

THE DURABILITY OF CONSTITUTIONS IN CHANGING ENVIRONMENTS: EXPLAINING CONSTITUTIONAL REPLACEMENTS IN LATIN AMERICA*

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ABSTRACT

Given the costs entailed in replacing a constitution, most works on political institutions assume that constitutions are a stable set of rules that become self-enforcing over time. The durability of constitutions is, however, subject to variation. I argue that this variation depends on specific institutions and on the relative stability of the political environment that the constitution is supposed to regulate. Using a duration analysis of constitutions in eighteen Latin American countries between 1946 and 2000, this paper finds that while the lifespan of constitutions is negatively affected by political and social instability, institutions that diffuse power and make possible the flexible adaptation of the constitution to changing circumstances decrease the risk of constitutional replacement. It also shows that for the Latin American region, the durability of constitutions tends to decrease rather than increase over time.

RESUMEN

Debido a los costos que implica reemplazar una constitución, la mayoría de los trabajos acerca de instituciones políticas asumen que las constituciones son un conjunto de reglas estables cuyo cumplimiento se refuerza con el paso del tiempo. Sin embargo, la duración de las constituciones se encuentra sujeta a variación. Argumento que esta variación depende de instituciones específicas, y de la estabilidad relativa del ambiente político que la constitución busca regular. Utilizando un análisis de duración de constituciones vigentes en dieciocho países latinoamericanos entre 1946 y 2000, este artículo encuentra que, mientras que la vida de las constituciones es afectada negativamente por la inestabilidad social y política, las instituciones que impiden la concentración del poder y que posibilitan la adaptación de la constitución a contextos cambiantes, disminuyen el riesgo de reemplazo constitucional. También muestra que, para la región latinoamericana, la duración de las constituciones tiende a disminuir, en lugar de aumentar, con el tiempo.

Given the costs entailed in replacing a constitution, most works on political institutions assume that constitutions are a stable set of rules that become self-enforcing over time. The durability of constitutions is, however, subject to variation. Some constitutions persist without major formal change through a series of crises; others are replaced every few years. What makes constitutions endure in some contexts and not in others?

I argue that the durability of constitutions depends on specific institutions and on the relative stability of the political environment that the constitution is supposed to regulate. To test this hypothesis, I use a duration analysis of constitutions, both authoritarian and democratic, in eighteen Latin American countries during the period 1946–2000. This analysis shows that while the risk of constitutional replacement increases with political and social instability, it decreases with institutions that diffuse power and make possible the flexible adaptation of the constitution to changing circumstances. It also shows that for the Latin American region, the durability of constitutions tends to decrease rather than increase over time.

I start by analyzing the concept of constitutional stability. In section 2, I discuss the different theories that have attempted to explain constitutional stability. Section 3 provides descriptive data on the frequency of constitutional replacements in Latin American countries and tests the hypotheses outlined in the previous section with a duration analysis of constitutions in eighteen countries of Latin America from 1946 to 2000. I conclude with a discussion of the findings of this paper and the avenues of research that it opens for the future.

THE CONCEPT OF CONSTITUTIONAL STABILITY

For the purposes of this paper I restrict the concept of “constitution” to a written document so named.¹ This document contains a set of rules which aim at regulating the channels of access to principal government positions, the allocation of powers among different branches of government, and the rights of citizens. Most constitutions also include rules establishing procedures for their own amendment and the conditions under which constitutional provisions can be suspended.

“Constitutional stability” is more difficult to define and measure. The lifetime of constitutions can be affected by different events and it is not readily apparent which should count as indicators of instability. From a formal, legal point of view, constitutions can be altered by means of amendment, interpretation, and replacement.

At one extreme, constitutions are stable if after creation they can be said to be *renegotiation-proof* (Shepsle 1986: 142). This means that even as experience unfolds and previous uncertainties are resolved, no decisive coalition of agents desires an alteration of the arrangements. From this perspective, any transformation of the original agreement may affect the stability of constitutions. This concept of constitutional stability, however, is probably unrealistic.

Constitutions are not immutable. They need to be and often are altered over time to respond to changes in the political, economic, or social environment in which they operate. The key point is whether the alteration implies the legal abrogation of the existing constitution. Amendment procedures, for instance, have been designed for the purpose of adapting a constitution to new circumstances without affecting its legal continuity. The same happens when a constitutional court is authorized to decide on the meaning and scope of constitutional provisions. In these two cases possible modifications to the constitutional order take place according to a preexisting procedure established by the constitution itself.

The situation is different when a constitution is replaced. In this case, institutional reformers decide that a new constitution should be created, usually by procedures that are not regulated by the existing constitution.² This decision could very well be made for merely symbolic reasons, such as signaling a transition to democracy, with little or no substantive change in relation to the previous constitution. Nevertheless, replacements constitute a clear case of legal discontinuity and should obviously count as indicators of constitutional instability.

For these reasons, I define constitutional stability as the durability, in legal terms, of the original constitution. In this view, the lifespan of a constitution is the length of time that passes between its enactment and its formal replacement by another constitution.³ The longer a constitution survives without being replaced, the more stable it is.

The durability of constitutions is an important phenomenon in political science. In the first place, it is a component of constitutionalism. As Elster points out, constitutionalism is a “spirit” or “state of mind” consisting in the willingness that political life be restricted by standing rules that are not themselves the subject of ongoing political struggle (Elster 1991: 9). Clearly, if constitutions are frequently replaced, it is unlikely that political elites or citizens will regard the constitution as a superior law that stands above the short-term interests of partisan actors.

The durability of constitutions is also assumed when political scientists attribute to constitutions important effects in political life. Several authors argue that it makes a difference for democratic stability whether a constitution is parliamentary or presidential, whether electoral rules are restrictive or inclusive, and whether executives are weak or strong (Linz 1994; Shugart and Carey 1992; Jones 1995; Mainwaring and Shugart 1997). Similar aspects of constitutional design have also been isolated as causal factors affecting the quality of democracy (Lijphart 1999; Powell 2000; Colomer 2001a), economic policy and economic performance (Persson and Tabellini 2003; North and Weingast 1989), or the rate of policy change in political regimes (Tsebelis 1995; Cox and McCubbins 2001). However, if constitutions change as ordinary laws do, they are not likely to function as the single variable that explains these outcomes (Alexander 2001).

WHAT MAKES CONSTITUTIONS ENDURE?

Surprisingly, there is no explicit and accepted explanation of what makes constitutions endure. Theoretical works on the nature of constitutions see constitutional stability as a function of time. Comparative studies imply that the durability of constitutions is a function of specific variables that either increase or decrease the capacity of constitutions to survive. One set of arguments focuses on constitutional design. An alternate perspective emphasizes that constitutional stability depends on the dynamics of the social and political environment. I argue that both specific constitutional provisions and contextual factors should account for the different duration of constitutions across countries.

Time

Political theorists suggest that constitutional stability is a self-enforcing equilibrium. According to Hardin, who first proposed this view, a stable constitution works like a convention that depends for its maintenance on its self-generating incentives and expectations. This means that once the relevant political actors have settled a constitutional arrangement, it is not likely to be in their interests to renege on the arrangement due to the internal costs of collective action for recoordination (Hardin 1989: 113).

Not just any constitution is likely to become stable in this view. Stability is an attribute of a constitution created as an effective coordination device. It requires the successful resolution of the conflicts that are likely to arise among constitution makers over alternative constitutional arrangements. For this reason, the deeper the division between citizens and the political elite, the more difficult it is to solve the coordination problem that underlies constitution making. According to Weingast (1997), this explains why societies divided by overlapping cleavages of an economic, ethnic, or religious nature often suffer from chronic constitutional instability.

The equilibrium concept of constitutional stability implies positive time dependence. This means that once constitution makers coordinate on a particular arrangement, the probability of its being replaced should decrease over time. Or in other words, positive time dependence suggests that the longer a constitution is in force, the more likely it is to last.⁴

This assumption appears to fit the evolution of the US Constitution well. It has survived a civil war, severe political and economic crises, and deep social transformations. The US constitution has lasted more than two hundred years, and it seems increasingly unlikely that it will be replaced. Positive time dependency, however, does not seem an accurate description of the life cycle of constitutions in other regions of the world.

In the first place, we have to consider the case of constitutions that, over time, seem to become *more* rather than less at risk of being replaced. It is not uncommon to observe countries experiencing a sort of “constitutional fatigue” over time. The 1886 Colombian Constitution, for instance, was replaced in 1991, after 105 years of being

formally in force. The authority of this constitution, however, did not appear to be growing with every passing year. On the contrary, decades of mounting criticism of its central aspects as well as failed attempts to convene a constituent assembly preceded its eventual replacement in 1991.⁵

There are also cases in which a pattern of constitutional stability is followed by one of instability. Uruguay's 1830 Constitution was in force for 86 years, until 1916. From that date to the present, however, Uruguay has had five different constitutions. Finally, remarkable constitutional stability can be achieved after a past of recurrent instability. Costa Rica had eight constitutions in the nineteenth century but only two in the twentieth century. In all these cases, it is not apparent how time affects the risk of constitutional replacement.

As Hardin and others have argued, constitutions imposed unilaterally in the midst of severe distributive conflicts may not be able to endure. But the opposite is not necessarily true. A constitution might have emerged as a coordinating device and been in force for a considerable period of time. This pattern, however, may change. At a given historical juncture, a decisive coalition may prefer an alternative institutional arrangement and find that the costs of maintaining the current constitution are higher than the costs of reorganizing on a new one. The equilibrium view of constitutional stability does not offer an adequate answer to why this might happen.

The different survival rates of constitutions around the world suggest that whether or not the costs of replacement exceed the costs of maintaining the existing constitution is a hypothesis that should be tested controlling for factors other than time. As we will see, there are good arguments to think that the incentives and opportunities of political actors to change the constitution may vary depending on specific constitutional provisions or on the social and political conditions under which constitutions exist.

Institutions

Starting with James Madison, several political scientists have argued that the durability of constitutions is a function of specific institutions that constitutions create. In this view, institutions that diffuse power, such as separate elections, bicameralism, executive veto, or federalism, may have a positive effect on the survival of constitutions

because they deprive relevant political actors of the motives to change existing arrangements. Institutions that protect the constitution as a “higher law”—such as stringent amendment rules or constitutional adjudication—may have a similar effect by making constitutional change difficult or by creating an informal mechanism to adapt the constitution to changes in the political, social, or economic environment.

According to Przeworski (1991: 38), “constitutions that are observed and last for a long time are those that reduce the stakes of political battles.” In his view, constitutions that reinforce a temporary advantage do not endure beyond the conditions that generated the last political victory. For this reason, successful democracies are those in which institutions make it difficult to fortify a temporary advantage and where increasing returns to power are institutionally mitigated. Were it otherwise, losers would tend to fight back the first time they lose, for waiting would make it less likely that they would ever succeed (1991: 36).⁶

Josep Colomer (2001a, 2001b, 2004) takes a similar position when he argues that restrictive institutions are more vulnerable to change than pluralistic institutions. Since restrictive rules create absolute winners and losers, some degree of uncertainty regarding future outcomes provides both incumbents and challengers with an incentive to adopt more inclusive institutions (2001b: 210). Once created, pluralist institutions are not likely to face the same pressures for change because they produce widespread satisfaction among the relevant political actors. Pluralist democratic institutions “should obtain relatively high endogenous support and, as a consequence, they should have greater longevity than exclusive or simple institutions favoring the concentration of power” (2001b: 211). In other words, only pluralist institutions are likely to remain stable in equilibrium.

If these arguments are correct, a constitution designed to diffuse power is likely to last longer than a constitution that concentrates power. In particular, power-sharing institutions such as inclusive electoral rules, bicameralism, executive veto, and federalism should have a positive effect on the survival of constitutions.

According to Lutz (1995: 357), constitutions can reach a considerable age without being replaced if they are neither amended too frequently nor too rarely. In his view, a moderate amendment rate depends on an amendment procedure that reaches an optimum

equilibrium between flexibility and rigidity. If this procedure is too rigid, the constitution cannot adapt efficiently to changing political environments. If it is too flexible, the distinction between ordinary and constitutional legislation disappears, making amendments a frequent strategy. In either case, according to this author, the replacement rate should increase.

Although Lutz's argument has some logical appeal, it is impossible to find a universal standard of what a moderate rate of amendment is or what the exact features of an optimum amendment procedure are. Everything depends on how frequently the constitution needs to be adapted, which in turn depends on extra constitutional factors, such as the relative stability of the political, social, and economic environment the constitution is supposed to regulate. If the environment is stable, a stringent amendment procedure and a low amendment rate might be adequate and preserve the constitution from being replaced. If the environment is unstable, however, a burdensome amendment process may prevent necessary adaptations and over time create incentives for the replacement of the constitution by irregular means.

Based on this reasoning, I propose that for countries facing frequent demands of institutional and policy reform the risk of replacement increases as the amendment procedure becomes more rigid.⁷ At the lower end of the continuum there are cases of parliamentary supremacy, in which the legislature can amend the constitution by a simple majority vote. At the other extreme one finds constitutions where amendments require the vote of a qualified majority in a bicameral legislature plus some additional process of approval, such as a second vote in a different legislature, changes passed by a number of states, or a popular referendum. If constitutional replacement is a function of the flexibility of adaptations through amendments, the life of constitutions in unstable environments should be shorter the more stringent the amendment procedure is.

Recent cases of constitutional replacement in Latin America lend plausibility to this hypothesis. President Gaviria in 1990 and President Hugo Chavez in 1999 managed to convene constituent assemblies to replace Colombia's 1886 Constitution and Venezuela's 1961 Constitution. In both cases, this was a strategy to bypass the intervention of Congress, where the reform proposal was likely to be delayed or rejected.

One final institution that may affect the durability of constitutions is constitutional adjudication. Constitutional adjudication is, along with formal amendment, one of the usual means by which constitutions are adapted to changes in the political, social, or economic environment (Lutz 1995). A body authorized to arbitrate in constitutional controversies and decide on the constitutionality of laws and executive orders may introduce significant changes into the existing constitution without amending or replacing it (Ackerman 1995). It does so by means of innovative interpretations that incorporate into the constitution rights, practices, or powers not provided for in the original text. If amending the constitution is too costly, political actors may rely on the interpretations of a special body responsible for constitutional adjudication to adapt the constitution to changing circumstances.

Constitutional adjudication can, however, only work as an alternative to constitutional amendment or replacement under certain conditions. The most important is that the constitutional adjudication body be invested with the power to make its decisions stand beyond the particular case at hand. A special body may be in charge of interpreting the constitution but its decisions may not have general effects, that is, effects beyond the case to be decided and the parties involved in the controversy. This weakens the impact of the decisions of the constitutional adjudication body as a means to change the constitution. By this standard, for instance, many countries in Latin America have only recently adopted an effective process of constitutional adjudication (Navia and Ríos-Figueroa 2005).

The preceding analysis suggests a general hypothesis about the impact of constitutional design on the longevity of constitutions. This hypothesis can be formulated as follows: constitutional provisions that diffuse power and make possible the flexible adaptation of the constitution to changing circumstances decrease the risk of constitutional replacement. This means that, other things being equal, constitutions are likely to last longer when they have inclusive electoral rules, bicameralism, presidential veto, federalism, flexible amendment rules, and constitutional adjudication.

The durability of constitutions, however, cannot be explained solely by variables pertaining to constitutional design. The lifespan of constitutions may be directly determined by the political and social conditions under which constitutions exist. These

events may also affect the selection of institutions under which constitutions are more or less likely to survive. Thus, if we do not take contextual factors into account, we may be either omitting a relevant set of variables or taking as the sole effect of institutions what is in part an effect of the conditions under which constitutions exist.

Political and Social Environment

A rich intellectual tradition in political science postulates that formal institutions emerge and change as a byproduct of political and social change. In this perspective, political actors would support a constitution in equilibrium only as long as the underlying configuration of interests and powers that sustains the equilibrium remains stable. Should the interests or resources of powerful actors change, so would the existing constitutional structure.

This analytic framework has been widely used to explain the origins and change of important political institutions. It is implicit, for instance, in Rokkan's account (1970) of the turn to proportional representation (PR) in Europe at the beginning of the twentieth century. According to Rokkan, the shift from plurality rule to PR resulted from a convergence of the interests of long-established parties and new parties. While the rising working class wanted to lower the threshold of representation in order to gain access to legislatures, the most threatened of the old parties wanted to protect their positions against the new waves of mobilized workers.⁸ In other words, a political change that is exogenous to the existing institutions is the key variable that triggers institutional change. A similar argument has been made by authors who consider that transformations in the party system, such as the collapse of previously dominant parties or the emergence of new parties, precede changes in the electoral system and not the other way around.⁹

The same explanation plays a part in various accounts of constitutional change during transitions to democracy. Robert Dahl (1971: 15–16), for instance, argued that inauguration of a democratic regime is impossible without rules of “mutual security” between government and opposition. These are rules that establish effective limits on the potential to concentrate power and to act arbitrarily in regard to citizen rights. When rules of mutual security do not exist, the ruling elite may not be willing to tolerate opposition

without first initiating a process of constitutional change that creates such guarantees (Przeworski 1988).

Barbara Geddes (1990, 1996) builds on this tradition to explain why some transitions to democracy simply restore a preauthoritarian constitution while others create a new constitution. Geddes argues that transitions to democracy will promote the replacement of the existing constitution only if the new political environment (the party system, for instance) is substantively different from the preauthoritarian one.

The idea that constitutions are created and changed as a reflection of political transformations makes sense if we consider the historical events that have usually triggered constitution-making processes. As Elster (1995) points out, constitutional change tends to occur in the wake of a crisis or exceptional circumstance of some sort, such as social and economic crises, revolutions, regime collapse, fear of regime collapse, reconstruction after war, or liberation from colonial rule. All these are important events with the potential to upset a preexisting constitutional equilibrium.

A general hypothesis can be derived from these arguments, namely, that important changes in the political and social environment under which constitutions exist are likely to increase the risk of constitutional replacement. Other things being equal, constitutions should have shorter lives when countries experience regime transitions, changes in the party system, military coups and revolutions, and social mobilizations directed against the incumbent government or the political regime.

An explanation of constitutional stability, however, cannot rely on contextual factors alone. In order to determine whether changes in the environment affect the risk of constitutional replacement, it is crucial to control for the effect of relevant aspects of constitutional design over time. This is so for two reasons. In the first place, institutions internal to the constitution may have a direct effect on its survival, as explained in the previous section. On the other hand, certain aspects of constitutional design may also generate the type of events that affect the durability of constitutions. The exclusion of constitutional design variables could then imply missing a potentially important part of the explanation or simply confusing as the sole effect of contextual conditions what is in part the effect of institutional variables.

In order to test the hypotheses outlined so far we need to perform a multivariate analysis with observations that have sufficient variation on the relevant independent variables. In particular, we need observations with different values on institutions but the same values on contextual variables—as well as observations with different values on contextual variables but the same values on institutions.¹⁰ In the next section I perform this analysis using data on constitutional replacements in Latin America during the period 1946–2000.

THE DETERMINANTS OF CONSTITUTIONAL STABILITY IN LATIN AMERICA

Whether constitutional stability is explained by time, constitutional design, or the political and social environment can be tested empirically. The Latin American region is an excellent field of study for this test. In the first place, Latin American countries have been prolific in constitution making. As shown in Table 1, 101 constitutions have been created in Latin American countries during the twentieth century. The number of constitutions in force per country in this period ranges from a low of 2 (Colombia and Mexico) to a high of 16 (Venezuela). On average, there have been 5.7 constitutions per country from 1900 to 2000.

There is also variation in the durability of constitutions both across and within countries. Ecuador's 1945 Constitution lasted less than a year, while Colombia's 1886 Constitution lasted 105 years. Uruguay maintained its 1830 Constitution for 86 years, until 1916. Since 1917, however, the average duration of constitutions in that country has been 28.3 years.

Latin American countries offer an appropriate context to test hypotheses about constitutional stability because there is sufficient variation in terms of design and political conditions. While all Latin American constitutions have adopted a presidential structure of government, there is variation in terms of electoral rules, congressional structure, presidential powers, and state organization. The constitutions also operate in markedly different political environments. Costa Rica, Mexico and Colombia have been politically stable, whether under authoritarian or democratic conditions. Ecuador, on the other hand, has had highly unstable political regimes almost since its independence.

TABLE 1
CONSTITUTIONAL STABILITY IN LATIN AMERICA

Country	Constitutions since independence	Constitutions 1900–2000	Average duration 1900–2000	Implemented in democratic years 1900–2000
Argentina	3	3	36.75	3
Bolivia	16	6	20	1
Brazil	7	6	18.2	2
Chile	7	3	55.7	2
Colombia	7	2	57	2
Costa Rica	12	4	32.25	1
Dom. Rep.	13	4	28.25	2
Ecuador	18	8	12.9	3
El Salvador	15	7	16.3	1
Guatemala	7	5	24.2	4
Honduras	14	8	13.25	3
Mexico	6	2	71	1
Nicaragua	12	8	13.4	1
Panama	4	4	24	2
Paraguay	6	4	32.5	1
Peru	13	5	26.6	2
Uruguay	6	6	28.3	5
Venezuela	26	16	6.3	3
Total	192	101		39
Mean	10.7	5.7	28.7	2.17

Source: Author's calculations, based on *Constituciones Hispanoamericanas* (<http://www.cervantesvirtual.com/porta/constituciones/>), Political Database of the Americas (<http://www.georgetown.edu/pdba>) and country sources.

A final relevant feature of constitution making in Latin America is the fact that constitutions have been created and replaced in both democratic and authoritarian regimes. In fact, most constitutions in force during the twentieth century were enacted and implemented under nondemocratic conditions. As shown in Table 1, only 39 out of 101 constitutions (38 percent) were implemented in democratic years. Most constitutional replacements occurred during nondemocratic years.¹¹

Data

I collected data on constitutional changes in eighteen Latin American countries from 1946 to 2000.¹² The dataset includes 990 observations, representing 62 constitutions, 44 of which were replaced during these years, and 18 of which were still surviving by 2000, when the observation period ends.¹³ Of the 62 constitutions, 26 were enacted in

democratic and 36 in nondemocratic years. The sample represents 61 percent of the total number of constitutions in force from 1900 to 2000, and includes 52 percent of the replacements that took place during the same period.¹⁴ The median survival time of the constitutions included in the sample is eighteen years.

The database traces the “life” of a constitution from the time it first comes under observation until it “fails” or “dies.” Except for the first constitution that enters the study in each country, constitutions come under observation the year after enactment, which is when they become at risk of being replaced. Since the event of interest is constitutional replacement, an existing constitution is considered to “fail” or “die” the year a new constitution is enacted.¹⁵ Amendments are not included here as failure events.

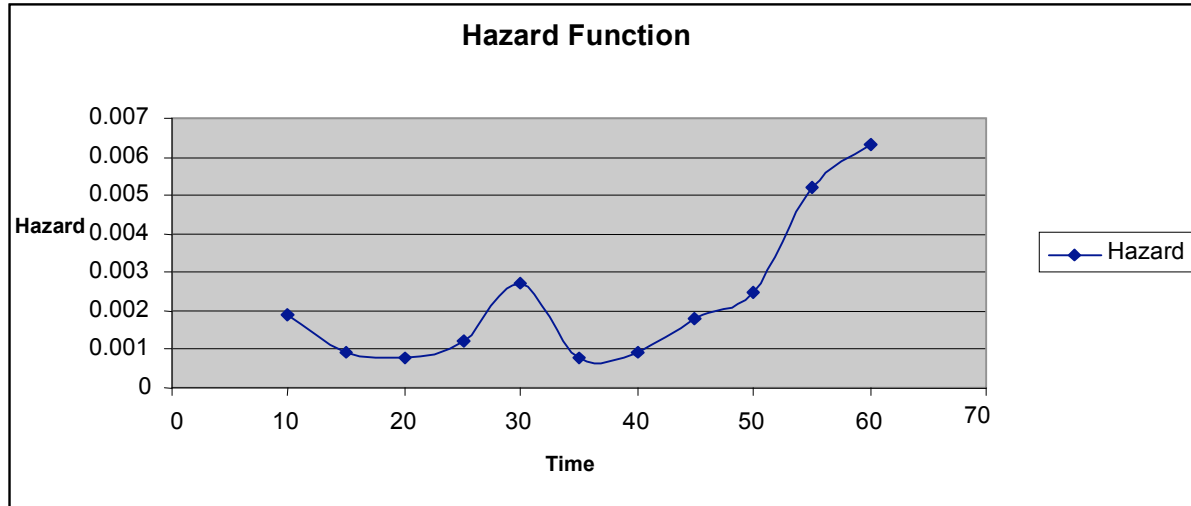
A constitution is considered to be new (thus replacing the existing one) when it purports to be new and is so labeled by its drafters, usually by indicating the abrogation of the previous constitution with all its amendments at the end of the text. In case of doubt, country sources on the evolution and history of constitutions provide these data.¹⁶ If country sources differ about whether a constitutional change is a reform of the existing constitution or a new constitution, I follow the rule of considering new a constitution enacted by a popularly elected constituent assembly.¹⁷

Since we are interested in the risk of constitutional replacement, it is useful to estimate the hazard of this event before including any explanatory variables or before assuming the hazard has any particular form. Figure 1 shows the shape of the hazard function based on a life table of the constitutions included in the database with estimates of the hazards of constitutional replacement calculated in five-year intervals.¹⁸

The hazard estimates from which this figure is derived suggest that the probability of observing a replacement within each interval first decreases, then increases and decreases again, with an apparently constant upward trend after the seventh five-year interval. These hazard estimates do not provide a direct test of dependence of the hazard on time, for which we need a parametric modeling approach. They also become less reliable over time because there are fewer individuals (constitutions) at risk in the dataset.

FIGURE 1

ESTIMATED HAZARD OF CONSTITUTIONAL REPLACEMENT IN LATIN AMERICA (1946–2000)



This descriptive analysis, however, does provide prima facie evidence that there is no positive dependence between constitutional survival and time. On the contrary, it indicates that for the constitutions under analysis, the hazard of constitutional replacement does not decrease over time. I will return to this point later.

Explanatory Variables

The dependent variable in this analysis is the number of years that constitutions remain in force before being replaced by another constitution. We want to know what factors explain the observed duration of constitutions. The first set of covariates of theoretical interest are related to the hypothesis that constitutional provisions that diffuse power and make possible the flexible adaptation of the constitution to changing circumstances are likely to decrease the risk of constitutional replacement. The variables selected to test this hypothesis are electoral rules, congressional structure, presidential veto, decentralization, amendment rules, and constitutional adjudication.

I have followed Shugart and Carey (1992) to distinguish between restrictive and inclusive electoral rules in a presidential regime. The most restrictive electoral rule is the election of presidents by plurality in concurrent congressional elections. The least restrictive is the election of presidents by majority rule. An intermediate category is the

election of presidents by qualified plurality (that is, plurality with a minimum threshold) or by plurality rule in nonconcurrent elections. Two variables have been included to reflect these categories. *ELECRULE2* equals 1 when presidents are elected by plurality rule in nonconcurrent elections or by qualified plurality and 0 otherwise. *ELECRULE3* equals 1 if presidents are elected by majority rule and 0 otherwise. The election of presidents by plurality in concurrent congressional elections is used as the implicit comparison group.

I use *BICAMERAL* to measure whether congress has a bicameral structure. It is coded as 1 when congress is bicameral and 0 otherwise. *VETO* traces the impact of the veto powers of the president. It is coded as 1 when the president has a veto requiring a qualified majority override and 0 otherwise. *DECENTR* measures the effect of vertical separation of powers. It is coded as 1 when the constitution provides for the popular election of regional or provincial governors and 0 otherwise.

The stringency of amendment rules is measured with the variables *QUALIFIED* and *ADDITIONAL*. The first determines whether amendments require a qualified majority vote in congress; the second whether the approval of local legislatures, the president, or a popular referendum is required in addition to legislative approval.¹⁹ Both are dummy variables which equal 1 when the respective rule is present and 0 otherwise. *ADJUDICATION* measures the impact of a body responsible for constitutional adjudication. The variable is coded as 1 when a body with the power to interpret the constitution with general effects exists and 0 otherwise.²⁰

If power-sharing institutions decrease the risk of constitutional replacement, one should expect the opposite effect from institutions that concentrate power. To test this effect I included two additional variables measuring the length of the presidential term in office and the restrictions placed on presidential reelection. *TERM* is a continuous variable indicating the length of the president's term in office. *REELECT2*, *REELECT3*, *REELECT4*, and *REELECT5* are dummy variables measuring the levels of restriction placed on presidential reelection, namely, reelection after two terms, reelection after one term, one immediate reelection, and unlimited reelection. No reelection is the implicit comparison group.

The second set of covariates of theoretical interest are related to the hypothesis that important changes in the political and social environment under which constitutions exist are likely to increase the risk of constitutional replacement. The variables selected to test this hypothesis are regime transitions, changes in the party system, the interruption of governments by military coups, revolutions or popular uprisings, general strikes, antigovernment demonstrations, and guerrilla warfare.

TRANSITION traces the effect of regime change on formal constitutional replacements.²¹ The variable takes the value of 1 when a regime transition occurs, and 0 otherwise.²² The effects of regime transition on constitutional stability are considered to last five years from the end of the old regime.²³ This means that regime transitions can only have an effect if a constitutional replacement occurs within that period.²⁴

The second variable is INTERVENTION, which measures government instability. It indicates the termination of an incumbent government by means of a military coup, a revolution or a civilian revolt.²⁵ It is coded as 1 when interventions occur and 0 otherwise. The effects of the intervention are considered to last five years from the time the military coup, revolution, or civilian revolt takes place.

PARTY CHANGE measures party system instability. The party system is considered to change when a new party or coalition obtains 20 percent or more of the popular vote in legislative elections within ten years of its first appearance in the electoral arena.²⁶ The variable is coded as 1 when a new party or coalition wins 20 percent or more of the vote and 0 otherwise. The effect is considered to last five years from the time when the new party or coalition reaches the threshold.²⁷

ANTIGOVT, STRIKE, and GUERRILLA are measures of social conflict affecting the stability of the government and/or the political regime as recorded by Banks (2006). ANTIGOVT indicates the number of demonstrations per year of at least 100 people for the primary purpose of displaying or voicing opposition to government policies or authority. STRIKE measures the number of strikes per year of 1,000 or more industrial or service workers that involve more than one employer and that are aimed at national government policies or authority. GUERRILLA indicates any armed activity, sabotage, or bombings per year carried on by independent bands of citizens or irregular forces and aimed at the overthrow of the present regime.

Five additional control variables are considered. LEGACY controls for the influence of previous failures on the probability that the existing constitution will be replaced. It is coded as a numerical variable indicating the number of constitutions that have been replaced in a given year. THIRDWAVE is a dummy variable which measures the impact of different time periods on constitutional survival, with 1978, the starting point of the last wave of democratization in the region, as the dividing date. DIFFUSION measures the impact of the number of countries replacing their constitutions on the probability that another country will change its constitution within a particular geographical area.²⁸ The numerical value of DIFFUSION is the percentage of countries in each sub-region that replaced their constitutions in five-year intervals. INFLATION and GROWTH are continuous variables measuring the average rate of inflation and GDP growth in five-year intervals.²⁹ They trace the impact of economic conditions on constitutional stability.

Method

I use a duration model to explore the factors that affect the probability that a country will replace its constitution. This model allows us to estimate the effect of variables on the hazard rate of an event (Allison 1984; Box-Steffensmeier and Jones 1997, 2004; Box-Steffensmeier and Zorn 2001). Since we are interested in explaining the survival of constitutions, measured as the time in years from enactment to replacement, the hazard rate means in this case the “risk” of replacement. Thus, the hazard rate tells us the likelihood that a constitution will be replaced between t and $t + 1$ given that a replacement has not already occurred.

I start by using a Cox proportional hazard model (Cox 1972), which makes the least restrictive assumptions about the shape and distribution of the hazard.³⁰ This model allows us to model constitutional survival without having to specify a priori the relationship between the event of interest—constitutional replacement—and time. It assumes that each covariate has a proportional and constant effect on the risk. This means, for instance, that if the occurrence of a regime transition increases the hazard of constitutional replacement by 20 percent, this ratio is the same at one year, two years, or at any point on the time scale.

An additional model, however, is required to determine whether the durability of constitutions is time-dependent. Theories of the constitution as a self-enforcing equilibrium postulate that the costs of change increase over time. If this hypothesis is correct, new constitutions should fail at higher rates than older ones. A Weibull model will allow us to test the null hypothesis of age independence and, if rejected, determine whether the mortality rate of constitutions is an increasing or decreasing function of time.

Results

Table 2 presents the results of the proportional hazard analysis.³¹ All regressions provide robust standard errors clustered by country, to control for possible correlation among observations within each country. All models are also stratified by whether the constitution was enacted in a democratic or in an authoritarian year. This provides a control for whether the constitution is democratic or authoritarian while allowing the arbitrary functions of time to differ for each group of constitutions.³²

The coefficients indicate whether an independent variable significantly increases or decreases the hazard rate, using standard errors to determine statistical significance. A positive coefficient indicates that the variable increases the hazard rate, meaning that the presence of the variable increases the rate at which a constitution is likely to be replaced. A negative coefficient indicates that the variable decreases the rate at which the constitution is likely to be replaced.

Model 1 provides an initial test of the effect of institutional design on the durability of constitutions. Inclusive electoral rules have the expected negative sign but their impact is not statistically different from zero. BICAMERAL, on the other hand, has a negative sign and is statistically significant at $p < .01$. This means that, compared to a unicameral congress, bicameralism systematically reduces the risk of constitutional replacement. This may be because a bicameral congress provides representation to a larger number of actors who have no interest in changing the constitution and/or because it makes more difficult to reach an agreement on the replacement of the existing constitution. Contrary to the prediction, VETO and DECENTR have positive signs and the latter is statistically significant at $p < .05$. One possible interpretation is that the existence of independent local authorities increases the demands for constitutional change to reallocate powers and jurisdictions between the central state and subnational units.

TABLE 2

**COX REGRESSIONS OF DURATION OF CONSTITUTIONS
IN LATIN AMERICA, 1946–2000**

Dependent Variable: Lifespan of Constitutions				
Independent Variables	Model 1	Model 2	Model 3	Model 4
<i>Constitutional Design Variables</i>				
ELECRULE2	-.136 (.894)	-.369 (.568)	-.383 (.612)	-.404 (.628)
ELECRULE3	-.353 (.629)	-.465 (.360)	-.474 (.384)	-.513 (.392)
VETO	.245 (.721)	.438 (.691)	.221 (.755)	.270 (.816)
BICAMERAL	-1.650 (.402) ***	-1.767 (.418) ***	-1.658 (.436) ***	-1.673 (.449) ***
DECENTR	1.247 (.565) **	.923 (.613)	1.044 (.536) *	1.119 (.571) *
QUALIFIED	-.310 (.681)	-.625 (.378) *	-.740 (.442) *	-.797 (.455) *
ADDITIONAL	.401 (.462)	.444 (.357)	.361 (.341)	.460 (.357)
ADJUDICATION	-1.167 (.490) **	-1.041 (.466) **	1.221 (.441) ***	-1.137 (.418) ***
REELECT2	1.110 (1.198)	.279 (.863)	.406 (1.004)	.444 (1.079)
REELECT3	2.467 (.918) ***	1.99 (.646) ***	1.922 (.634) ***	1.933 (.625) ***
REELECT4	1.420 (1.160)	1.307 (1.128)	1.339 (1.046)	1.417 (1.068)
REELECT5	2.956 (1.790) *	2.609 (1.162) **	2.624 (1.189) **	2.603 (1.192) **
TERM	.278 (.237)	.151 (.272)	.306 (.268)	.315 (.260)
<i>Political Stability Variables</i>				
TRANSITION	_____	.849 (.376) **	_____	_____
INTERVENTION	_____	_____	1.859 (.381) ***	1.873 (.381) ***
PARTYCHANGE	_____	1.075 (.353) ***	.800 (.347) **	.722 (.321) **
ANTIVGOVT	_____	.239 (.092) ***	.281 (.096) ***	.285 (.098) ***
STRIKE	_____	.288 (.104) ***	.380 (.128) ***	.357 (.119) ***
GUERRILLA	_____	-.151 (.177)	-.281 (.205)	-.292 (.206)
<i>Control Variables</i>				
LEGACY	.106 (.039) ***	.114 (.026) ***	.114 (.032) ***	.123 (.033) ***
THIRDWAVE	-.161 (.348)	-.652 (.469)	-.347 (.593)	-.303 (.718)
DIFFUSION	_____	_____	_____	1.461 (.707) **
INFLATION	_____	_____	_____	-.000 (.000)
GROWTH	_____	_____	_____	-.014 (.066)
Log pseudo-likelihood	-91.911	-82.815	-76.016	-75.324
N	990	990	990	990

Numbers in parenthesis are robust standard errors clustered by country

*** p < 0.01; ** p < 0.05; * p < 0.1

None of the variables measuring the impact of amendment procedures have a systematic effect on the hazard rate of constitutional replacement. They also have different signs, suggesting that amendment procedures may have contradictory effects on constitutional replacement. ADJUDICATION, however, has a negative sign and is statistically significant at $p < .05$. This suggests that having a body with the power to interpret the constitution with general effects does decrease the risk of constitutional replacement.

All the variables measuring power concentration have a positive sign. REELECT3 and REELECT5 are also statistically significant at $p < .01$ and $p < .10$ respectively. This means that, compared to the proscription of presidential reelection, provisions allowing the president to be reelected after one term or allowing the president to be reelected indefinitely systematically increase the hazard of replacement. The result makes sense, considering the prominence of term limits in many constitutional replacements in Latin America. Reelection after one term, for instance, has been the most common provision before a constitutional change replaced it by either more or less permissive reelection rules.³³ Indefinite reelection, in turn, is often the target of constitutional changes that occur after the fall of dominant parties or after an authoritarian regime.

Among the control variables, LEGACY has a positive sign and is statistically significant at $p < .01$. This indicates that a past of constitutional instability increases the risk that existing constitutions will be replaced. This finding reflects that regular patterns of behavior affect expectations. Given a past of constitutional instability, political actors do not expect constitutions to survive for a long time which, in turn, accelerates demands for change. THIRDWAVE has a negative sign, indicating that the rate of constitutional replacement has shown a decreasing trend since 1978. The effect, however, is not statistically significant.

Model 2 adds all the variables measuring political instability except INTERVENTION. The impact of institutional variables remains the same as in Model 1, except for DECENTR, which is no longer statistically significant, and QUALMAJ, which becomes marginally significant. REELECT5 increased its significance level at $p < .05$. The coefficients of TRANSITION and PARTY CHANGE are statistically significant at the .05 and .01 level and have the expected positive sign. This means that regime transitions, either

from or to democracy, and substantial transformations in the party system increase the risk of constitutional replacement. ANTIGOV and STRIKE are also significant, at $p < .01$, indicating that an increase in the number of antigovernment demonstrations or general strikes per year is positively correlated with a higher risk of constitutional replacement.

Model 3 replaces the variable INTERVENTION for TRANSITION.³⁴ This variable is significant at $p < .01$ and has a positive sign, indicating that the interruption of governments by means of military coups, revolutions, or civilian revolts leads to an important increase in the hazard of constitutional replacement. The impact of the rest of the variables is similar to what we observe in Model 2.

Model 4 is the complete model, including controls for diffusion effects and economic conditions. Results for the constitutional design and political stability variables are the same as those of the previous model. Among the new control variables, only DIFFUSION is significant at $p < .05$, indicating that the number of countries replacing their constitutions in a particular geographical area may have an effect on the probability that a nearby country will also replace its constitution.

Based on the results of Model 4, we can calculate the effect of the most significant variables using hazard ratios. As shown in Table 3, the hazard of constitutional replacement decreases by 81 and 68 percent respectively when the constitution provides for a bicameral congress and a constitutional court with the power to invalidate laws and acts of government with general effects. The hazard, however, increases by 591 and 1250 percent when the president can be reelected after one term or indefinitely. Among the political stability variables, the most impressive change in the hazard is created by the termination of governments by means of military coups, revolutions or civilian revolts.³⁵ The occurrence of these events increases the hazard of constitutional replacement by 550 percent. The emergence of new parties, the occurrence of antigovernment demonstrations and general strikes increase the hazard by 106, 33, and 43 percent respectively.

TABLE 3

**MAGNITUDE OF SIGNIFICANT COVARIATE EFFECTS
ON THE DURATION OF CONSTITUTIONS**

Variable	Change in x	Hazard Rate Change (Based on Model 4)
BICAMERAL	(0,1)	- 81%
ADJUDICATION	(0,1)	-68%
REELECT3	(0,1)	591%
REELECT5	(0,1)	1250%
INTERVENTION	(0,1)	550%
PARTY CHANGE	(0,1)	106%
ANTIGOVT	(1)	33%
STRIKE	(1)	43%

I used a Weibull model to test whether the hazard of constitutional replacement is dependent on the age of constitutions. Unlike the Cox model, where the particular form of the hazard function is left unspecified, the Weibull model constrains the baseline hazard to be monotonically increasing or decreasing, or flat with respect to time. Table 4 shows the results of this model for the regression of Model 4 (shown in column 4 of Table 2).

The coefficients of the relevant variables differ somewhat from those of the Cox regression, particularly ANTIGOVT and STRIKE. The main purpose of using the Weibull model, however, is to estimate the baseline hazard function, something we cannot do with a Cox regression. The null hypothesis is that the hazard of replacement is constant. This hypothesis is rejected at the 0.01 level. A Weibull regression also allows us to estimate whether the hazard is increasing or decreasing through time. This is indicated by the parameter p . If $p > 1$, the hazard is monotonically increasing; if $p < 1$ the hazard is monotonically decreasing. Table 4 shows that p is 1.54. This means that, at least for Latin American constitutions from 1946 to 2000, the hazard of constitutional replacement increases monotonically with time.³⁶ Figure 2 shows the shape of the hazard function.

TABLE 4

**WEIBULL REGRESSION OF DURATION OF CONSTITUTIONS
IN LATIN AMERICA, 1946–2000**

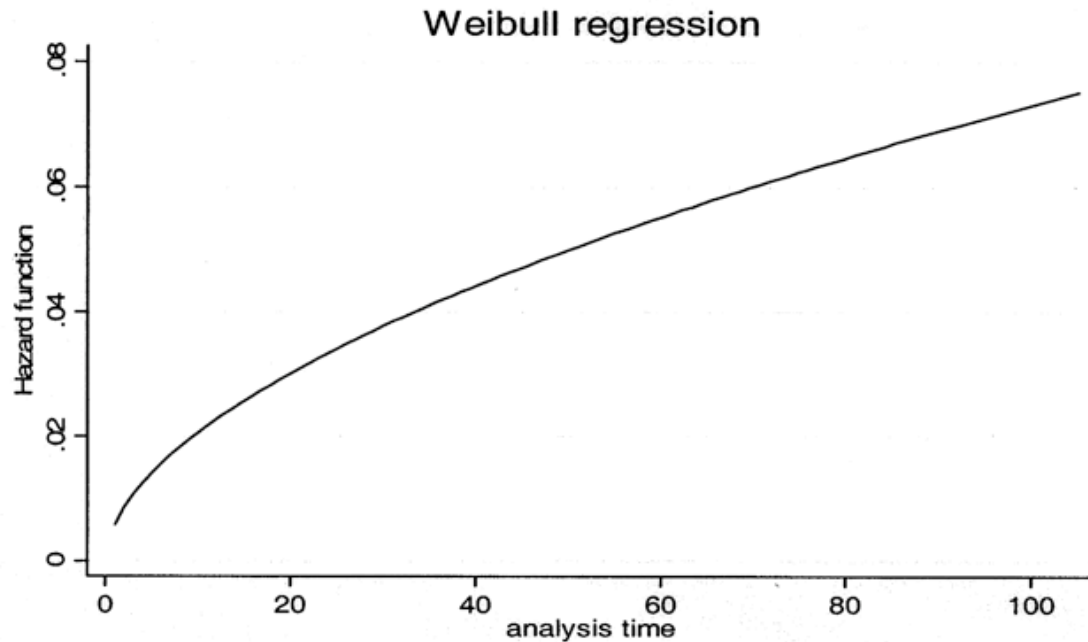
Dependent Variable: Lifespan of Constitutions

Independent Variable	Estimate (std. err.)
<i>Constitutional Design Variables</i>	
ELECRULE2	-.534 (.720)
ELECRULE3	-.169 (.420)
VETO	.508 (.693)
BICAMERAL	-1.111 (.394)***
DECENTR	1.022 (.339)
QUALIFIED	-.484 (.482)
ADDITIONAL	.123 (.366)
ADJUDICATION	-.701 (.424)*
REELECT2	.448 (.929)
REELECT3	1.641 (.583)***
REELECT4	.905 (1.036)
REELECT5	1.917 (1.311)
TERM	.163 (.267)
<i>Political Stability Variables</i>	
INTERVENTION	1.639 (.418)***
PARTYCHANGE	.724 (.326)**
ANTIVGOVT	.086 (.123)
STRIKE	.062 (.118)
GUERRILLA	-.099 (.105)
<i>Control Variables</i>	
LEGACY	.074 (.042) *
THIRDWAVE	-.072 (.484)
DIFFUSION	.630 (.384) *
INFLATION	-.000 (.000)
GROWTH	.025 (.052)
<i>Constant</i>	-8.263 (2.594)***
<i>ln_p</i>	.434 (.074)***
<i>Parameter P</i>	1.54 (.115)***
N	990

Numbers in parenthesis are robust standard errors clustered by country
*** p < 0.01; ** p < 0.05; * p < 0.1

FIGURE 2

ESTIMATED HAZARD BASED ON WEIBULL REGRESSION



Note that this result does not mean that the hazard of constitutional replacement is *ever* increasing. It appears to have this shape due to the assumptions of the Weibull model. The real shape of the hazard rate may very well decrease and then increase over time, as suggested by the nonparametric estimate of the hazard shown in Figure 1. What the model indicates, however, is that the hazard is increasing overall, thus rejecting the hypothesis that there is a positive dependence between time and the lifespan of constitutions.

This result may be region specific and cannot be generalized unless a more encompassing test that includes a larger set of constitutions from different regions of the world is performed. Based on the Latin American experience, however, a general proposition can be derived from this analysis. Constitutions that merely survive in the midst of government and regime instability, pervasive social conflict, and economic decline are likely to be seen as irrelevant or as contributing factors to performance

failure. In either case, political elites will have incentives to change constitutions periodically to redistribute power or to create the hope of a new beginning among disillusioned citizens.

CONCLUSIONS

Several important works on political institutions assume that constitutions are a stable set of rules that constrain political actors. This assumption is questionable, however, since the lifespan of constitutions varies a great deal both within and across countries.

I have argued that the stability of constitutions should be explained as a function of specific variables that either increase or decrease the capacity of constitutions to survive, and not simply as a function of time. One group of potentially relevant variables is related to constitutional design itself. Another group of variables is related to the political environment that constitutions are meant to regulate.

Neither of these explanations has yet been scrutinized through empirical analysis. In this paper I have attempted a preliminary test using data on constitutional replacements in Latin America from 1946 to 2000. Overall, the results of the empirical analysis show that both constitutional design and contextual factors are crucial for explaining whether constitutions remain stable in equilibrium.

The political environment is clearly important. In particular, regime transitions, transformations of the party system, irregular interruption of governments, and antigovernment demonstrations significantly increase the risk of constitutional replacement. This finding makes sense from a comparative perspective. Countries like Colombia and Mexico have both had long-lived constitutions in spite of the fact that these constitutions were very different in origin and design. What seems to be common to those countries, however, is the relative stability of their political regimes and party systems and the absence or low number of governments interrupted by military coups or civilian revolts.

The interruption of governments by military coups, civilian revolts, or revolutions has had the greatest effect in reducing the lifespan of constitutions in Latin America during the period under study. Of the constitutions that failed to survive from 1946 to

2000, 66 percent were replaced within a few years of a military coup, civilian revolt, or revolution.

These events occurred under both democratic and authoritarian regimes. Some of these events are rare (revolutions) or may not occur in the future at the rate they occurred in the past (military coups). The region, however, still suffers from government instability. From 1978 to 2003, for instance, fifteen Latin American presidents have been forced to resign or unilaterally decided to cut short their constitutional terms. These events have recently triggered processes of constitutional replacement (such as in Peru in 1993, Ecuador in 1998, and Venezuela in 1999), suggesting that constitutional instability is likely to persist in the region.

Even after we control for the political environment, however, this paper shows that variables related to constitutional design also have an important effect on the survival of constitutions. Bicameralism, for instance, reduces the hazard of constitutional replacement, either because it provides politicians with more positions to compete for or because it makes the process of replacement more difficult. There is also evidence that the existence of a body responsible for interpreting the constitution and with the power to make decisions with general effects strengthens the capacity of constitutions to survive under changing political and social conditions. Some institutions also appear to reduce the lifespan of constitutions. Compared to the absolute proscription of presidential reelection, the possibility of reelection after one term significantly increases the risk of constitutional replacement. This provision is likely to promote constitutional replacements to make reelection more or less restrictive.

The analysis presented in this paper constitutes a preliminary step for improving our understanding of why some constitutions survive longer than others. Several issues are obviously left unexplored. One of them is constitutional change under authoritarian regimes. It is not obvious why authoritarian leaders might care about constitution making if constitutions are not supposed to be binding during their rule. It would also be useful to consider amendments in comparison to replacements to see whether they are explained by the same or different factors. This would allow us to be more specific about the exact impact of amendment rules on the frequency of replacements. These issues are part of a future research agenda.

ENDNOTES

- ¹ This excludes rules of constitutional status contained in statute law (such as laws establishing the jurisdiction and powers of governmental departments or independent agencies) or in judicial decisions (such as the rulings of a constitutional court). It also excludes unwritten conventions.
- ² Most constitutions do not include procedures regulating their own replacement, thus turning this alternative into an irregular form of constitutional change.
- ³ In section 3 I define the criterion used to differentiate replacements from mere amendments.
- ⁴ This is similar to the idea of “path dependence,” that is, a process of positive feedback or self-reinforcement that leads to rising costs of reversal over time (Pierson 2004).
- ⁵ The first attempt to convene a constituent assembly to replace the constitution was made by President López Michelsen in 1975. See Sarabia Better (2003).
- ⁶ This argument does not need to apply to democratic regimes only. An authoritarian regime that has to accommodate a plurality of interests within the authoritarian elite may also achieve more constitutional stability over time with power-sharing than with power-concentrating institutions.
- ⁷ As Holmes and Sunstein have argued (1995), flexible amendment procedures may be preferable to stringent ones to preserve the constitution in rapidly changing political environments.
- ⁸ This explanation was later expanded by Lijphart (1992) and Boix (1999).
- ⁹ See Grum (1958) and Colomer (2004).
- ¹⁰ This analysis only captures the direct effects that institutional and contextual variables have on the lifespan of constitutions. On the indirect causality of these variables on constitutional survival, see Przeworski (2005).
- ¹¹ From 1945 to 2000, 26 out of 44 replacements (59 percent) took place in nondemocratic years.
- ¹² See the Appendix for data sources.
- ¹³ Some constitutions also had their origin before the first year of observation, 1946.
- ¹⁴ It should be noted that the decades 1940–50 and 1960–70 registered the most intense constitutional activity in the region during the twentieth century.
- ¹⁵ When a constitution is abrogated in one year and later restored during the period of observation, the restored constitution is counted as a new constitution.
- ¹⁶ Country sources are available by request from the author.
- ¹⁷ In fact, the only two constitutions in the database that it is not clear whether they should be considered reforms or new constitutions are the constitutional changes of 1949 and 1994 in Argentina. I opted for considering them new constitutions since they were enacted by popularly

elected constituent assemblies. That only new constitutions are created by constituent assemblies is a well accepted perspective in constitutional theory. See Ackerman (1995).

¹⁸ The hazard is here calculated as $dj/bj(nj-wj/2-dj/2)$, where dj is the number of constitutions that failed within the interval, bj is the length of the interval, nj is the number of constitutions still “alive” at the start of the interval, and wj is the number of constitutions still surviving at the end of the interval.

¹⁹ Since these procedures do not belong to the same dimension of design, they cannot be combined into a single ordinal scale of rigidity. It is not clear, for instance, whether an amendment requiring a qualified majority in a unicameral congress is more rigid than another requiring a simple majority plus a popular referendum. See Rasch and Congleton (2006: 335).

²⁰ The coding was based on Navia and Ríos-Figueroa (2005) with data provided by Julio Ríos Figueroa.

²¹ While democratic parties may restore the preauthoritarian constitution, authoritarian leaders may simply suspend the existing constitution without creating a new one.

²² The coding for regime transitions follows Przeworski et al. (2000).

²³ This means that if the old regime ends, say, in 1979, the transition is considered to have an effect on constitutional stability if the existing constitution is replaced between that date and 1983.

²⁴ In this and the other variables where the effect can be expected to occur within a period of time, I have tried a shorter (4) and longer (6) term without finding significant variations in the results.

²⁵ The coding of military coups and civilian revolts was based on Smith (2005), Nohlen (2005), and *The Cambridge History of Latin America*, vols. 5, 6, 7, and 8.

²⁶ In the absence of information about legislative elections, share of votes in presidential elections, share of seats in congress, or share of seats in constituent assemblies was used. Data on elections was collected from Nohlen (1993, 2005) and Payne et al. (2002). Data on political parties was collected from Nohlen (1993, 2005), Coppedge (1997), Mainwaring and Scully (1995), and Alcántara (2004).

²⁷ This means that if a party starts to compete in 1979 and wins more than 20 percent of the popular vote in 1984, party change is considered to have an effect on constitutional stability if the constitution is replaced between 1984 and 1988.

²⁸ Latin American countries were classified into three subregions: Southern, Andean, and Central/North. The Dominican Republic, the only Caribbean country considered, is included in the latter category.

²⁹ Data from the Oxford Latin American History Database (<http://oxlad.qeh.ox.ac.uk/>).

³⁰ Parametric models, such as the Weibull or the exponential, require specifying a particular distributional form of the baseline hazard.

³¹ The Efron method for handling ties was used in all regressions.

³² This means that the hazards for each type of constitution are not restricted to being proportional, unlike the case with the variables explicitly included in the models. This option is justified because tests of the proportional hazard assumption show that the variable measuring whether the constitution is democratic or authoritarian tends to interact with time.

³³ Specifically, 37 of the 62 constitutions included in the database had a provision allowing for presidential reelection after one term and 33 of them failed to survive.

³⁴ INTERVENTION correlates with TRANSITION because several transitions (either from or to democracy) occurred due to military coups that interrupted the existing government.

³⁵ For the discussion of a similar result using a different database, see Elkins, Ginsburg, and Melton (2007).

³⁶ To see the impact of outliers, I ran the regression without the most stable countries (Colombia, Costa Rica, and Mexico) and without the least stable (Ecuador, Nicaragua, and Venezuela). The estimate of the baseline hazard function did not change significantly.

REFERENCES

- Ackerman, Bruce. 1995. "Higher Lawmaking." In Sanford Levinson, *Responding to Imperfection: The Theory and Practice of Constitutional Amendment*. New Jersey: Princeton University Press.
- Alcántara, Manuel. 2004. *Instituciones o Maquinas Ideológicas? Origen, Programa y Organización de los Partidos Latinoamericanos*. Barcelona: ICPS.
- Alexander, Gerard. 2001. "Institutions, path dependence, and democratic consolidation." *Journal of Theoretical Politics* 13 (3): 249–70.
- Allison, Paul. 1984. *Event History Analysis: Regression for Longitudinal Event Data*. London: Sage Publications, Quantitative Applications in the Social Sciences Series.
- Banks, Arthur S. 2006. *Cross-National Time Series, 1815–2003* [Computer file]. ICPSR ed. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [producer and distributor]. Last accessed in 2006.
- Barros, Robert. 2004. Constitution-making and -breaking in South America, 1946–2000: Are constitutions part of the problem? Unpublished manuscript.
- Boix, Charles. 1999. "Setting the Rules of the Game: The Choice of Electoral Systems in Advanced Democracies." *American Political Science Review* 93 (3): 609–623.
- Box-Steffensmeier, Janet M. and Bradford S. Jones. 1997. "Time is of the essence: event history models in political science." *American Journal of Political Science* 41 (4): 1414–61.
- . 2004. *Event History Modeling: A Guide for Social Scientists*. New York: Cambridge University Press.
- Box-Steffensmeier, Janet M, and Christopher J. W. Zorn. 2001. "Duration models and proportional hazards in political science." *American Journal of Political Science* 45 (4): 972–88.
- Colomer, Josep M. 2001a. *Political Institutions: Democracy and Social Choice*. Oxford, New York: Oxford University Press.
- . 2001b. "Disequilibrium institutions and pluralist democracy." *Journal of Theoretical Politics*, 13 (3): 235–48.
- , ed. 2004. *Handbook of Electoral System Choice*. London, New York: Palgrave-Macmillan.

- Coppedge, Michael. 1997. "A Classification of Latin American Political Parties." Working Paper No. 244, Kellogg Institute of International Studies, University of Notre Dame.
- Cox, D. R. 1972. "Regression Models and Life Tables." *Journal of the Royal Statistical Society, Series B* 34: 187–202.
- Cox, Gary, and Matthew D. McCubbins. "The Institutional Determinants of Economic Policy Outcomes." In Stephan Haggard and Matthew D. McCubbins, eds., *Presidents, Parliaments, and Policy*, 21–63. New York: Cambridge University Press.
- Dahl, Robert A. 1971. *Polyarchy: Participation and Opposition*. New Haven, CT: Yale University Press.
- Elkins, Zachary, Tom Ginsburg, and James Melton. 2007. "The Lifespan of Written Constitutions." Paper presented at the American Political Science Association Meeting, Chicago, August 28–September 2.
- Elster, Jon. 1991. "Born to be Immortal: The Constitution-Making Process." Cooley Lectures, University of Michigan Law School, April 15–17 (on file in *University of Chicago Law Review*).
- . 1995. "Forces and mechanisms in constitution-making." *Duke Law Review* 45: 364–96.
- Geddes, Barbara. 1990. "Democratic Institutions as a Bargain Among Self-Interested Politicians." Paper presented at the 1990 meeting of American Political Science Association, San Francisco.
- . 1996. "Initiation of New Democratic Institutions in Eastern Europe and Latin America." In Arend Lijphart and Carlos Waisman, eds., *Institutional Design in New Democracies: Eastern Europe and Latin America*. Boulder, CO: Westview Press.
- Grum, John. 1958. "Theories of electoral systems." *Midwest Journal of Political Science*. Vol. 2, 4: 357–376.
- Hardin, Russell. 1989. "Why a Constitution?" In Bernard Grofman and Donald Wittman, eds., *The Federalist Papers and the New Institutionalism*. New York: Agathon Press.
- Holmes, Stehen and Cass Sustein. 1995. "The Politics of Constitutional Revision in Eastern Europe." In Sanford Levinson, ed., *Responding to Imperfection: The Theory and Practice of Constitutional Amendment*. Princeton: Princeton University Press.

- Jones, Mark P. 1995. *Electoral Laws and the Survival of Presidential Democracies*. Notre Dame, IN: University of Notre Dame Press.
- Lijphart, Arend. 1992. "Democratization and constitutional choices in Czecho-Slovakia, Hungary and Poland 1989–91." *Journal of Theoretical Politics* 4 (2): 207–223.
- . 1999. *Patterns of Democracy: Government Forms and Performance in Thirty-Six Countries*. New Haven: Yale University Press.
- Linz, Juan. 1994. "Presidential or Parliamentary Democracy: Does it Make a Difference?" In Juan Linz, and Arturo Valenzuela, eds., *The Failure of Presidential Democracy*, 3–87. Baltimore: John Hopkins University Press.
- Lutz, Donald S. 1995. "Toward a Theory of Constitutional Amendment." In Sanford Levinson. *Responding to Imperfection: The Theory and Practice of Constitutional Amendment*. New Jersey: Princeton University Press.
- Mainwaring, Scott, and Timothy E. Scully, eds. 1995. *Building Democratic Institutions: Party Systems in Latin America*. New York: Cambridge University Press.
- Mainwaring, Scott, and Matthew Shugart, eds. 1997. *Presidentialism and Democracy in Latin America*. New York: Cambridge University Press.
- Navia, Patricio, and Julio Ríos-Figueroa. 2005. "The Constitutional Adjudication Mosaic of Latin America." *Comparative Political Studies* 38 (2): 189–217.
- Nohlen, Dieter, ed. 1993. *Enciclopedia electoral Latinoamericana y del Caribe*. San José, Costa Rica: Instituto Interamericano de Derechos Humanos.
- . 2005. *Elections in the Americas*. New York: Oxford University Press.
- North, Douglass, and Barry R. Weingast. 1989. "Constitutions and Commitment: The Evolution of Institutions Governing Public Choice in Seventeenth-Century England." *Journal of Economic History* 49 (4): 803–832.
- Payne, J. Mark, Daniel Zovatto G., Fernando Carrillo Flórez and Andrés Allamand Zavala. 2002. *Democracies in Development: Politics and Reform in Latin America*. Washington, DC: Inter-American Development Bank.
- Persson, Torsten and Guido Tabellini. 2003. *The Economic Effects of Constitutions*. Cambridge, MA: MIT Press.
- Pierson, Paul. 2004. *Politics in Time. History, Institutions, and Social Analysis*. Princeton: Princeton University Press.

- Powell, Jr., G. Bingham. 2000. *Elections as Instruments of Democracy: Majoritarian and Proportional Visions*. New Haven: Yale University Press.
- Przeworski, Adam. 1988. "Democracy as a Contingent Outcome of Conflicts." In Jon Elster and Rune Slagstad, eds., *Constitutionalism and Democracy*. New York: Cambridge University Press.
- . 1991. *Democracy and the Market: Political and Economic Reforms in Eastern Europe and Latin America*. New York: Cambridge University Press.
- . 2005. "Constitutions: When do they last? When do they work?" Paper prepared for the Second Seminar on "Constitutionalism and Constitutions," Universidad de San Andres, Buenos Aires, November 16–20.
- Przeworski, Adam, Michael Alvarez, José Antonio Cheibub, and Fernando Limongi. 2000. *Democracy and Development. Political Institutions and Well-Being in the World, 1950–1990*. Cambridge, UK: Cambridge University Press.
- Rasch, Bjorn Erik, and Roger D. Congleton. 2006. "Amendment Procedures and Constitutional Stability." In Roger D. Congleton, and Birgitta Swedenborg, eds., *Democratic Constitutional Design and Public Policy: Analysis and Evidence*. Cambridge, MA: MIT Press.
- Rokkan, Stein. 1970. *Citizens, Elections, Parties: Approaches to the Comparative Study of the Process of Development*. Oslo: Universitetsforlaget.
- Sarabia Better, Arturo. 2003. *Reformas Políticas en Colombia*. Bogota: Editorial Norma.
- Shepsle, Kenneth. 1986. "Institutional Equilibrium and Equilibrium Institutions." In Herbert Weisberg, ed., *From Political Science: The Science of Politics*, 51–82. New York: Agathon.
- Shugart, Matthew S., and John M. Carey. 1992. *President and Assemblies: Constitutional Design and Electoral Dynamics*. Cambridge, Mass.: Cambridge University Press.
- Smith, Peter. 2005. *Democracy in Latin America. Political Change in Comparative Perspective*. New York: Oxford University Press.
- Tsebelis, George. 1990. *Nested Games*. Berkeley: University of California Press.
- . 1995. "Decision Making in Political Systems: Veto Players in Presidentialism, Parliamentarism, Multicameralism, and Multipartyism." *British Journal of Political Science* 25: 289–326.
- Weingast, Barry. 1997. "The political foundations of democracy and the rule of law." *American Political Science Review* 91 (2): 245–263

Appendix
Data Sources on Constitutions and Constitutional Change

ConstitucionesHispanoamericanas,

<http://www.cervantesvirtual.com/portal/constituciones>

Country Profiles, <http://lcweb2.loc.gov/>

Keesing's Record of World Events On Line, <http://libnet.ac.il/~libnet/keesings.htm>

Latin American Historical Dictionaries, various countries (Metuchen, NJ: Scarecrow Press)

Latin American Weekly Report, 1978–2000

Nohlen, Dieter, ed., *Elections in the Americas: Data Handbook*, vols. 1 & 2 (Oxford: Oxford University Press, 2005)

Political Database of the Americas,

<http://pdba.georgetown.edu/Constitutions/constudies.html>