the Constitution

The two central implications of our theory are that a constitution's level of enforcement as well as its adaptability will help it withstand any pressures for transgression, whether such pressures arise from precipitating events or not. Here we describe the peculiar nature of constitutional enforcement and adaptability and the observable risk factors implied thereby.

4.2.1. *The Degree of Constitutional Enforcement*

Constitutional enforcement is not a simple matter. Constitutions are, in the end, mere "parchment barriers" and sometimes seem unequal to the task of constraining a government with a full bureaucracy and military force at its disposal. In this sense, Hardin (1989) and Ordeshook (1992) are right to disabuse us of the notion that constitutions are contracts. Contracts imply an agreement by the parties subject to default rules as well as – importantly – an external guarantor who will enforce the agreement, independent of the parties; neither of these criteria obtains in the case of constitutions. When a leader is determined to defy the limits of the constitution, who is to stop her? Certainly not the aged justices of constitutional courts, who are long on right but short on might.

We share the view, articulated in different forms by Hardin (1989), Przeworski (1991), and Weingast (1997), that successful constitutions are coordination devices that render the underlying political bargains self-enforcing. Enforcement, in this view, is the responsibility of a large and diffuse group, perhaps citizens themselves (Weingast 1997, 2005) but more likely elites. Any group of potential enforcers is subject to collective action problems, as they must coordinate among themselves to successfully enforce the constitution. The payoff ordering in this sort of arrangement follows the

prisoner's dilemma logic. Given a executive transgression that imposes costs on citizens (e.g., an infringement of political rights), citizens will be better off if they can collectively confront the executive and prevent the transgression and somewhat worse off if they collectively acquiesce. The worst outcome is an individual, and ultimately fruitless, confrontation with the executive. Given uncertainty about what others will do, the dominant individual strategy is to acquiesce.

Uncertainty in these circumstances is to be expected. Even if we assume homogeneity of interests, citizens 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. Under more realistic conditions of interest heterogeneity in which transgressions affect citizens unequally, collective action will be even more difficult. 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: 757). By stipulating the rules and defining violations, constitutions increase everyone's perceived likelihood that others will join them in challenging 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. The quality of "self-enforcement" (e.g., Weingast 2005) follows when the executive anticipates a challenge from citizens and refrains from transgressing at all.

This framework helps us understand why written constitutions are important components of constitutional democracy: they provide the focal point for coordination and enforcement. It 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.

Why do some constitutions make for better coordinating devices than others? More than anything, we assert, rules that best serve as coordination devices are those that are widely respected and widely understood. In short, self-enforcing constitutions must be highly *legitimate*. In part, legitimacy is a function of the charter's fit with societal needs and norms. Rules that are consistent with underlying

unwritten norms and expectations in the society are more likely to be enforced. Time should enhance this congruence. As a document survives, potential enforcers are more likely to understand what the document says, and to develop norms that can help coordinate expectations. Irrespective of time and fit, however, the legitimacy of a constitution likely depends on the manner in which it is written and adopted. Constitution-making processes that are highly consensual and inclusionary (or at least appear to be so) confer legitimacy upon their product and the constitutions that result will be better enforced.

There are two critical stages of the constitution-making process (the deliberation and the approval stages) in which the degree of consensus becomes evident based on the degree of inclusion. With respect to the deliberation stage, an extreme case of exclusion might be Burma's current efforts (as of this writing). 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. 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 constitutions 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 (forthcoming) reports survey evidence from a set of African cases that suggests that constitutions that are ratified by public referendum enjoy higher levels of legitimacy.

To summarize, the logic of constitutional enforcement implies that constitutional processes marked by high levels of public inclusion will, on average, produce more durable constitutions. The relevant arenas for public inclusion include both (1) drafting stage, and (2) the approval stage.

4.2.2. Constitutional Adaptability

A second crucial factor, besides enforceability, is *adaptability*. Executives who would transgress the constitution by extralegal means, will be more likely to act within the constitutional limits if there exist flexible mechanisms for retrofitting these limits to their transgression. There are two primary mechanisms by which intra-constitutional change occurs: formal amendment 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 1993). If, on the other hand, constitutional amendment is relatively simple, there may be less need for judicial reinterpretation of the constitution.

Optimal adaptation thus results from some combination of amendment flexibility and the possibility of judicial 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 endowment of legitimacy at the outset of the constitutional system). 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. At any rate, constitutions that lack either flexible formal amendments 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 when faced with environmental changes and will thus die young.

4.3. State-level Sources of Constitutional Resiliency

We should 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). Another 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). *Ethnic heterogeneity* is likely to promote instability, inasmuch as political competition often falls along ethnic lines.

5. AN ILLUSTRATION: EXECUTIVE TERM LIMITS

We test the predictions of the model with the full set of constitutional histories in the subsequent section, but an example might help illuminate the causal processes at work. Consider the matter of the recruitment, selection, and – crucially – *exit* of the executive, a central constitutional dilemma. Executives, as we well know, are often tempted to overstay the deadline for their departure. As a result, the historical landscape – especially in Latin America – is littered with constitutions that stood in the way of executive ambition. A case in point is the short, unhappy life of Brazil’s 1934 Constitution. Modeled after the Weimar constitution, the 1934 document extended political rights to most Brazilians, established a strong judiciary, and strengthened the legislature. President Getulio Vargas chafed under the charter’s restrictions, including one that would have prevented his reelection in 1938. Not to be so curtailed, Vargas declared the constitution null and void in 1937 and replaced it with new document, one that gave his administration considerably more room (and time!) to operate. More recently, Alberto Fujimori in

Peru and Hugo Chavez in Venezuela, unable to utilize the normal amendment process because of legislative opposition, oversaw the replacement of their countries' constitutions in 1993 and 1999, respectively. The new documents extended the presidential term.

Some constitutions survive such executive ambition, either by adaptation or, more rarely, by enforcement. In the last fifteen years, for example, a number of Latin American presidents (notably those in Brazil, Argentina, and Colombia) were able to put through constitutional amendments that lifted limits on their terms and facilitated their re-election. In these cases, the executive managed to retrofit the constitution to his otherwise extra-constitutional transgression. Finally, consider the case of Mexico, a paradigmatic case of no transgression at all, whether extra- or intra-. Since its adoption in 1917, the current Mexican constitution has maintained a strong one-term limit for the President, a limit that has not been successfully broached.

Our theory accounts for these three cases of replacement, adaptation, and no-transgression. In Venezuela, a country with 24 constitutions since independence, constitutions may lack legitimacy as entrenched documents—and when amendment was difficult, Chavez replaced the unprotected document to extend his term. The Mexican constitution survives, un-transgressed, in large part because of the enormous legitimacy embodied by that document. That constitution was widely admired and widely copied, even in the years immediately following its promulgation, but certainly after Lazaro Cardenas had fulfilled many of its aspirational pledges in the 1930's. Its level of legitimacy contrasts sharply with that of the 1934 Brazilian document, which had very few ready and willing defend it, especially after only three years in force. The cases of amended constitutions in the 1990's exhibit the characteristics that we would expect of an enforceable but adaptable constitution. Not only did these charters possess a fair amount of legitimacy, but they boasted a fairly flexible amendment rule. The 1988 Brazilian constitution, for example, requires two consecutive votes of 3/5 approval by legislators for passage of an amendment – only slightly more stringent than the simple majority needed to pass legislation. Had the amendment procedures in these cases been more inflexible – for example, that of Bolivia's 1828 document that

forbade any amendment until 1838 – such adaptation to executive transgression would have been considerably more difficult.

6. ANALYTIC METHODS, MEASURES, AND DATA

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

6.1. 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. 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 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, 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 executive transgression. Constitutions, after all, may be suited to the political environment at the time of its adoption but societies

do not remain constant. Exogenous technological changes occur; different international configurations develop; and institutions alter the political makeup of the societies they inhabit. Germany's 1871 constitution, for example, spends 11 of its 78 articles detailing aspects of the railroad and telegraph system, hardly pressing concerns in 2007. Anachronisms aside, even a self-enforcing constitution can fall into disequilibrium if the distributional benefits that it produces among groups change over time (Ordeshook 1992). 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 any 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'etat*. 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 (see footnote 14).

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.

6.2. 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 are original to us.

Table 1 here

6.2.1. *Precipitating Factors*

Military subjugation 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).¹⁴ 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 in the democratic or authoritarian direction, respectively, with changes in the other direction coded as zero. We capture an aspect of abrupt *leadership transitions* by measuring extra-

¹⁴ 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 $t+2$.

constitutional transitions with Arthur Banks' (2001) measure of "coups." We approximate institutional crisis with an omnibus index in Banks that aggregates a set of events from assassination to strikes to demonstrations.¹⁵

6.2.2. *Structural Factors within the Constitution*

We view the enforceability of the constitution as a function primarily of the level of *inclusion* in both the writing and the ratification of the document. We measure the degree of *inclusion* derived from 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 reason to be strong legitimating procedures. The source for our coding is the ratification instruction in constitutional documents. We recognize that public involvement during ratification probably adds more legitimacy 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 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

¹⁵ 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).

the total change in democracy (positive values meaning increased democracy) within one year of the constitution's promulgation.

We measure aspects of adaptability with four 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 hybrid 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.¹⁶ 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.¹⁷

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

¹⁶ Lutz (1994) and Lorenz (2005) recommend roughly similar measures in another context.

¹⁷ Our approach is akin to 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).

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 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 practice than will civil law rulings which tend to ignore precedent and *de facto* law. Berkowitz and Clay (2005), for example, provide suggestive evidence that US 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.

A final indicator of adaptability is the scope of constitutions, which vary systematically in their level of detail. Documents that paint broad brush strokes would seem to be more amenable to change than would those that make very specific commitments that run a greater risk of constraining executives. 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 US constitution, at a mere 10,165 words, is seen as providing a framework for politics rather than a repository of policies. Again, Berkowitz and Clay (2005) present evidence in the context of US states, that shorter constitutions are more durable. We wish to examine whether their findings hold in the broader universe of national constitutions.

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. 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.

7. RESULTS

7.1. Baseline Estimates

Constitutions, in general, do not last very long. The survival curve (Figure 3a), interpreted as the probability of survival at a certain age, provides the best sense of life expectancy. The estimates show that one-half of constitutions are likely to be dead by age 18, and by 50 only 19% will remain. Infant mortality is quite high -- 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 expected 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 life expectancy of a Constitution was 21 years, versus only 12 years since.¹⁸ 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.

¹⁸ Again, we note that these survival estimates account for right-censored cases.

Figure 3 here

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, a pattern that – incidentally – matches that of marriage in some countries. 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.

7.2. 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.¹⁹

¹⁹ 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. As the illustration above suggests, the Mexican case – widely considered non-democratic until 1994 – fits the general framework of our theory. 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.

Table 2 here

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. Public ratification produces more enduring constitutions in democracies, but not in autocracies. This is intuitive: referenda in dictatorships do not genuinely confer legitimacy. We find only marginal support that constitutions written in democratizing times are more resilient. 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. Contrary to our expectations, we find that longer constitutions, which we expect to be less adaptable, are slightly more durable than shorter ones.

Figure 4 here

Among the structural variables, several findings stand out. Ethnic fractionalization and democracy have effects in the predicted direction, although the latter should be interpreted as a

conditional effect since it is included in the interaction with public ratification. Wealth, as captured through energy consumption, has a slight negative effect, as hypothesized. We find no effect for common law. 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.

8. CONCLUSION: THE MERITS OF CONSTITUTIONAL LONGEVITY

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. Enduring constitutions share two 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 confer legitimacy upon the document, encouraging enforcement of its terms. Second, 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 the possibility of intervention in constitutional design.

We should not, however, assume that longevity is desirable as an end in itself, and we conclude, therefore, with a discussion of an important normative question that underpins our analysis above: how long *should* constitutions last in a democracy? Constitutions are designed to stabilize and facilitate politics, but there is certainly the possibility that constitutions can outlive their utility and create pathologies and distortions in the political process, or fail to fit societies that are constantly changing. . 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. One can also challenge constitutional endurance on theoretical grounds. As Jefferson famously argued, enduring constitutions come at the expense of representation, to the extent that the will of succeeding generations is checked by the decisions of their predecessors. Moreover, it is possible that more frequent constitutional turnover would engender greater levels of civic participation and engagement, as citizens are called on to consider and negotiate fundamental principles more frequently. Indeed, by Jefferson's standards, our estimate of an average life expectancy of seventeen years is hardly troubling.²⁰

What enduring constitutions sacrifice in terms of representation, they more than make up for with respect to stability, equality, and governability. Indeed, these outputs are, in our mind, of utmost importance for developing democracies. It is instructive to consider the role of endurance with respect to three central functions typically ascribed to constitutions: establishing the basic structure and rules of governance, limiting the powers of the state, and serving as a symbol of national unity and sovereignty. In terms of establishing the structure of government, 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 and routinization must occur before the institutions can take shape. Such habituation takes time. Furthermore, many of the crucial political institutions that make for effective governance—including the Central Bank, interest groups, or political parties – may not be mentioned in the constitution at all. Longevity allows these critical institutions to develop in a stable environment. The Mexican Constitution of 1917, one of the more progressive documents of its time, never matched the *de facto* politics of that country until the 1940's and did not deliver political competition until amendments in the 1990s, when actual political practice “caught up” with the aspirational provisions on the books.

²⁰ Jefferson believed that every constitution (and most other laws, for that matter) should expire after 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 European life expectancies. Thomas Jefferson to James Madison, 1789. ME 7:459, Papers 15:396.

Similarly, one of the reasons that the US Constitution “works” is that American political life has grown around it and adapted to its extremely idiosyncratic edicts. This sort of stability of the rules, as long as they are reasonably democratic, can have a very positive effect on political equality, not to mention rule of law.

Stability would also seem to be helpful in facilitating constitutional constraint on political power. If citizens play a strong role in the enforcement of the constitution, as we argue above, longevity may be helpful in that citizens learn over time what the document requires, and develop a stock of cooperation useful for enforcement. Citizens can then restrict sovereign power especially in times of crisis when the incentives for absolute power are strongest. Periodic changes in the fundamental rules, on the other hand, can encourage opportunistic elites to engineer institutions for their short-term benefit.

Finally, consider a constitution’s function as national symbol. In democracies without a monarchy to serve as the symbol of the state’s sovereignty and national history, documents such as the constitution are important in that they strengthen national identity. A strong attachment to the state, whatever the pathologies of such a sentiment, is critical to democracy. This is especially a concern in multiethnic states in which the state competes with other groups and affiliations 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.

In short, enduring constitutions are critical to the performance and stability of democracy. Of course, there may be instrumental reasons to prefer stable institutions as well. In addition to clear implications for the stability and quality of democracy, it is likely that constitutional stability will have a

strong market-enhancing effect that will result in positive welfare consequences for citizens.²¹ We can only conjecture as to these downstream consequences since, despite the massive volume of work on the endurance of democratic regimes, the relationship between constitutional duration and either democratic stability or wealth is virtually undocumented. While it is certainly beyond the purview this paper to assemble and evaluate such evidence, it seems worthwhile to report some of the basic empirical associations between constitutional duration and these two desirable outcomes. 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.

With respect to any market-enhancing effects, we observe that states with long-lived constitutions are likelier targets for foreign direct investment. Foreign direct investment (FDI) averages \$US 1.54 billion/year for constitutions lasting longer than 17 years (our sample mean) and only \$US 0.38 billion/year for constitutions lasting less than 17 years.²² As one would expect, the effect of stability is non-linear; as constitutions reach the golden years of fifty years or so, added longevity does not increase their share of FDI. We also observe a strong association between long-lived constitutions and democracy. As we show above, constitutional and democratic breakdown may sometimes result from the same set of forces. The relevant question is whether stable democracies can function effectively with a high degree of constitutional turnover, as Jefferson's famous "sunset" recommendation would presume. Our data suggests that they cannot or, at least, have not. France is one of the few stable democracies to have maintained democracy through periodic replacement of its founding document. To put it somewhat

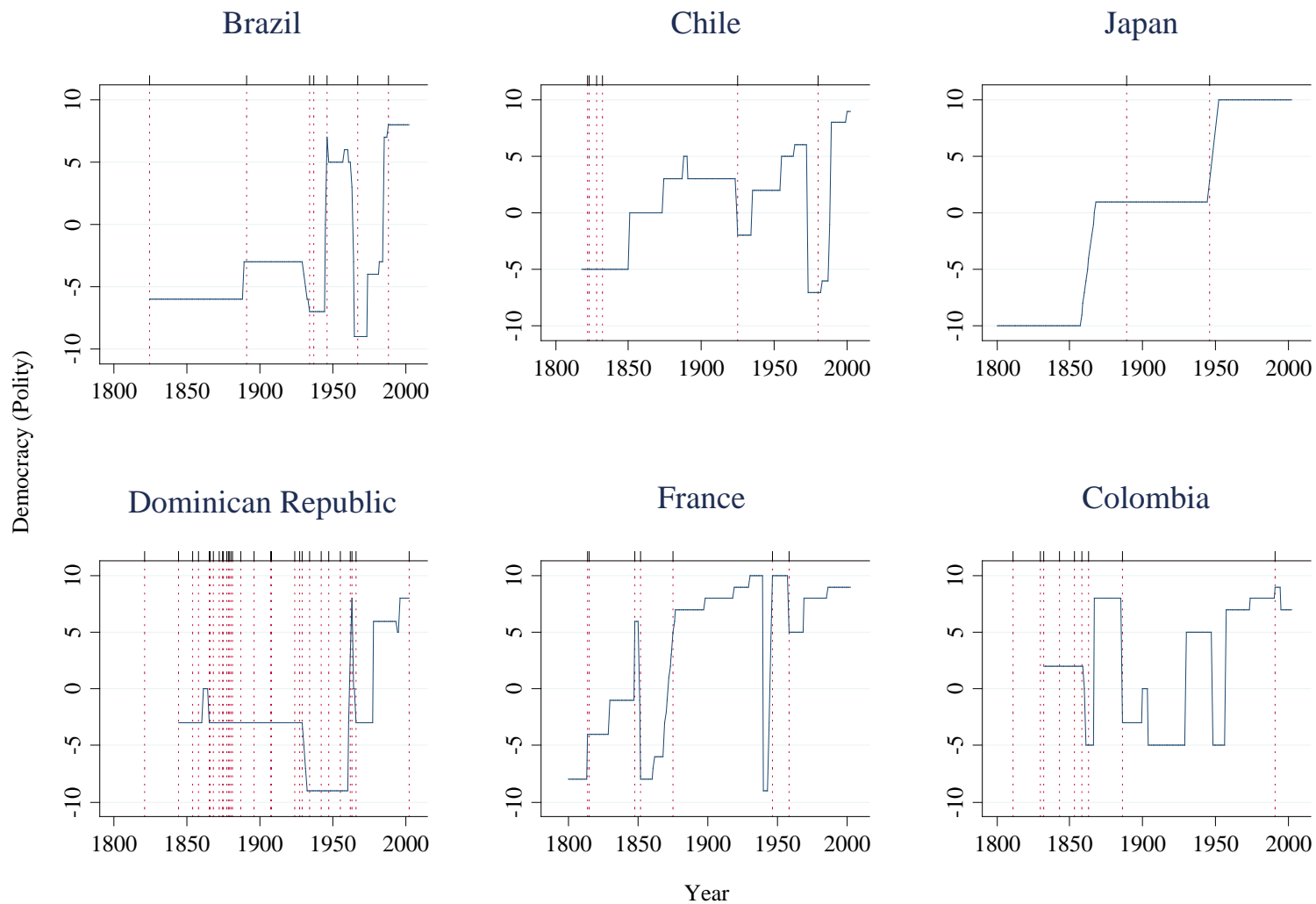
²¹ Another literature, dating back to Weber (1977), suggests that constitutional stability may provide the necessary predictability for capitalism to flourish, in which case we ought to observe a correlation between constitutional duration and long-term investment.

²² FDI data is from the World Development Indicators published by the World Bank (2000) and covers more than 100 countries, on average, each year between 1970 and 2000.

differently, both authoritarian stability and frequent regime change are associated with serial constitution writing, while democratic stability is associated with durable constitutions. 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 democratic and economic future of these developing countries may depend, at least partially, on the endurance of their constitutions more so than would established democracies.

Our intention in these concluding pages is not to insist on any particular normative judgment regarding the value of longevity. Though we suspect, based on our analysis of the correlates of longevity, that constitutional stability is a good thing, we reserve judgment on this intriguing normative question pending more systematic investigation. What we do know, based on the analysis above, is that constitutions are not as “sticky” as is commonly believed. Political and economic storms will clearly level even the most structurally sound of charters. Nonetheless, it is also clear that design and process elements – namely the inclusiveness of the drafting process and the adaptability of the document – will increase the probability that constitutions survive.

Figure 1 New Constitutions and Shifts in Authority Structure



* Horizontal lines represent democracy and vertical lines represent new constitutions

Figure 2 The Calculus of Constitutional Transgression

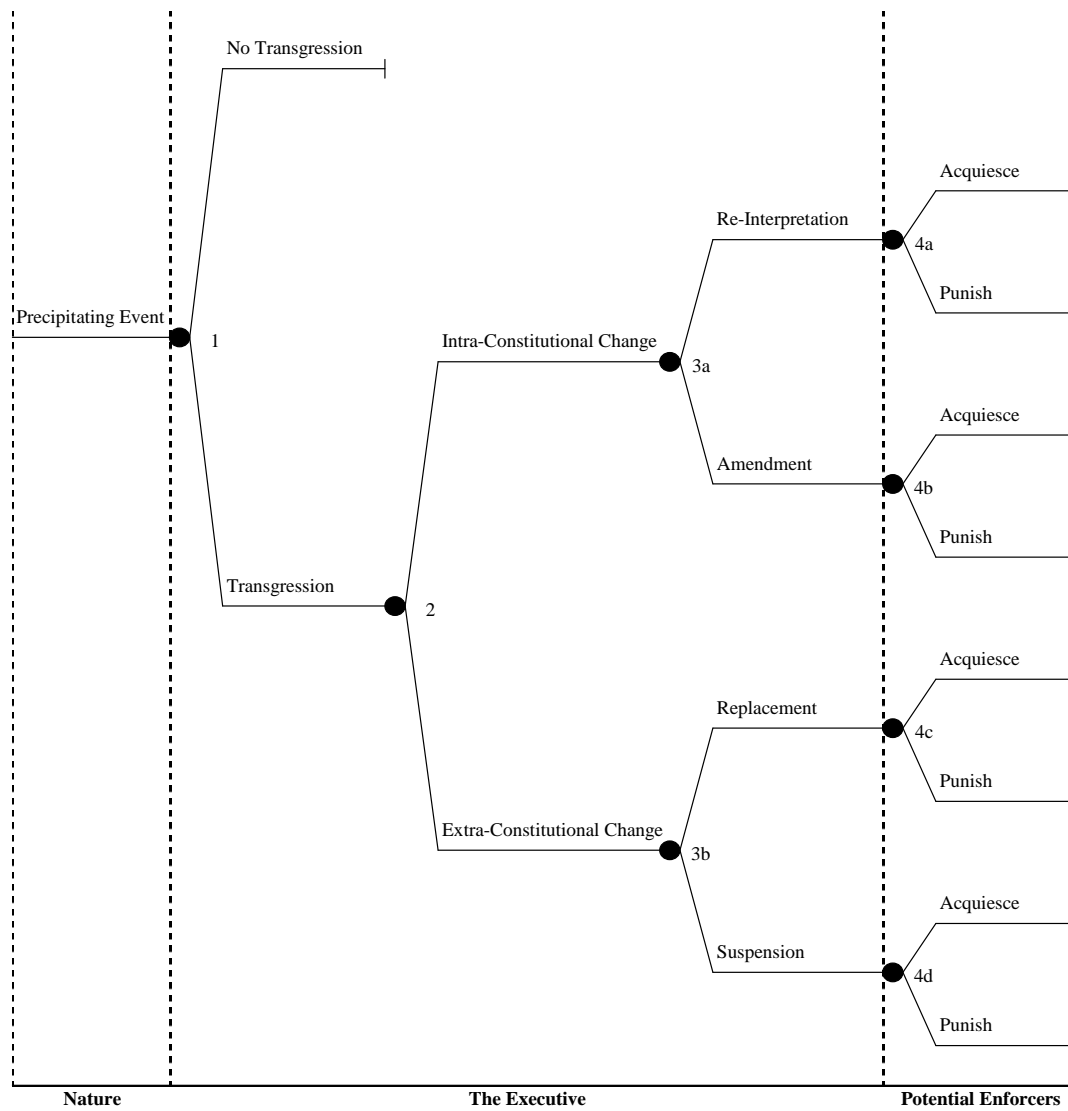
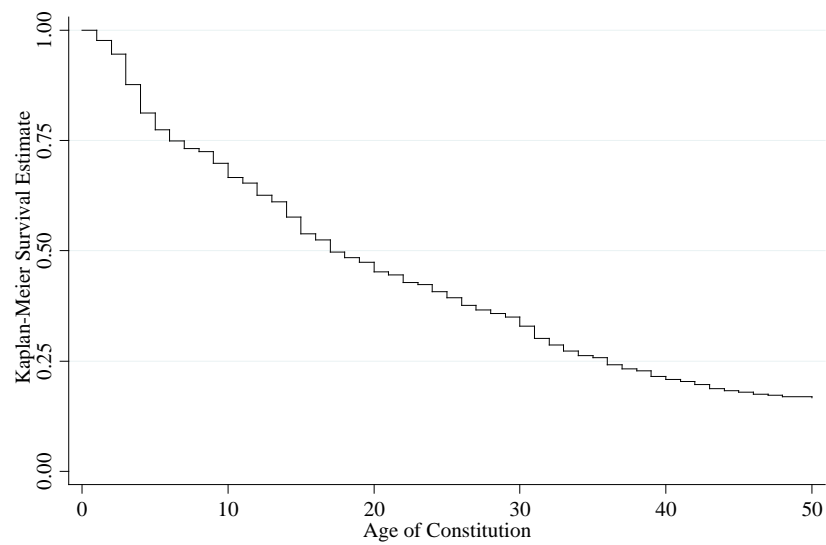


Figure 3 Survival and Hazard Estimates

a. Kaplan Meier Survival Estimate



b. Smoothed Hazard Estimate

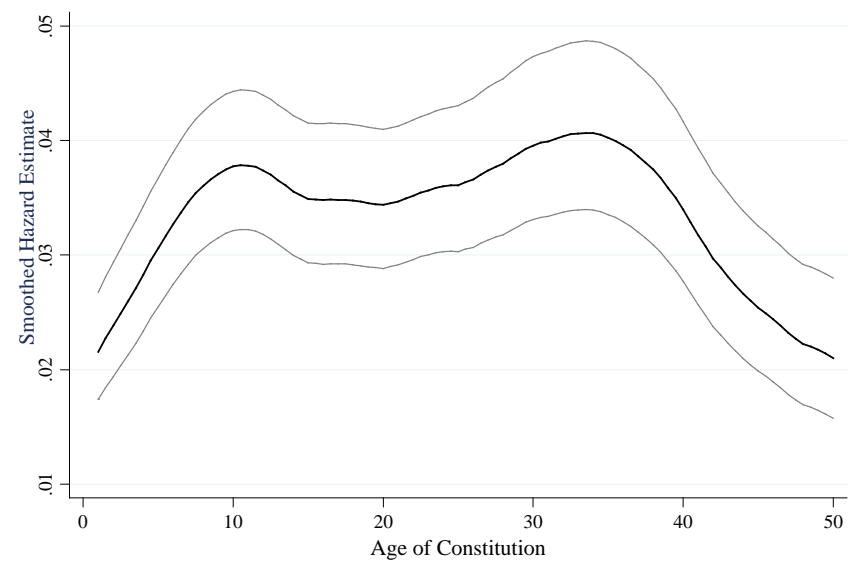


Figure 4 The Effect of Select Variables on the Survival Rate

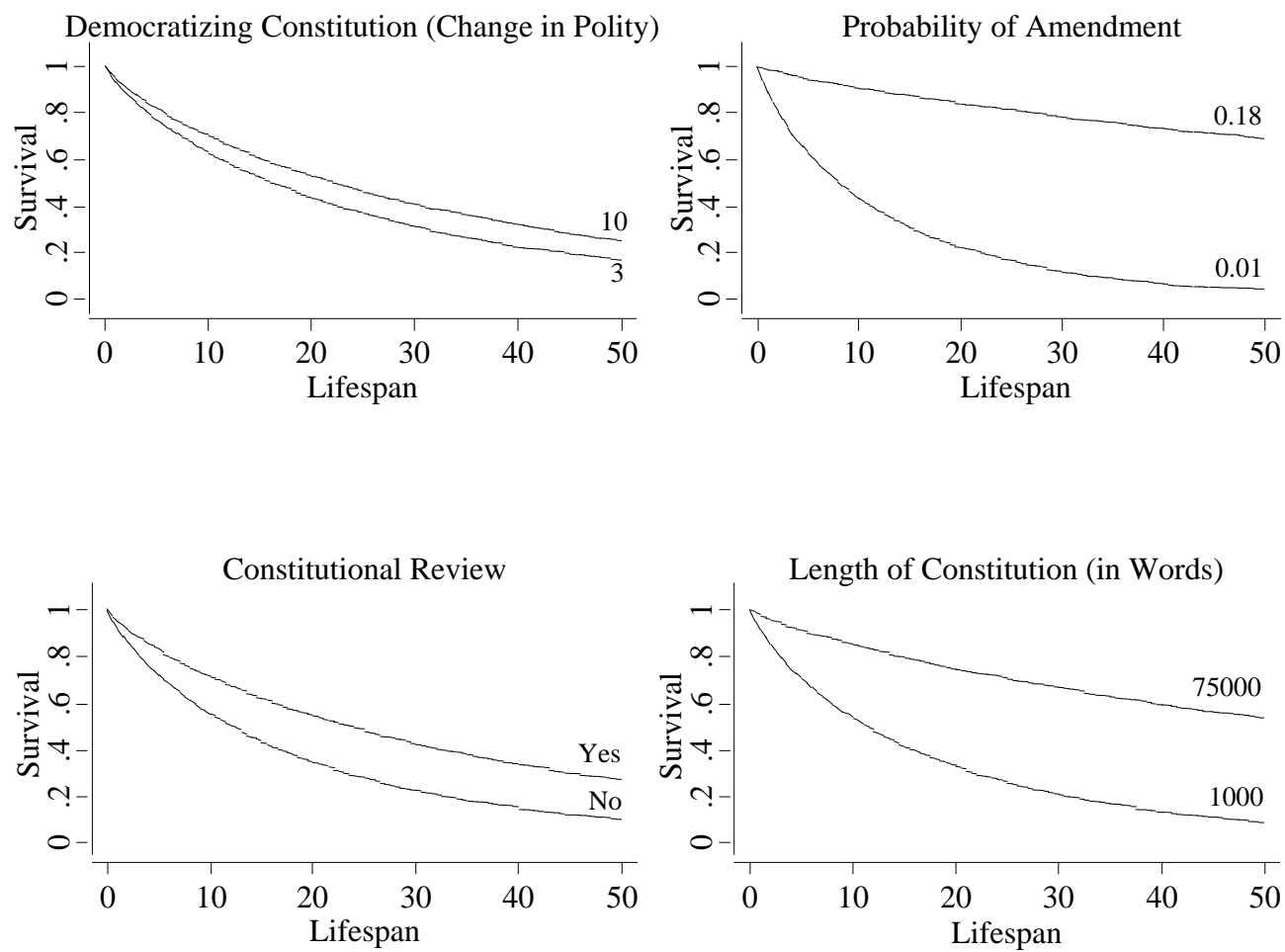


Table 1 Concepts and Measures

Category	Concept	Measure	Effect*	Source
Precipitating Factors	Military Subjugation	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	Yearly change in democracy if towards authoritarianism (zero otherwise)	+	Polity
	Leadership transition	Coup	+	Banks
	Internal crisis or conflict	Banks' weighted conflict index (rescaled between zero and one)	+	Banks
Degree of Inclusion in the Constitutional Process	Inclusionary Ratification procedures	Ratification by public or constitutional convention	-	CCP
		Ratification by public or constitutional convention in democratic regimes	-	CCP; Polity
	Indigenous character	Foreign occupation at time of drafting	+	COW
	Democratizing Constitutions	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 court	-	CCP
	Legal tradition	Common law dummy	-	La Porta et al.
	Specificity	Length of Constitution (rescaled between zero and one)	+	CCP
Structural Factors of the State	Ethnic Heterogeneity	Ethnic Fractionalization	+	Fearon
	Economic development	Energy consumption per capita (rescaled between zero and one)	-	COW
	Level of Democracy	Polity Score	+	Polity
	State development	Age of state	-	ICOW

* Hypothesized Effect: (+) indicates increased risk and (-) indicates decreased risk

Table 2 Predicting Constitutional Duration

	Precipitating Factors	Structural Factors	Full Model
Military Subjugation	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)
Autocratic Transition	1.06*** (0.02)		1.09*** (0.02)
Coup	3.37*** (0.40)		2.21*** (0.27)
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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