

Constitutional Evolution: Amendment Versus Replacement in Comparative Perspective

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Abstract

We explore why some national constitutions adapt to domestic and foreign challenges through incremental amendments, while others are abandoned and replaced wholesale. Existing studies point to the importance of constitutional scope, or the range of enumerated issues. We go further by disaggregating constitutions by their specificity on human rights versus political institutions. Using historical and cross-national data, we demonstrate that the specificity of rights reduces the probability of replacement, while the specificity of institutions increases the frequency of amendments. Constitutions that proscribe the government from violating a larger share of human rights mitigate bottom-up pressure for wholesale constitutional replacement, improving longevity. By contrast, the merits of enumerating institutions vary with country- and history-specific contexts. Institutions can be fixed, adapted, or manipulated without fundamentally altering state-society relations, thus motivating incremental amendments instead of replacement.

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I. Introduction

Constitutions are ostensibly designed to stand the test of time, but all countries experience social, political, and economic changes—both incremental and seismic—that challenge the viability of original constitutional bargains. This paper explores why some constitutions adapt and persevere through targeted *amendments*, while others are abandoned and *replaced* wholesale.

Existing cross-national studies suggest that amendment and replacement may be substitutes: constitutions that are amended periodically are less likely to be replaced (Elkins, Ginsburg, and Melton 2009). When a constitution faces a crisis in performance or legitimacy, veto players must explicitly decide whether the document is salvageable (amend) or permanently disabled (replace). But what factors influence this tradeoff? One school of thought points to the range of challenges that confront a constitution after its ratification. Wars (civil and international), regime change, or economic shocks can drastically weaken the legitimacy of the constitutional system. Another avenue is to look at the original *content* of constitutions. Elkins, Ginsburg, and Melton (2009) find that documents that cover more topics are less likely to be replaced, because they enshrine a greater range of issues that are relevant to citizens. While disputes may arise about the interpretation or execution of constitutional provisions, these can be resolved in the courts or by the legislature without requiring a complete overhaul.

We follow the latter line of research and explore whether the range of issues specified in a constitution influences its relative propensity to be amended vs. replaced. We pay particular attention to differences in the degree to which *human rights* and *political institutions* are enumerated. These are two very different domains of constitutionalism. Human rights—both negative and positive—delineate the maximal power of the state vis-à-vis private society. They define the state's discretion and obligation to provide public goods using its legal authority, including its monopoly on

violence. Institutions, by contrast, address the forms of political representation and the operations of the state. They define the powers of local governments, whether the executive is presidential or parliamentary, how legislators should be elected, and the like.¹

We argue that the specificity of rights and institutions has profound consequences for the tradeoff between constitutional replacement vs. amendment. Using data from over 500 national constitutions, we demonstrate that the greater enumeration of human rights reduces the likelihood of replacement, but it does not affect the likelihood of amendment. By contrast, the greater delineation of political institutions increases the amendment rate, but it does not influence the probability of replacement.

These divergent paths reflect fundamental differences in the importance of rights and institutions to constitutional endurance. When constitutions proscribe the government from encroaching on or violating a larger share of human rights, the original social contract between state and society is more likely to persevere. This is not to say that all citizens will be happy with the powers of the state. However, the appropriate venue for constitutional disputes shifts to the legislative arena, where offending governments can be replaced electorally, or to the courts, which can deem offensive behavior unconstitutional. When constitutions are vague on rights, however, there are fewer limits on state authority. This can tempt political actors to pursue ideological or particularistic agendas that delegitimize the constitution. Courts cannot remedy violations of civil rights which are not explicitly stipulated in the constitution or established in case law. The result, then, is greater bottom-up pressure for wholesale constitutional replacement.

The enumeration of political institutions, on the other hand, varies with country-specific factors and events. Socially heterogeneous countries are much more likely to be federal than unitary,

¹ Although we stipulate a theoretical difference between institutions and rights, in practice, one can be used to foster the other. For example, electoral quotas that guarantee legislative seats for underrepresented groups, such as women or ethnic minorities, can help protect those groups' rights.

while colonial history influences the propensity for parliamentary vs. presidential executives. At the same time, sociopolitical events such as civil wars or financial collapse may alter the viability of institutional arrangements, even if those reflected best practices at the moment of constitutional ratification. Insofar as institutions can be changed without fundamentally altering state-society relations, however, institutional problems tend to be resolved via incremental amendments, not wholesale replacement.

II. **Endurance and Adaptation**

Most national constitutions follow a similar functional form. Following a description of the history and purpose of the constitution in the preamble, they delineate the limits and obligations of the State to its citizens (positive and negative rights), the structure of government institutions (e.g. presidentialism, federalism), rules for selecting and replacing political actors (e.g. electoral system, impeachment provisions), procedures for passing legislation (e.g. agenda control, legislative committees), and finally how to amend the constitution itself. However, there is no agreed-upon standard for their optimal *content*. A sparser constitution that only enumerates fundamental political bargains, such as inviolable civil rights and government operations, should face less frequent attempts at revision than a detailed version that also lists policy goals (e.g. universal health care) or preferences (e.g. a ban on alcohol consumption), whose popularity can wane over time. This is not to say that that sparseness or vagueness is an inherent virtue. More detail on rights or institutions may be necessary to assuage minority groups' concerns that the majority will use its numerical clout to renege on non-enumerated promises. In the United States, smaller, less populated states fought for equal apportionment of Senate seats in order to protect their slave-holding and agricultural interests (Rakove 1996). As Ferejohn (1997) notes, there is an implicit tradeoff at work: detailed constitutions empower governments to make credible commitments by defining and limiting their

power, but excessive entrenchment limits policy adaptability and circumscribes the popular will of future generations.

At heart is a fundamental dispute about the purpose of constitutions, an issue that divided the Founding Fathers of the American constitution, notably James Madison and Thomas Jefferson. The “Madisonian” view is that a constitution’s value is linked to its endurance. By enshrining hard-to-change principles, constitutions stabilize expectations about social and political rules and serve as a national symbol of shared civic identity. As Madison warns in Federalist 49, constant reappraisal and criticism of the constitution can imply some defect with the government, depriving it of the veneration necessary to stabilize the polity. By contrast, the “Jeffersonian” view holds that constitutions should adapt to changes in social preferences and political environments. The priorities of a constitution’s founders may not be shared by successive generations, and growing dissonance between original principles and evolving preferences can challenge the constitution’s very legitimacy. The periodic replacement of constitutions ensures that they maintain relevance. In a letter to James Madison, Thomas Jefferson prescribes, “Every constitution, then, and every law, naturally expires at the end of 19 years. If it be enforced longer, it is an act of force, and not of right.”²

On balance, the value of endurance versus adaptability is conditional on the political context. Scholars of democratization argue that constitutional pacts empower citizens to monitor and coordinate against government overreach or irresponsibility (Hardin 1989, Weingast 1997).³ In countries riven by ethno-cultural strife, for example, political actors—of their own volition or in

² *The Founders' Constitution*. Vol. 1, Ch. 2, Document 23. (Chicago, The University of Chicago Press) <http://press-pubs.uchicago.edu/founders/documents/v1ch2s23.html>. Jefferson would not preclude the re-adoption of an identical constitution after 19 years. However, the deliberation of alternative constitutions can fortify public understanding of status quo principles and enhance their legitimacy.

³ A related argument is that of credible commitment: by imposing limits on their own power and binding their own hands, political rulers can demonstrate a stronger commitment to the preferences of their selectorate. North and Weingast (1989), for example, link this to the ability of English rulers—seeking financial loans to wage wars—to borrow money at lower interest rates.

response to majority preference—may try to exploit or disenfranchise minority groups unless the latter’s rights are enshrined in the constitution. Limits on government powers may be enumerated directly by forbidding discrimination based on ethnicity or heritage. It can also be achieved indirectly by ensuring that minority voices will be represented in the legislature through the adoption of proportional electoral rules (Lijphart 2004) or, for geographically-concentrated minorities, by decentralizing political power via federalism (Horowitz 2002). Where there exists long-term concerns about the predatory relationship between the state and society or between majority and minority groups, constitutional endurance can be a virtue, as it breeds knowledge and acceptance of the range of (im)permissible political behavior.

That said, constitutions are not blueprints that are specifically designed to optimize future prosperity and peace. In criticizing the almost sacred veneration of the US Constitution, Levinson (2006) reminds us that many American institutions, notably equal apportionment of Senate seats, were necessitated by political exigencies in 1787 that are less pressing today. Of course, constitutions that ignore political realities will not be ratified. And for constitutions to survive, they must be self-enforcing: veto players must judge that they will be better served by abiding by the constitution than by ignoring it. In this sense, veneration is not a trivial attribute, as unwavering public support for the constitution may give pause to powerholders who would otherwise treat the document as a parchment barrier. However, what may be a local maximum at the time of constitutional ratification may be suboptimal in future generations, prompting and justifying movements to change the constitution.

Indeed, demand for change is to be expected for a number of reasons. One is the evolution of sociocultural norms. Once-accepted biases against ethnic minorities or women have become passé, motivating revisions to group-based restrictions on human rights (Rasch and Congleton 2006). Issues that were not on the public radar 100 years ago, such as environmental pollution or

internet privacy, have become matters of concern. More generally, the expansion of suffrage, particularly to poor voters, has broadened expectations about the government's role in delivering social insurance and public education. Zackin (2013) notes that state-level constitutions in the US have steadily expanded positive rights in response to pressures from underrepresented, politically weak groups. She writes, "For at least certain groups of people, restrictions on government and protections for private property would mean little unless government also provided protection from other, even more immediate dangers – like poverty, dangerous working conditions, and environmental catastrophe." (p. 11)

Empirically, we can observe an increase in the range of issues mentioned in newer constitutions. Figure 1 plots the relationship between a constitution's "scope" and its year of adoption, separated by whether the country was democratic or autocratic at that time. *Scope* is a ratio (0-1) that denotes the proportion of 92 common issues that a constitution mentions in its text, taken from the *Comparative Constitution Project's* database of over 800 historical constitutions.⁴ The LOWESS lines (locally weighted scatterplot smoothing) in Figure 1 show that constitutions increasingly cover more topics, regardless of regime type.

[FIGURE 1 ABOUT HERE]

Greater topical scope generally—and perhaps unavoidably—necessitates some form of constitutional *adaptation* (Lutz 2006). Every polity experiences changes in demographics, socioeconomic needs, and political balances of power. Where constitutions are short and less comprehensive, these issues may be resolved through legislative statute or judicial review.⁵ Where

⁴ <http://comparativeconstitutionsproject.org>

⁵ Leaving disputes to the courts is not necessarily a good thing. As Epp (1998) notes, judicial review

the constitution is longer, however, the probability that a contested issue touches on an existing constitutional principle—and hence requires a formal amendment—increases.

While we do not directly assess the merits of constitutional longevity in this paper, we take as given that political demand for adaptation increases over the constitution's lifespan. Our concern, instead, is with the nature of this adaptation: under what conditions are constitutions more likely to be *amended* versus *replaced*? An amendment reflects the judgment of veto players that the original constitution is worth keeping, albeit with changes to specific sections to bring the document in line with their wants or needs. Replacement, however, indicates that the entirety of the constitution needs to be voided, because the normative content or policy implications of its provisions are out of sync with political balances of power or pressing social concerns.⁶ Replacement is obviously a more dramatic step than amendment, as it risks disrupting the Madisonian benefits of stable expectations, common knowledge, and legitimacy, all of which derive from longevity. However, retaining a poorly structured constitution for longevity's sake implies being trapped at some local maximum whose relative superiority may erode over time.

Before introducing our own theory and hypotheses, we should add an important caveat. While our study is concerned with constitutional adaptation, our analysis is restricted to formal, textual changes to the document itself. In other words, we do not seek to explain the frequency and content of *reinterpretations* of constitutional provisions, which is an enormous literature in and of itself. Rasch and Congleton (2006) note three “informal” types of amendment: judicial review in a constitutional court, evolution of political customs, and suspension of provisions during national

in appellate and constitutional courts can be financially expensive, thereby biasing the process against resource-poor actors.

⁶ Replacements are distinct from repeated amendments, although the difference is reminiscent of the paradox of Theseus's Ship. For example, the German Basic Law has survived since its implementation in 1949, but more than half of the articles have been amended, calling into question whether it is still the same document. Following EGM (2009), however, we define a replacement as “a set of revisions that is formally designed as a ‘new’ constitution or significant revisions that do not use the stated amendment procedure.” (p. 126)

emergencies. In many countries, particularly common law systems, judicial review is the more common way by which the exact meaning of constitutions evolve over time. Besso (2005) outlines conditions under which actors may privilege formal versus informal paths to constitutional adaptation. Some of the relevant factors, such as powers of judicial review and the difficulty of formal amendment, will be incorporated in our own models. However, we do not include informal adaptation as a dependent variable, due to the lack of data and consensus on when and how judicial reviews occur. This choice limits the empirical scope and theoretical reach of our analysis, but we believe this provides a clearer understanding of formal constitutional changes without doing violence to broader conceptions of constitutionalism.

III. **Replace or Amend?**

Earlier studies have also examined the frequency of constitutional amendments and propensities for complete replacement. Donald Lutz (2006), analyzing both national constitutions and US state constitutions, finds that the probability of replacement increases when the procedural hurdle for amendments is too high or too low. Constitutions outside the goldilocks zone either blur the line between normal legislation and fundamental principles (when too easy to amend), thus limiting popular veneration, or prevent legislators and citizens from fixing poor choices or obsolete provisions (when too difficult), reducing their utility. Elkins, Ginsburg, and Melton (2009; EGM hereafter) extend this work and provide a historically comprehensive analysis of the determinants of constitutional longevity. Their study is based on an original dataset of over 800 constitutions in both autocratic and democratic countries since 1789, which undergirds their “Comparative Constitutions Project” (CCP) research agenda. EGM focus on constitutional *design*: whether specific provisions in the constitutional document improve its resilience to exogenous shocks such as war, economic crises, democratic transitions, or leadership change. They find—among other things—that

constitutions that cover more topics (greater “scope”, defined above and in Figure 1) endure longer. Detailed constitutions may require more adaptation, but frequent amendments extend constitutional longevity by incrementally bringing the document in line with evolving social demands.

EGM’s study provides important general principles underlying constitutional endurance. As they note, “Even Jeffersonians, . . ., would agree that *some* constitutions deserve a longer lease on life, whereas Madisonians would recognize that *some* constitutions should be euthanized” (EGM, pg. 33; italics in original). The central purpose of our paper is to adjudicate what this “some” is: Which features of constitutions make amendment or replacement more likely? We tackle this question by theorizing and estimating the explicit tradeoff between these two modes of constitutional change.

The primary empirical hurdle is operationalizing the content of constitutions in a substantively meaningful way. One option is to follow Lutz (2006) and count the number of words in the document, but this risks conflating important issues with (seemingly) extraneous ones. For example, the Maltese Constitution (est. 1964) has 32,000 words, making it relatively long and detailed compared to the median of 13,600 words in the CCP dataset. However, 145 words are spent on designating the national language (Art. 5), 982 words on qualifications for Maltese citizenship (Art. 22-24, 44.4), and 574 words on the national broadcasting station (Art. 118-119). These issues are not trivial: they embody conceptions of nationhood and the government’s role in molding and transmitting information. While we do not doubt these provisions were important to Maltese constitution writers in 1964, we hesitate to declare them as necessary to the constitution’s survival. EGM’s *Scope* variable is a better measure than word count, as it examines the ratio of 92 common issues that are mentioned in constitutions. One of *Scope*’s empirical virtues is that its values are distributed normally, which is critical when conducting econometric analyses. However, it, too, measures a number of arguably secondary issues, such as whether the constitution refers to artists or the arts or whether public office holders must take an oath to abide by the constitution.

We focus on a more targeted subset of constitutional principles. Specifically, we contend that the constitution's specificity with respect to *human rights* and *political institutions* fundamentally influences its fate. "Human rights" is our umbrella term for civil rights and liberties (positive and negative) that define the depth and breadth of the state's power to intervene in private social or economic affairs. They are at the heart of the social contract in republican polities, where the state is given policing and taxation powers in exchange for strict constitutional limits to their exercise.⁷ Indeed, the social contract is predicated on the sovereign agency of the people to trade or curtail some autonomy in order to obtain collective public goods, ranging from national security to public healthcare.

By comparison, we define "institutions" as the formal rules for the composition and architecture of governments, such as methods for selecting representatives or passing legislation, that define *how* the state operates. The study of political institutions is a fertile field, but many scholars dichotomize them by their majoritarian or consensual qualities (Lijphart 1999; Powell 2000). The former is epitomized by the concentration of power in a unitary central government that is led by a majority party in the legislature, while the latter fragments authority via multi-party coalitions and strong local governments. The merits of having more / fewer checks and balances are much debated on the grounds of both democratic representation and policy flexibility, which we will return to later in this paper.

Our central thesis is that the specification of rights is more fundamental to the longevity of a constitution than the specification of political institutions. When rights are under-specified relative

⁷ Political theorists distinguish different conceptions of the "social contract" by sources of its legitimacy, the relationship between natural and legal rights, and the proper type of government to steward the balance between private rights and public goods. There is also significant debate as to whether this contract needs to be formalized in a textual constitution. We do not wade into this literature here, save to say that the concept of social contracts is implicit in the purpose and shape of constitutions, particularly in democracies.

to the preferences of citizens, then there will be greater demand for a complete re-covenanting of the constitution.

Hypothesis 1: constitutional longevity increases (i.e. replacement is less likely) when more human rights are specifically enumerated.

Two principles, drawn from earlier research, underlie this claim. First, people may value human rights inherently, even if greater individual autonomy hampers the attainment of certain collective benefits. Inglehart (1997) argues that economic growth frees individuals from focusing on material survival and, instead, produces greater social demand for “self-expression”, including an unfettered voice in politics and greater limits on government paternalism. This desire undergirds the belief—articulated in the preambles of many constitutions—that certain human rights are inalienable and fundamental. Second, when there are clear constitutional principles constraining state power, citizens are better able to coordinate against government overreach (Weingast 1997). This can be achieved by “kicking the bums out” in elections, filing suit in constitutional courts, or, in extreme cases, engaging in extra-constitutional revolutions. Indeed, the threat of popular disaffection may preempt governments from overreaching in the first place, thereby improving the social legitimacy of the constitution itself.

By contrast, institutions are more technical in nature, in that they deal with political processes whose utility is less obvious to the public absent a political crisis. Institutions can be amended on the margins without changing the very nature of the state, such as by adding term limits to the chief executive or altering the independent powers of local governments. Some of these changes may be for neutral motives, such as improving government efficiency or responsiveness, while others may have a partisan purpose, such as altering the electoral system to benefit governing

parties (McElwain 2008). Adapting institutions does not require a rewriting of the entire constitution, which may reopen debates on all areas covered by the existing document, including some topics which are socially divisive.

Instead, greater institutional specification should produce more *amendments* to the constitution, not replacement. Wholesale revisions to institutions can be costly to political actors, especially if there is any uncertainty about the resultant effects. Pierson's (2000) classical work on path dependency argues that institutions—even suboptimal ones—can persist if they generate increasing returns with positive feedback cycles. A political party that adapts its organizational structure, policy platforms, and legislative strategy to operate under one electoral system may face significant short-term costs if a different rule is adopted, even if the long-term payoffs are positive. The complexity in estimating the returns from institutional change multiplies if the effect of a given institution is conditional on the presence of another. For example, Hicken and Stoll (2008) show that the number of candidates in presidential elections is a nonlinear function of the electoral system, the power of the president vis-à-vis the legislature, and the authority of the national versus subnational governments. While uncertainty should limit the active and continuous manipulation of political institutions, we posit that should actors decide to pursue reform, they are more likely to target changes narrowly to minimize the downside risks.

Another reason why institutions are more likely to be subject to amendments is that there is no consensus on “best practices”. As a result, constitution writers may mistakenly designate suboptimal arrangements that are not suited to the nation's specific problems. For example, Lijphart (2004) prefers that divided societies adopt “consociational” power-sharing institutions, particularly a proportional electoral system, so that minority groups are guaranteed legislative representation. However, Horowitz (2002) argues that consociationalism simply reinforces cultural and ethnic differences, recommending federalism instead. A similar disagreement exists for the merits of

presidentialism. Juan Linz (1994) attributes the breakdown of Latin American democracy in the 1970s and 1980s to the dual legitimacy of the presidency and legislature, which worsened gridlock during times of divided government. Stepan and Skach (1993) similarly posit that parliamentary systems are superior in new democracies, as the ability of the executive and legislature to “fire” each other via snap elections and votes of no confidence encourages policy compromise. However, others defend the policy value of having a separately-selected executive and legislature. As the number of veto players increases, the range of policy changes that satisfy all actors shrinks, thereby reducing uncertainty about the long-term viability of existing constitutional and policy agreements (Hammond and Miller 1987; Tsebelis 2002).

Hypothesis 2: constitutions will be *amended* more frequently when more political institutions are specifically enumerated.

If political actors are prone to making “mistakes” in selecting institutions due to uncertainty about their effects, then demand for institutional change should be common. Even if institutions are designed optimally, their utility may diminish with changing social circumstances, such as the intensification or alleviation of ethnic conflict. Facing the need to fix, adapt, or even manipulate institutions, we posit that constitutional change is more likely to take the form of amendments rather than replacements, due to concerns about the unintended consequences and short-term costs of those reforms. Changes can be targeted to specific provisions, such as altering the electoral system or changing the policy autonomy of the presidency, without challenging the legitimacy and purpose of the State itself.

IV. The Specificity of Rights vs. Institutions

To analyze cross-national and temporal differences in the specificity of constitutions, we create two indices that incorporate 26 human rights and 50 institutional factors. The Comparative Constitution Project (CCP) codes most issues on two criteria: 1) is it mentioned in the constitution, and 2) if so, what does the constitution say about it? Our measure of specificity is concerned with whether a right or institution is enumerated in the constitution's text on both criteria. For example, if the lower house electoral system is mentioned in the constitution, but the constitution simply stipulates that the electoral system will be determined by statute or regulation, then we do NOT count it as "specific".

Our specificity index of rights covers the following 26 principles, spanning a mixture of civil rights and liberties. We count the number of rights that are specifically enumerated and divide that by the total number of variables, producing a specificity rate [0, 1]. The full variable list, taken from CCP, can be found in the Appendix.

Rights:

- Right / access to... 1) free education, 2) academic freedom; 3) higher education; 4) strike; 5) life; 6) privacy; 7) free movement; 8) opinion; 9) expression; 10) assembly; 11) association; 12) self-determination or development of personality; 13) join trade unions.
- Freedom ... 1) of religion; 2) from censorship; 3) of press; 4) from expropriation; 5) from torture; 6) from cruel, inhumane, or degrading treatment; 7) from slavery or forced labor.
- Contains provisions (pro or con) relating to... 1) education; 2) official religion; 3) separation of church and state; 4) tax-free status of religious organizations; 5) inalienable rights; 6) protection of environment.

Our specificity index of institutions covers 50 topics, spanning the structure of the judiciary, local government, chief executive, and national legislature. As with the specificity of rights, we count the number of institutions that are specifically enumerated and divide that by the total number of variables, producing a specificity rate [0, 1].

Institutions:

- Judiciary: 1) independence of central judicial organ; 2-11) provisions for 10 types of special courts (see Appendix); 12) provide for some type of supreme court; 13) courts must take into account rulings of higher court; 14) decisions by highest ordinary court are final; 15-18) interpretation of constitution left to one of four types of courts (see Appendix); 19-20) the public or the Courts can challenge constitutionality of courts (see Appendix).
- Legislature / Executive: 1) electoral system for first chamber; 2) electoral system for the second chamber; 3) immunity for legislators; 4) power to dismiss the legislature; 5) dismissing the Head of State (HoS); 6) dismissing the Head of Government (HoG); 7) mentions the executive Cabinet; 8) provisions to call State of Emergency; 9) quota for representation in first chamber; 10) quota for representation in second chamber; 11) mentions legislative committees; 12) decree power of HoS; 13) decree power of HoG; 14) immunity from prosecution for HoS; 15) immunity for HoG; 16) term limit for HoG; 17) how to replace individual legislators; 18) power to approve/reject legislation after it passes legislature; 19) can approving / vetoing actor change parts / all of the bill; 20) are members of first chamber elected or selected; 21) are members of second chamber elected or selected; 22) who can initiate general legislation; 23) any special legislative processes (e.g. for budget bills); 24) who can convene extraordinary legislative session; 25) dismissal of cabinet / ministers.

- Federalism: 1) describe state as unitary, federal, or confederal; 2) recognize subnational government units; 3) provisions for secession by parts of state; 4) which government unit has superior legal status; 5) can central government review subnational legislation.

The specificity of constitutions is not randomly distributed over time and space, in that there are historical and global factors that influence constitutional design. We try to account for these determinants in our analysis, but it is nevertheless informative to view how specificity varies over time. Figure 2a (left panel) shows the distribution of *Rights Specificity* by the year that the constitution was ratified, along with a LOWESS (locally-weighted scatterplot smoothing) line of fit. There is a strong linear relationship: newer constitutions specify a higher proportion of fundamental human rights than older documents.

[FIGURE 2 ABOUT HERE]

A number of factors account for this trend. Domestically, postwar economic growth and the broadening middle class base in industrializing nations have shifted citizen's concerns from physical survival to "post-materialist" issues, such as environmental pollution and gender rights, that were less salient when times were lean (Inglehart 1997). An even more disruptive factor is democratization. The spread of universal male suffrage after WWI enfranchised poorer voters and ethnic, racial, and religious minorities who sought greater constitutional protections against an indifferent or hostile elite. This trend accelerated with post-WWII waves of democratization and decolonization in Africa and Asia. We can directly compare the levels of rights specificity between constitutions adopted in democratic vs. non-democratic regimes. First, we construct a simple regime variable that counts a country as being democratic when its "Polity" score is 6 or greater in the year

of constitutional adoption.⁸ We then examine whether this indicator changed in value from the year preceding constitutional adoption, where “1” indicates democratization, “0” no change, and “-1” autocratization. Second, we estimate *changes* in the specificity of rights from a country’s previous constitution. While this limits our sample to countries with multiple constitutions, we are left with 116 cases of democratization, 29 of autocratization, and 207 of no regime change in years of constitutional replacement. Finally, we conduct a simple two-sample t-test to compare mean changes in rights specificity. When there is no regime change (our baseline), rights specificity increases by 0.047. When a new constitution is adopted at the same time as democratization, however, rights specificity climbs by 0.128, with the difference from the baseline being statistically significant at the 0.001 level ($t=3.566$). By contrast, constitutional adoption following autocratization produces a more subdued increase in rights specificity of 0.057, which is not statistically significant ($t=0.262$)

Domestic changes in the composition and preferences of the selectorate have been complemented by stronger global norms in favor of inviolable and universal human rights (Go 2003). The Universal Declaration of Human Rights, adopted in 1948 by the United Nations General Assembly, has become a template for civil rights and liberties in recent constitutions. Some go so far as to reference the UDHR directly: Article 10.2 of Spain’s 1978 Constitution reads, “Provisions relating to the fundamental rights and liberties recognized by the Constitution shall be construed in conformity with the Universal Declaration of Human Rights...”⁹ That said, Go warns against assuming homogenization, since global norms may be interpreted and fused on to constitutions in different ways and to different degrees. Law and Versteeg (2012) show that the similarity of

⁸ Marshall, Monty G., Ted Robert Gurr, and Keith Jagers. 2013. "Polity IV Project: Political Regime Characteristics and Transitions 1800-2012." ed. Center for Systemic Piece.

⁹ Translation of Spanish Constitution taken from Constitute, retrieved Oct 10, 2014. https://www.constituteproject.org/search/topics#?q=universal%20declaration%20of%20human%20rights&cons_id=Spain_2011

individual constitutions to international treaties and conventions has not increased over time.¹⁰ At the same time, we should be wary of assuming that the de jure enumeration of human rights necessarily produces a de facto improvement, since many authoritarian regimes—which likely differ from democracies in their fidelity to constitutional provisions—are also signatories to these conventions (Law and Versteeg 2013).

Universal suffrage's influence on constitutional detail also extends to *political institutions*. As the newly enfranchised masses pushed for more positive and negative rights, the elite establishment sought to slow the progressive movement by strictly enumerating institutional checks and balances (Banting and Simeon 1985). Lehmbruch (1985) notes that newer constitutions specify more parliamentary rules, such as votes of no confidence, that were customary or procedural in the past. Arjomand (2003), looking at post-1989 constitutions, argues that the authority and autonomy of the judiciary have been strengthened significantly, due to public consternation that elected actors lack the ability or inclination to defend human rights. He finds this to be particularly true in the Former Soviet Union, where officials routinely privileged ideological or revolutionary principles above civil liberties.

That said, the trend line for *Institutional Specificity* is less striking than that for *Rights*, as seen in Figure 2b (right panel). Empirically, this is due to the faster increase in the specificity of rights than institutions. Prior to 1918 (the end of WWI), the average *Institutional Specificity* was 0.35, while that of *Rights Specificity* was 0.34. These measures began to diverge in the interbellum era, when mean *Rights Specificity* rose to 0.44 while *Institutional Specificity* increased more modestly to 0.41. The differences have become starker after WWII. If we look exclusively at constitutions ratified after 1990, mean *Rights* is 0.66 while mean *Institutions* is only 0.49.

¹⁰ It is also worth noting that globalization does not equate Americanization, at least as far as constitutions are concerned. Elkins et al (2009) and Law and Versteeg (2012) both show that the overlap between American and other constitutions has actually decreased over time.

One reason for the slower growth in institutional detail is the lack of agreed-upon “best practices” for political institutions that there are normatively for rights. If anything, the structure of governments is based on country-specific, not time-dependent, factors. One salient dimension is colonial legacy. Anglophone countries tend to adopt more loosely defined parliamentary systems, while Francophone countries tend to be presidential, which in turn requires a more detailed enumeration of the balance of power between the executive and legislature (Go 2003). Similarly, Anglophone countries tend to adopt single-member plurality electoral rules, while Francophone countries favor proportional representation (Taagepera 2002). Federalism tends to be more common in countries that are geographically large—which correlates with more economic segmentation—and ethnically heterogeneous. While a detailed analysis of the *determinants* of constitutional specificity is beyond the scope of this paper, we attempt to control for underlying regional, temporal, and political covariates in our econometric analysis.

An interesting case of the disparity between *Institutional* and *Rights Specificity* is Japan’s postwar (or Showa) constitution. Though ratified in 1946 by the Japanese parliament, the constitution was drafted by officers of the US Occupation, albeit with some Japanese input. As discussed by Hellegers (2001), the Supreme Commander of Allied Powers, General Douglas MacArthur, sought a prosperous, democratic, pro-American ally in East Asia. His focus, and the resultant American draft, listed an impressive array of rights that were not guaranteed in the prewar “Meiji Constitution”, such as the freedom of opinion and the right to unionize. There was much less attention paid to the nature of political institutions, for reasons of expediency. To get democratic governance up and running, many prewar institutions, such as a strong central government and parliamentarism, were left intact. Even when political institutions are mentioned in the postwar constitution, they are given short shrift and left to legislation. For example, Article 47 writes, “Electoral districts, method of

voting, and other matters pertaining to the method of election of members of both Houses *shall be fixed by law.*” [italics added]

According to our operationalization of constitutional specificity, the Japanese Constitution rates 0.65 on Rights but only 0.33 on Institutions. This disparity is extraordinary rare, insofar as most constitutions are more balanced in what they encode. Figure 3 depicts the distribution of the *difference* between institutional and rights specificity across 644 historical constitutions, with ratios noted for select countries. Among established democracies, Australia and India are notable for the greater detail they provide for political institutions. In contrast, the German Basic Law, also written under Allied Occupation, rates a more modest -0.08 ratio between the specificity of institutions and rights.¹¹

[FIGURE 3 ABOUT HERE]

A suggestive outcome of the specificity gap between institutions and rights is that the Constitution of Japan is the oldest *unamended* constitution in the world today.¹² Its endurance alone is striking, given EGM’s finding that constitutional longevity is correlated with democratic promulgation and a moderate rate of amendments, both of which do not apply to Japan. McElwain and Winkler (2015) argue that the high degree of *Rights Specificity* has limited the government’s intrusion into the social or personal sphere, and even where the government overreaches, the public has recourse through the courts. The vagueness of *Institutions*, by contrast, has given the long-ruling

¹¹ Japan’s earlier “Meiji Constitution” (1889), which established an autocratic government with the Emperor as sovereign, rates a higher +0.06 (more detail on institutions than rights). In general, autocracies tend to enumerate more institutions than rights. The average gap between the specificity measures is -0.08 in democracies, and -0.05 in autocracies. This difference is statistically significant at the $p=0.05$ level.

¹² The next oldest unamended constitution is from Denmark (1953).

Liberal Democratic Party free reign to adjust political institutions to their benefit without having to obtain public approval via constitutional amendments.

Put simply, the Japanese case comports with our two hypotheses: high *Rights Specificity* reduces the probability of constitutional replacement, while low *Institutional Specificity* increases the number of amendments.

V. Data

Our econometric analysis of the determinants of constitutional changes is based on the Comparative Constitutions Project's database, which includes information on the amendment and replacement years (our dependent variables) of 860 constitutions from 198 states since 1789.¹³ We also incorporate replication data from Elkins, Ginsburg, and Melton (2009) on amendment difficulty, level of democracy at the time of ratification, presence of judicial review, and other covariates. Out of EGM's total sample, 354 constitutions have been amended at least once before replacement. If we restrict our sample to constitutions promulgated under democracies, then 111 out of 203 democratic constitutions have been amended at least once.

Our theory and hypotheses concern the tradeoff between *amending* vs. *replacing* the constitution. This is not straightforward to model as alternative choices or events, such as with a multinomial logistic regression. An amendment implies that that the constitution has not been replaced; even if an amendment occurs, replacement may still happen at a later date. Replacement, however, precludes the possibility of further amendments by definition; if replacement occurs, further amendments cannot. In our analysis, we employ separate statistical models to estimate the propensity for amendment and replacement as distinct dependent variables.

¹³ We are immensely grateful to the three authors for sharing their data on historical constitutions.

Each observation in our analysis is a national constitution. Our first dependent variable is *Lifespan*, or the number of years between a constitution's ratification and replacement. Figure 4 plots the Kaplan-Meier survival estimates of constitutional lifespan, separated by constitutions that were never amended (dashed red line) and those that were amended at least once (solid blue line). The Kaplan-Meier graph shows the fraction of constitutions (y-axis) that have not been replaced after t years since promulgation (x-axis). It is readily apparent that for any given lifespan, the proportion of surviving *amended* constitutions is greater than that of unamended documents.

[FIGURE 4 ABOUT HERE]

We test the determinants of constitutional longevity using the Cox Proportional Hazards (Cox PH) model, a particular class of survival analysis models. Constitutional data is taken from the CCP dataset, which right-censors the data in 2006. Survival analysis models (also called event history analysis) allow us to estimate the effect of specified covariates on the time until an event occurs—in our case, constitutional replacement.¹⁴

Our second dependent variable is *Amendment Rate*, or the proportion of years in a constitution's lifespan when an amendment occurred. Formally, this is the number of years with an amendment divided by the total number of years that the constitution survived. 506 constitutions (59% of our sample) have amendment rates of zero, meaning they were replaced before being amended even once or had not been replaced as of 2006. Figure 5 shows the distribution of

¹⁴ Cox PH is a semi-parametric model, in that it makes no assumptions about the particular distributional form of the duration time until the occurrence of an event. However, it does assume that covariates have a proportional impact on the baseline hazard. For example, constitutional specificity should increase / decrease the hazard rate similarly at ten or one hundred years into the constitution's lifespan. We test the proportional hazards assumption for each covariate, and include an interaction between the covariate and $\log(\text{time})$ where appropriate.

Amendment Rate for those constitutions that experienced at least one amendment. In our main analysis of amendments, we use an OLS regression. As a robustness check, we also rerun the models with a zero-inflated negative binomial regression, where the dependent variable is *Amendment Frequency*, or the (count) number of years an amendment occurred during a constitution's lifespan.¹⁵

[FIGURE 5 ABOUT HERE]

Our main independent variables are *Institutional Specificity* and *Rights Specificity*, described in the previous section. We expect *Lifespan* to increase when *Rights Specificity* is high (Hypothesis 1), and *Amendment Rate* to increase when *Institutional Specificity* is high (Hypothesis 2). We also incorporate additional covariates that speak to constitutional content, drawn from EGM's (2009) analysis of constitutional longevity.

- *Scope* is EGM's coding of the ratio [0, 1] of 92 common issues that are mentioned in a constitution. EGM find that constitutions with greater scope are more likely to be amended but less likely to be replaced. While we believe that our *Specificity* variables better capture core issues at the heart of constitutions, we use *Scope* as an alternative measure to show their relative significance. We should note that these variables are highly correlated. *Scope*'s correlation with *Institutional Specificity* is 0.73 and with *Rights Specificity* is 0.77. The two specificity variables

¹⁵ There is some disagreement in the literature on the appropriate way to measure the rate or frequency of amendments. Our measure echoes EGM (2009), who also focus on the proportion of *years* with an amendment. Lutz (2006), on the other hand, uses the total number of amendments per year, i.e. each year could have values greater than zero. Ginsburg and Melton (2014), in a separate paper, interact the EGM measure with how *much* a constitution changes substantively after an amendment. This latter approach is the most promising, but there are significant challenges to gathering precise data on the content of all amendments, much less operationalizing them in an objective and replicable way. As such, we replicate the empirical strategy of EGM, whose findings we use as a baseline to inform our own estimations.

themselves are correlated at 0.62. In our analysis, we run models that include / exclude a combination of these variables to obviate concerns about multicollinearity.

- *Detail*, also drawn from EGM, operationalizes the average number of words per issue in *Scope*, normalized on a [0, 1] scale. A lengthier discussion of a given issue is correlated with more information, restrictions, or caveats on the topic. This increases the likelihood that constitutional disputes over rights, institutions, or even public policy will require an amendment to resolve. Because *Detail* is more closely related to the determinants of amendments than replacement, we only include it in models analyzing the former. That said, this variable is not statistically significant—and does not alter the significance of other covariates—when included in our survival analysis models for constitutional replacement.
- *Judicial Review* equals “1” when any court can review the constitutionality of laws, and “0” otherwise. There are dueling expectations for the relationship between judicial review powers and formal constitutional change. On the one hand, judicial review may improve longevity, because it allows for incremental adjustments even where formal amendments are rare (Lutz 2006). Lijphart (1999) shows that powers of judicial review are stronger in polities where the constitution is harder to amend formally, suggesting that these are substitutes. On the other hand, EGM posits that judicial review powers should *decrease* longevity. If a powerful constitutional court can strike down legislative initiatives, then political actors must replace or amend the constitution should their preferences be at odds with judicial interpretations of the status quo text. However, they find weak statistical evidence that judicial review alters the rates of amendment or replacement. We are agnostic about the causal impact of judicial review, mostly because these effects may be captured by other historical legacies, such as common or civil law traditions, that may be clustered at the region or country level.

- *Amendment Ease* [0, 1] is a composite measure, taken from EGM, which predicts the likely rate of amendments as a function of the actual amendment process, checks and balances in government, and the onset of exogenous events such as interstate war. Higher values indicate a greater propensity for amendments. As Ginsburg and Melton (2014) discuss, there is no “best” measure for amendment difficulty. They themselves use different alternatives, and they suggest that the simplest and most objective measure may be the amendment threshold in the legislature. Taking their advice, we run additional models with a dichotomous variable *Amendment Super-Majority* that equals “1” when approval in the legislature requires more than a simple majority.

We have five further variables that proxy for the historical context of constitution writing. There are good reasons to believe that political and temporal factors at the time of ratification influence constitutional design, including the specificity of rights and institutions. Elster (1997) traces different procedural approaches to writing and ratifying constitutions, such as through directly elected assemblies or consociational bargaining between societal leaders. Since different actors—status quo elites, external governments, previously disenfranchised minorities—have distinct capabilities and motives, different procedures for constitution writing should produce different constitutional content. Widner’s (2008) impressive analysis of constitution-writing in post-conflict countries, on the other hand, warns that there may be no optimal procedure. While constitutions tend to endure longer in higher income countries, she theorizes that past historical endowments, such as an effective bureaucracy and greater government capacity, may ultimately matter more than whether an elected assembly drafted the constitution. She finds, for example, that constitutions in former French colonies fare worse than Anglophone countries. Again, the determinants of constitutional content is an important topic, but one that we cannot do justice to here. Our strategy is to control for factors that previous work has linked to the greater likelihood of specifying rights and institutions.

- *Democracy* equals “1” when the country was a democracy when the constitution was promulgated, based on EGM’s coding of regime type. There are two possible effects of democratic promulgation, both of which should reduce the need for early replacement or amendment. First, the presence of democracy makes it more likely that constitution-writing was a consultative process, thus increasing the overlap between constitutional provisions and social preferences. Second, democratic promulgation may engender—or be a reflection of—greater respect for constitutional norms by political elites and/or the voting public, which should improve longevity independent of the content of the constitution. The precise causal effect of regime type is difficult to disaggregate, but we verify that constitutional specificity has an independent effect on survival by stratifying our survival models on regime type and, alternatively, interacting democratic promulgation with specificity.
- *Occupation* equals “1” when the country was under foreign occupation when the constitution was promulgated. When the constitution-writing process involved (c)overt input from occupying powers with goals—democratization, a planned economy, pliant military partner—that are at odds with the preferences of the country’s elites or masses, popular demand for replacement should be greater. [Coding taken from EGM 2009]
- *Legacy* is the average lifespan of previous constitutions in the same country, normalized on a 0-1 scale. We expect legacy to reduce the likelihood of constitutional replacement, since it denotes greater experience with constitutional politics and a stronger sense of what works (or not) in constitutional design.
- Ginsburg and Melton (2014) argue that countries may have different “amendment cultures”, defined as public or elite veneration for the inviolability of the constitution or its writers. They postulate that more frequent replacement or amendment of past constitutions should increase the likelihood that the current document will experience similar events. We measure this in two

ways. *Order* is a counting variable which denotes that the constitution is the N^{th} one in the country's history. *Lagged Amendment Rate* is the *Amendment Rate* for the previous constitution; it equals zero for the first constitution in the country's history.

- *Origin Year* is the year that a constitution was ratified. We expect older constitutions to be less inclusive of public preferences, insofar as democratic constitution-writing were not common until after WWI. A more direct measure of this concept would be whether the constitution was ratified before or after universal suffrage, but these dates are difficult to standardize cross-nationally. For one, there are historical differences in the use of poll taxes and literacy tests. For another, we encounter subnational variance in federal polities where local administrations have discretion in establishing voting standards. *Origin Year* is easier to standardize, although there are methodological issues since we expect it to correlate with our *Specificity* variables, as well as EGM's *Scope* and *Detail*. The endogeneity of our variables is problematic, but the correlation is not overwhelmingly strong (ranging from 0.25 to 0.47), so we include it as an indicator of the historical context of the constitution. Excluding the variable does not alter our findings materially, nor does replacing it with a three-part periodicity variable *Era* that separates ratification into pre-World War I, interbellum, and post-World War II periods.

VI. Results

VI.1: Determinants of Constitutional Lifespan / Replacement

Our first hypothesis posits that constitutional longevity should increase when more human rights are enumerated, because this diminishes bottom-up, civic pressures to replace the constitution. To test this hypothesis, we run Cox proportional hazards models with constitutional *Lifespan* as our dependent variable.

The coefficients reported in Table 1 are the “hazard rates”, or the effect of a one-unit increase in the independent variable to the *probability of replacement*. Hazard ratios greater than one indicate that the variable has a positive effect on the likelihood of replacement (i.e. lowers *Lifespan*). When hazard ratios are less than one, the variable has a negative effect on constitutional replacement (i.e. raises *Lifespan*). Each model in Table 1 includes different combinations of covariates to illustrate the robustness of our findings, relative to EGM’s earlier research. We also test each model for whether it satisfies the assumption of proportional hazards on the basis of Schoenfeld residuals. *Origin Year* and *Amendment Rate* are consistently identified as time varying covariates, meaning that their effect on the hazard ratio varies at different points in a constitution’s lifespan. We follow convention and include an interaction term between these two variables and the natural log of time in the final models.

[TABLE 1 ABOUT HERE]

In the baseline Model 1, we observe that higher levels of *Scope*, or the number of topics a constitution covers, reduce the probability of replacement (coefficient is less than “1”) as EGM originally found. However, once we incorporate *Institutional* and *Rights Specificity* in Model 2, the number of topics is no longer significant. As discussed above, the three measures have a moderately high correlation, and so our main discussion will focus on Model 3, which includes *Specificity* but excludes *Scope*. Note that the models in Table 1 show the hazard ratios, but when interpreting the changes in our continuous variables, we must use the un-exponentiated coefficients.¹⁶ These values can be found in Table 1b in the Appendix.

¹⁶ The hazard ratio is equivalent to $e^{\text{(un-exponentiated coefficient)}}$. For dichotomous variables, such as *Democracy*, the hazard ratio in Table 1 equals $e^{\text{(coefficient)}}$ in Appendix Table 1b. For

Based on the results of our main Model 3, we estimate that a one standard deviation increase (0.2) in *Rights Specificity* reduces the likelihood of replacement by a substantial 27% ($1 - e^{0.2 * -1.55}$). By contrast, *Institutional Specificity* is not statistically significant in any of our models. Figure 6 illustrates the substantive impact of *Rights Specificity* graphically. The solid navy line depicts the proportion of constitutions (y-axis) expected to survive after t years since ratification (x-axis) when all variables are held at their mean values ($Rights = 0.49$). The dashed red line shows that the proportion of surviving constitutions increases when *Rights Specificity* is raised to 0.69 (a one standard deviation increase). By contrast, the dotted black line indicates that fewer constitutions survive when the enumeration of rights is reduced to 0.29.

[FIGURE 7 ABOUT HERE]

Regarding the influence of other constitutional factors, we see that *Amendment Rate*, or the proportion of years with amendment, has a consistently significant effect on reducing the likelihood of replacement. In Model 3, a one standard deviation increase in *Amendment Rate* leads to a 27% decrease in the likelihood of replacement. This supports our argument that replacement and amendments are substitutes, not complements, as EGM (2009) and Lutz (2006) also found. The more a constitution is altered via amendments, the less the demand to replace the document in its entirety.

Constitutional *Legacy*—the average age of previous constitutions—also decreases the likelihood of constitutional replacement. Keeping in mind that *Legacy* is normalized to a 0-1 scale, a one standard deviation increase (0.08) reduces the probability of replacement by approximately 20% in Model 3. The effect of *Legacy* is consistent across the different specifications. *Constitutional Order* is

continuous variables, we can observe changes in the hazard ratio at different values of the coefficient by $e^{[(\text{size of change}) * \text{un-exponentiated coefficient}]}$.

also significant across models, with constitutions from a longer line of documents leading to higher rates of replacement (approximately 3-4% higher likelihoods per additional constitution). Both *Legacy* and *Order* speak to Ginsburg and Melton's (2014) argument relating to "amendment culture": when constitutions are considered inviolable (survive longer and replaced infrequently), they are more resilient to exogenous shocks that would sink other, less venerated constitutions.

We conduct a number of robustness tests to confirm our main finding that the specificity of rights, but not of institutions, improves constitutional longevity. As discussed earlier, one possible issue is the linkage between constitutional content and the historical context of constitution writing. This is particularly worrisome with respect to regime type: constitutions that are promulgated in democracies may be more respectful of human rights, and thus have higher levels of rights specificity. One way we assess this is by stratifying the Cox PH models by the *Democracy* variable. Another is to include an interaction term between *Democracy* and *Rights Specificity*. Both approaches have a trivial effect on the substantive and statistical significance of *Rights Specificity* relative to the finding in Model 3 (Table 1). A third approach is to run separate models for factors linked to constitutional content (Model 4) and history (Model 5). Again, we confirm that there is minimal difference in the substantive and statistical significance of our primary *Specificity* variables.

VI.2: *Determinants of Constitutional Amendment*

We have shown that the most relevant content-related determinant of constitutional lifespan—whether and how quickly it is replaced—is the *specification of rights*. What, then, prompts more incremental amendments to the constitution? Our second hypothesis posits that constitutions should be amended more frequently when more *political institutions* are enumerated. We use OLS to estimate *Amendment Rate*, or the proportion of years in a constitution's lifespan when an amendment occurred. Table 2 contains results for four model specifications. Model 1 includes EGM's *Scope*

variable, while Models 2-4 replace it with our primary *Specificity* variables. Furthermore, we use different operationalizations of amendment difficulty: Models 1 and 2 use EGM's composite measure, while Models 3 and 4 use a simple dichotomous variable for whether amendments require a super-majority in the legislature. Figure 7 displays the marginal effect of these coefficients graphically as a one standard deviation increase for each continuous variable and a one unit change for dichotomous variables. Figure 7's estimation is based on the results from Models 1 and 2, comparing the relative effect of *Scope* versus *Specificity*. The discussion below centers on Model 2, unless stated otherwise.

[TABLE 2 AND FIGURE 7 ABOUT HERE]

Among EGM's primary variables, *Detail*, or the average number of words per constitutional issue, is particularly influential. A two standard deviation increase in *Detail* (0.18) produces 0.08 more amendments per year. On a cumulative basis, this is approximately 1.6 more amendments over a twenty-year span.¹⁷ This is not an unexpected finding: when the constitution stipulates issues at greater length, the probability that a desired-for political change requires an amendment increases. By contrast, *Scope* is not statistically significant in Model 1. This suggests that while the detailed enumeration of issues prompts amendments, not all issues are equally relevant.

This insight is confirmed by the statistical and substantive significance of our specificity variables, which unpack constitutional scope into institutional and human rights components. As we hypothesized, the primary issue driving amendments is *Institutional Specificity*. An increase in the enumeration of political institutions by 0.22 (two standard deviations) leads to a 0.05% increase in

¹⁷ This twenty-year span is empirically relevant, as it is the average constitutional lifespan that EGM find in their analysis. It also mirrors Thomas Jefferson's recommendation that constitutions have a nineteen-year sunset period.

the amendment rate, or approximately one more year of amendment over twenty years. The predicted difference between Japan's institutionally vague constitution (specificity = 0.33) and Germany's detailed Basic Law (specificity = 0.63) is 0.07, or roughly 1.4 more amendments over twenty years. By comparison, *Rights Specificity*, which has a powerful effect on the probability of constitutional replacement, is statistically insignificant in all models. The enumeration of human rights is crucial to the long-term survival of the constitution, but it is on political institutions that amendments are targeted.

Let us add a few words about other variables relating to constitutional history and content. One surprising finding is that amendment difficulty, regardless of operationalization, is not statistically significant. This seems to fly in the face of historical experience and logic: higher procedural hurdles should make it more difficult to enact amendments, because reformers must construct broader coalitions. However, we believe our result demonstrates that it is the *necessity* for constitutional change that drives amendment frequency, not the process. Put differently, a lower amendment hurdle does not by itself induce political actors to attempt more amendments. Institutionally vague constitutions allow political elites or the public at large to initiate reforms via statutory legislation, administrative regulations, or popular referenda. For example, the Japanese constitution allows parliament to alter the autonomy of local governments by law. This is in stark contrast to the German Basic Law, which expends close to 8000 words on the structure of the federal system, including the exclusive and concurrent powers, joint responsibilities, and financial powers of the central government and regional *Länder*. Germany has a similar amendment hurdle to Japan's—two-third supermajorities in both legislative chambers and a popular referendum—but the former has been amended more than fifty times while the latter remains unchanged. The culprit is the difference in institutional specificity: Japan's vagueness allows reforms to be made without amendment, while Germany's specificity requires it.

As robustness tests, we reran Models 1 and 2 using a zero-inflated negative binomial (ZINB) regression. Given that our dependent variable is a rate that is bound between 0 and 1, OLS—despite being simpler to interpret—can produce implausible predictions, such as a negative amendment rate. Our alternative, the zero-inflated negative binomial model, is designed for “count” variables where the “zero” outcome is over-dispersed, as is our case where many constitutions were replaced before even one amendment. For this analysis, we replace the amendment rate with amendment *frequency*, or the number of amendment years in a constitution’s lifespan. ZINB models have two parts: a logistic regression for predicting the inflation of “0s”, and a negative binomial count model that estimates the number of amendment-years. We model the probability of having zero amendments as a function of the constitution’s *lifespan* (our dependent variable in the survival analysis). The intuition is straightforward: the longer a constitution survives, the greater the probability of it being amended at least once. We then estimate the number of amendment-years with the same covariates as in Table 2. However, we make one change: we take out the *Origin Year* variable, for the simple reason that newer constitutions may be too “young” to have experienced amendments.

The full results from the ZINB models are in Table 2b of the Appendix, but let us briefly explore the findings here.¹⁸ First, *Lifespan* is a statistically significant predictor of *Amendment Frequency*: a one-year increase in constitutional longevity reduces the log odds of having no amendment by -0.43. In concrete terms, the probability of having zero amendments is 0.90 after one year, 0.16 after ten years, and falls below 0.01 after seventeen years. Second, *Institutional Specificity* continues to be statistically significant, while *Rights Specificity* and EGM’s *Scope* remain insignificant. Figure 1b in the Appendix plots the predicted frequency of amendments as a function of

¹⁸ A Vuong test comparing the ZINB with an ordinary negative binomial regression confirms that the former is preferred over the latter (Vuong 1989). We also compare the ZINB to a zero-inflated Poisson regression, which is preferred when the over dispersion coefficient is zero (the mean and variance are similar). A significant likelihood ratio test indicates that ZINB is more appropriate.

institutional specificity, along with 95% confidence intervals. (Institutional specificity is shown for the full range of observed values; all other variables are held at their medians.) An increase in institutional specificity from one standard deviation below the mean to one standard deviation above increases the predicted count of amendments from 2.9 to 4.8.¹⁹

VII. Conclusions

Existing studies, particularly the empirical work by Elkins, Ginsburg, and Melton (2009), show that a constitution's lifespan increases 1) when it is amended periodically, and 2) when it covers a broad range of topics. Our paper contributes to this literature by breaking down types of constitutional change in terms of the tradeoff between *amendment* vs. *replacement*. The former connotes that a constitution is out of sync with the preferences of political elites or the public, but that it can still be salvaged through targeted changes to specific provisions. The latter, however, suggests that a constitution has too many problems, requiring an entire redrafting rather than a patchwork fix.

Our principal findings are twofold. First, constitutional *longevity* increases with the specificity of human rights. The enumeration of civil rights and liberties sets maximal limits on the powers of the state and is the cornerstone of representative governance. Constitutions that guarantee more rights and limit state powers are less likely to face demands for complete replacement.

Second, the frequency of *amendments* depends on the specificity of political institutions. Unlike civil rights, which have become more enumerated over time, institutions face competing demands for more or less specification. Public consternation with corruption or poor political

¹⁹ The main difference from the OLS model is that *Amendment Difficulty* is now statistically significant. This is more in line with default expectations, but the result is not robust. If we replace this measure with *Amendment Supermajority*, then the variable is no longer significant. Overall, the consistency of our results across model specifications gives us confidence that *Institutional Specificity* increases the propensity for constitutional amendments, while *Rights Specificity* does not.

accountability, for example, may prompt the erection of legislative term limits. Political elites may change the institutional framework for partisan motives, such as by increasing checks and balances when they are about to lose power but decreasing them when they are in office. In both cases, demand to change institutions will prompt higher rates of amendment when the constitution's institutional specificity is higher, as reforms cannot be implemented by statutory or regulatory processes.

One issue our paper elides is why some constitutions are more specific or vague in the first place. This is an important question in its own right, and the answer likely depends on a mix of temporal factors, such as evolving global norms concerning civil rights (Go 2003) and country-specific, historical circumstances, such as ethno-linguistic heterogeneity and colonial legacies (Widner 2008). We have tried to account for some of the underlying causes in our models, but they deserve fuller attention in future analyses.

That said, we believe that we have elucidated important patterns that speak to broader questions about the function of constitutions. As other scholars have noted, more recent constitutions are longer and specify more human rights and, to a lesser extent, political institutions. What has been less examined, however, is whether all of this new detail is *necessary* for constitutional survival. EGM (2009) and Lutz (2006) note that constitutions that are both specific and flexible endure longer, but is every new piece of detail equally important? On the face of it, we doubt that writing down the oath of office is as significant as guaranteeing the freedom of the press.²⁰ Indeed, we posit that institutional details are ultimately less crucial to constitutional survival, insofar as institutional blanks can be filled in via normal legislation. This leaves open the possibility of partisan

²⁰ The *Constitute* website allows users to search constitutions for specific topics or texts. For example, 171 current constitutions require some officeholders to swear an oath to abide by the constitution. <https://www.constituteproject.org/search/topics#?key=oath>

mischief in the future, but it does not necessarily cast doubt on the fundamental value or legitimacy of the constitution itself.

In fact, many constitutional texts already rank order their content in terms of importance. This may be implicit or vague, such as the allusion to past problems to be solved and future goals to be achieved in the preamble. The ranking may be explicit, in the form of unamendable provisions. The German Basic Law (Article 79) proscribes any changes to the federal nature of the nation, popular sovereignty and democracy, and the inviolability of human rights and dignity. All of these relate to the goal of avoiding a return to the Third Reich or the resurgence of fascism. Article 97 of the Japanese Constitution elevates human rights above all other provisions:

“The fundamental human rights by this Constitution guaranteed to the people of Japan are fruits of the age-old struggle of man to be free; they have survived the many exacting tests for durability and are conferred upon this and future generations in trust, to be held for all time inviolate.”²¹

Both of these constitutions are historically atypical, as they were drafted during Western occupations when domestic autonomy was curtailed. However, they also tell us which features of constitutions were deemed important by outsiders, who were less likely to evoke cultural or social exceptionalism in justifying constitutional choices. We do not mean to say that human rights or institutions are normatively superior to other provisions. Nor would we contend (without evidence) that human rights protections are more important to long-term economic growth or peace than are institutions. However, as it pertains to constitutional evolution, and perhaps to defining the textual

²¹ Translation taken from the Japanese Cabinet Office, retrieved on October 10, 2014. http://japan.kantei.go.jp/constitution_and_government_of_japan/constitution_e.html

manifestation of the social contract itself, the specification of rights matters more for endurance, while institutions explain incremental adaptation.

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FIGURE 1

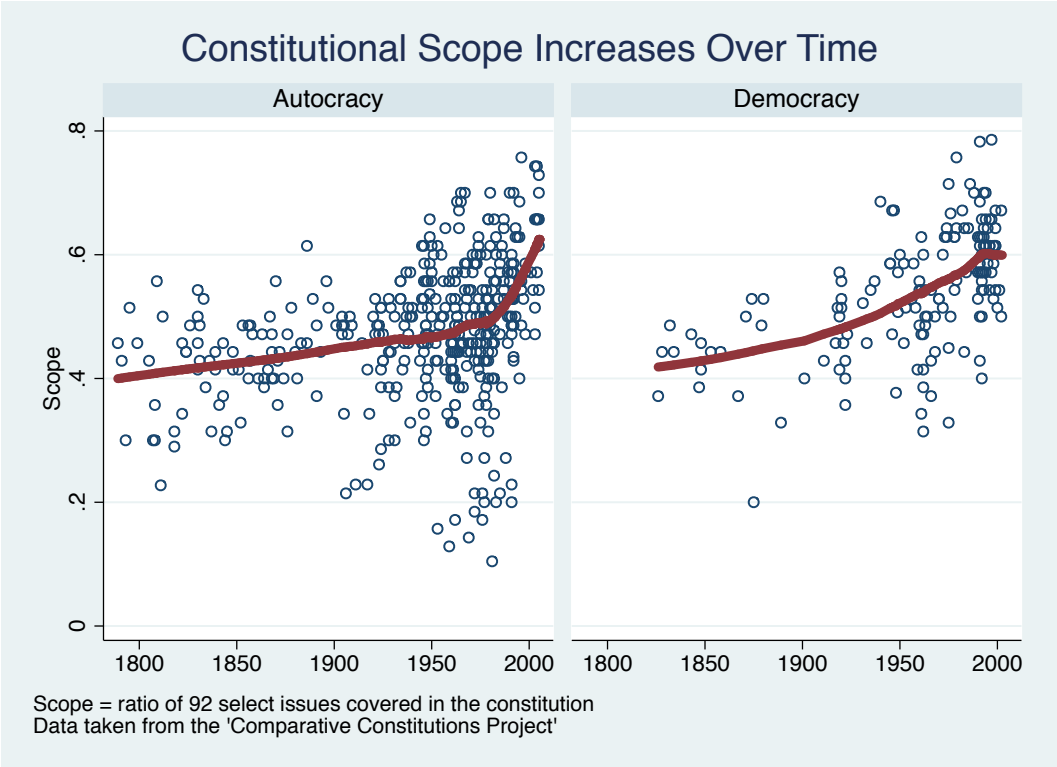


FIGURE 2

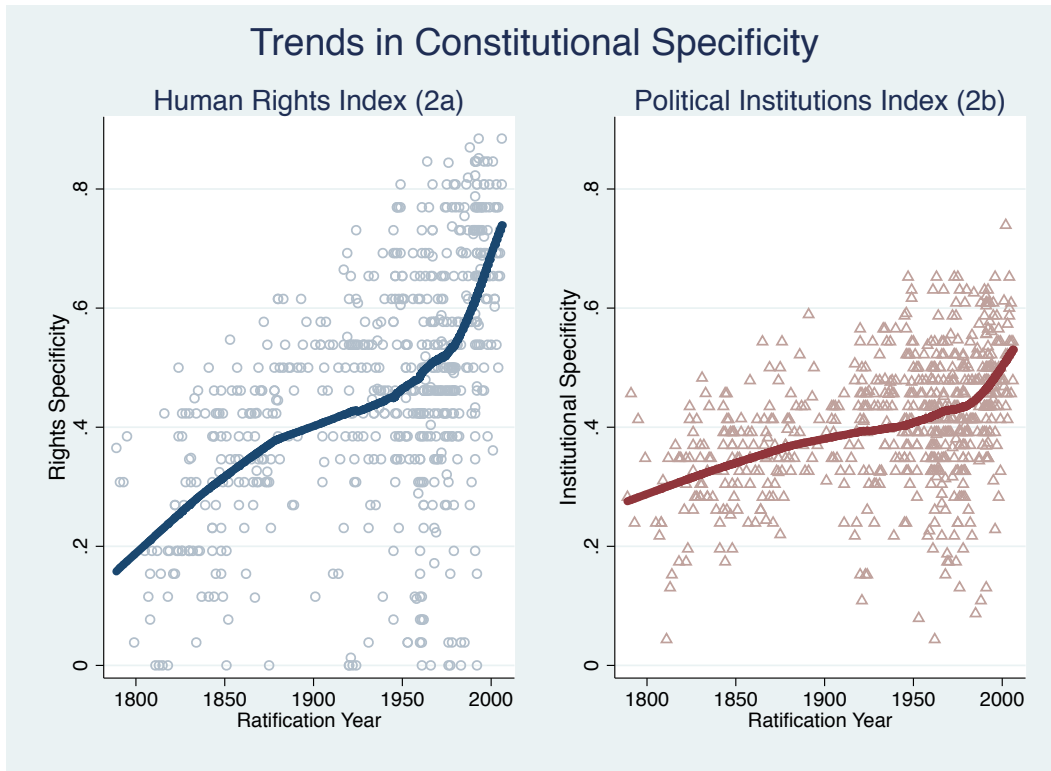


FIGURE 3

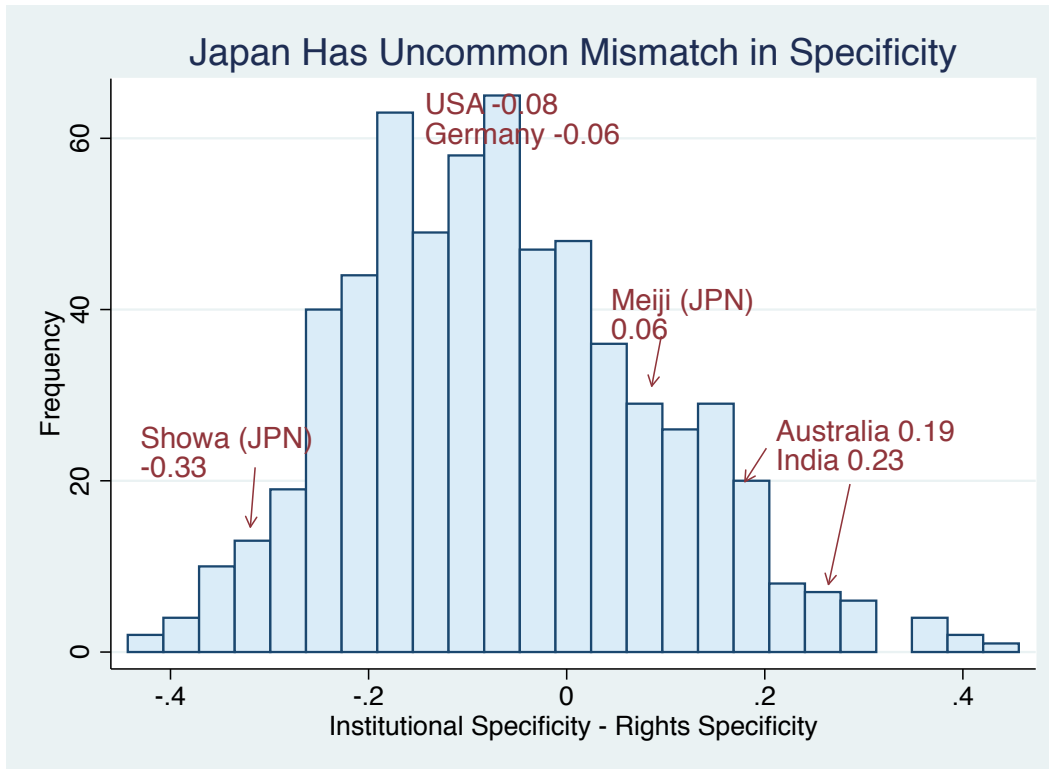


FIGURE 4

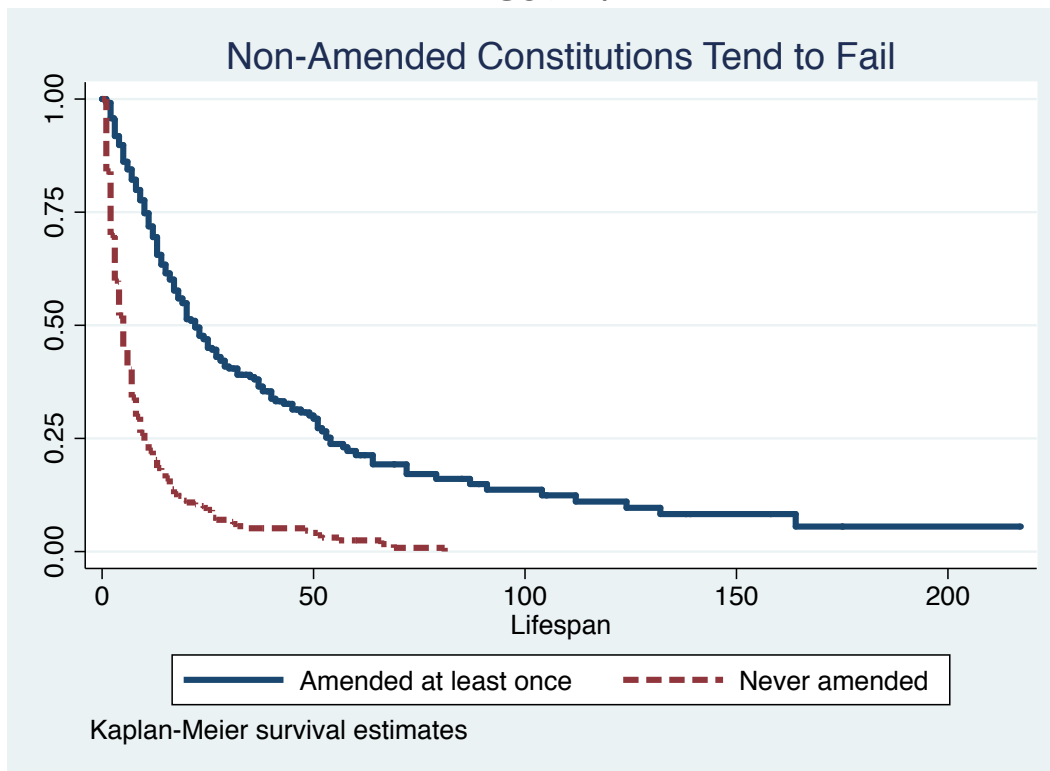
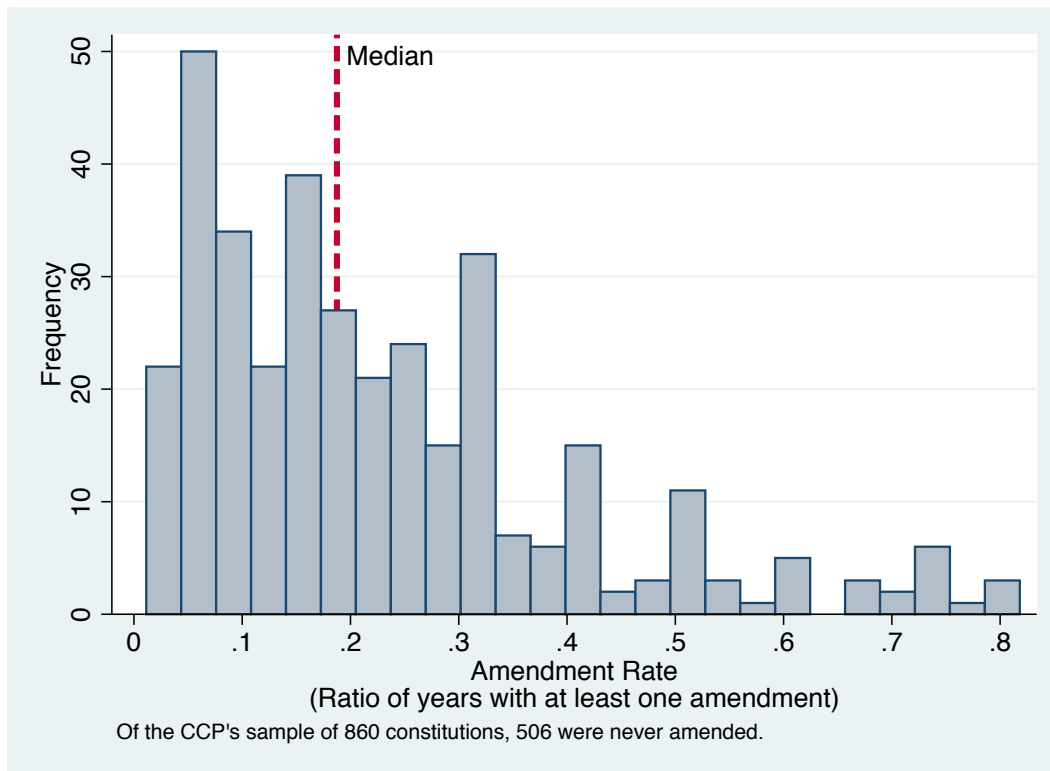


FIGURE 5
Distribution of Amendment Rate If Amended At Least Once



**Table 1: Constitutional Replacement
[Cox Proportional Hazards]**

(Coefficients are hazard ratios)		Model 1	Model 2	Model 3	Model 4	Model 5
<i>Constitutional Content</i>	Scope (CCP)	0.0925*** (0.0549)	0.370 (0.331)		0.469 (0.390)	
	Rights Specificity		0.253** (0.108)	0.212*** (0.0836)	0.325** (0.124)	
	Institutional Specificity		1.367 (1.149)	0.828 (0.587)	1.295 (0.993)	
	Judicial Review	1.175 (0.156)	1.292 (0.179)	1.265 (0.173)	1.187 (0.146)	
	Amendment Rate	0.0124*** (0.0125)	0.0101*** (0.0108)	0.0102*** (0.0109)	0.0043*** (0.0046)	
<i>Historical Context</i>	Democracy	0.880 (0.119)	0.897 (0.124)	0.893 (0.124)		0.761* (0.0810)
	Occupation	1.187 (0.312)	1.145 (0.329)	1.159 (0.331)		1.253 (0.216)
	Constitutional Order	1.032** (0.0127)	1.034* (0.0134)	1.037** (0.0133)		1.037*** (0.0110)
	Legacy	0.0369*** (0.0370)	0.0653** (0.0651)	0.0752** (0.0739)		0.0332*** (0.0270)
	Origin Year	0.992*** (0.00246)	0.991*** (0.00258)	0.991*** (0.0026)		0.994*** (0.0011)
<i>Regional Fixed Effects</i>	W. Europe/US/Canada	0.434*** (0.0913)	0.370*** (0.0825)	0.377*** (0.0839)		0.575*** (0.0808)
	E. Europe	1.507* (0.313)	1.470 (0.330)	1.541* (0.339)		1.466* (0.235)
	Sub-Saharan Africa	1.617* (0.344)	1.454 (0.330)	1.511 (0.339)		1.852*** (0.308)
	Middle East/N. Africa	0.662 (0.197)	0.633 (0.208)	0.675 (0.218)		1.172 (0.250)
	South Asia	1.256 (0.467)	1.134 (0.430)	1.186 (0.447)		1.492 (0.465)
	East Asia	1.309 (0.312)	1.181 (0.295)	1.194 (0.298)		1.669** (0.325)
	Oceania	0.174* (0.127)	0.156* (0.115)	0.164* (0.121)		0.366 (0.218)
<i>Time-Varying Covariates</i>	Amendment Rate*log(t)	2.855** (1.056)	2.867** (1.111)	2.813** (1.094)	4.013*** (1.520)	
	Origin Year*log(t)	1.002* (0.00101)	1.003** (0.00103)	1.003** (0.00103)		
Observations		529	505	505	505	754

Standard errors in parentheses: *** p<0.001, ** p<0.01, * p<0.05

FIGURE 6

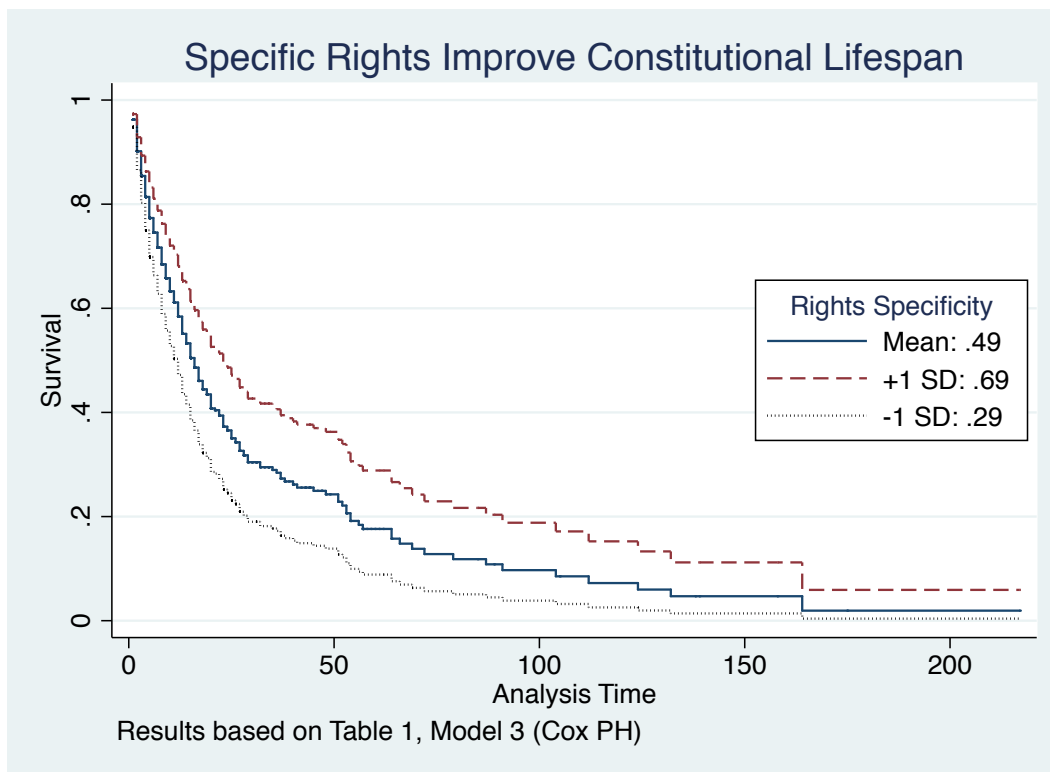


Table 2: Frequency of Amendments

DV: Amendment Rate

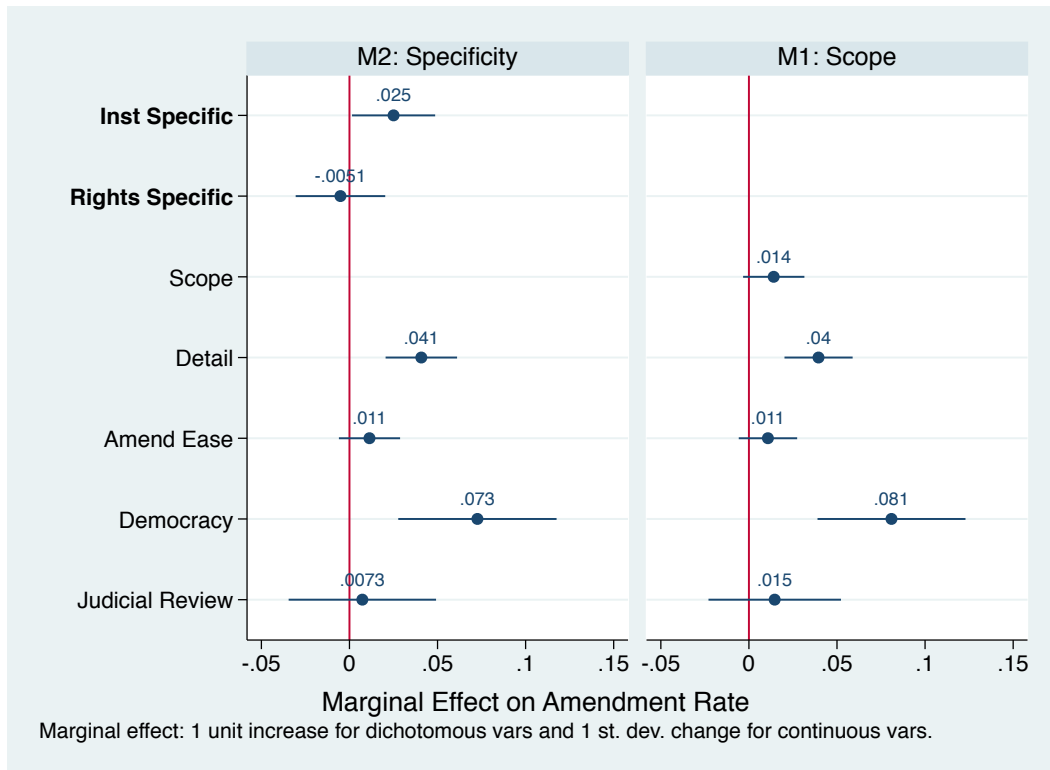
Model: OLS

	(1)	(2)	(3)	(4)
<i>Constitutional Context</i>	Scope	0.128 (0.0805)		
	Institutional Specificity		0.228** (0.109)	0.240** (0.121)
	Rights Specificity		-0.0256 (0.0647)	-0.0908 (0.0718)
	Amend Ease	0.0284 (0.0222)	0.0299 (0.0232)	
	Amend Supermajority			-0.00344 (0.0231)
<i>Historical Context</i>	Lag Amendment Rate			0.163** (0.0719)
	Detail	0.439*** (0.109)	0.453*** (0.115)	0.571*** (0.139)
	Judicial Review	0.0147 (0.0191)	0.00732 (0.0213)	0.0121 (0.0205)
	Democracy	0.0809*** (0.0214)	0.0726*** (0.0229)	0.0356 (0.0218)
	Occupation	0.00237 (0.0327)	0.00279 (0.0358)	0.00199 (0.0365)
	Legacy	0.257 (0.171)	0.270 (0.179)	0.109 (0.164)
	Constitutional Order	-0.0016 (0.0013)	-0.0017 (0.0014)	-0.0016 (0.0014)
	Origin Year	-3.63e-05 (0.00016)	7.38e-06 (0.00019)	4.68e-05 (0.00018)
	Constant	0.0365 (0.308)	-0.0612 (0.341)	-0.101 (0.327)
Observations	436	410	367	367
R-squared	0.180	0.180	0.132	0.153

Robust standard errors in parentheses (Huber-White)

*** p<0.01, ** p<0.05, * p<0.1

FIGURE 7



APPENDIX: Variables Used in Cross-National Analysis

[Variable name from Comparative Constitutions Project dataset in brackets]

Institutional Variables

<i>Judiciary</i>	<i>Political Institutions</i>
Supreme court or any specific court [levjud:]	Dismissal of Head of State or Head of Government [hosdiss, hogdiss]
Judicial independence [judind]	HoS or HoG immunity from prosecution [hosimm, hogimm]
Follow precedence from higher court [judprec]	HoS or HoG decree power [hosdec, hogdec]
Highest court's decisions are final [judfin]	HoG term limits [hogterm]
Courts or public can challenge legislation [challeng_8, challeng_9]	Mention executive cabinet/ministers [cabinet]
Specific courts: administrative, constitutional, amparo, military, public office, tax, labor, religious, or special [judcrts]	Authority to dismiss cabinet/ministers [cabdiss]
Judicial interpretation by: ordinary, constitutional, supreme court, or special chamber of supreme court (interp_1 – interp_4)	Replacing individual legislators [legrep]
	Immunity for legislators [immunity]
<i>Federalism</i>	Dismissal of legislature [legdiss]
Describe state as federal, confederal, or unitary [fedunit]	Selection of member of first or second chamber [lhselect, uhselect]
Provisions for secession [seccess]	Electoral system for first or second chamber [lhelsys, uhelsys]
Subunits recognized: local/municipal; state/province; autonomous indigenous groups [federal]	Quota for first or second chamber [lhquota, uhquota]
Legal superiority of one govt level [fedsep]	Who initiates general legislation [leg_in]
Federal judiciary / legislature can review subunit laws [fedrev]	Who can reject legislation after it passes legislature [legapp]
	Type of veto power [legapppt]
	Provision to call state of emergency [em]
	Legislative committees [commit]
	Special legislative processes [specleg]
	Convene extraordinary legislative session [exsess]

Civil Rights/Liberties Variables

<i>Human Rights</i>	<i>Education</i>
Right to life [life]	Any provision concerning education [educate]
Right to privacy [privacy]	Provide free education [edfree]
Freedom of movement [freemove]	Academic freedom [acfree]
Freedom of opinion or thought [opinion]	Equal access to higher education [achighed]

Freedom of expression / speech [express]	
Freedom of press [press]	
Freedom of assembly [assem]	
Freedom of association [assoc]	
Any inalienable / inviolable rights [inalrht]	
Self-determination or development of personality [devlpers]	
Prohibit censorship [censor]	
Prohibit torture [torture]	
Prohibit cruel, inhuman, or degrading treatment [cruelty]	
Prohibit slavery or forced labor [slave]	
	<i>Religion</i>
	Official religion or church [offrel]
	Freedom of religion [freere]
	Separation of church and state [sepre]
	Tax exemption to religious orgs [reltax]

Table 1B: Survival Model Coefficients (Unexponentiated)

(Un-exponentiated coefficients)	Model 1	Model 2	Model 3	Model 4	Model 5	
<i>Constitutional Content</i>	Scope (CCP)	-2.381*** (0.594)	-0.993 (0.894)		-0.757 (0.832)	
	Rights Specificity		-1.373** (0.424)	-1.549*** (0.393)	-1.123** (0.382)	
	Institutional Specificity		0.312 (0.840)	-0.188 (0.709)	0.259 (0.767)	
	Judicial Review	0.161 (0.133)	0.256 (0.138)	0.235 (0.136)	0.172 (0.123)	
	Amendment Rate	-4.390*** (1.009)	-4.592*** (1.063)	-4.581*** (1.065)	-5.441*** (1.050)	
<i>Historical Context</i>	Democracy	-0.128 (0.135)	-0.109 (0.138)	-0.113 (0.138)		-0.273* (0.106)
	Occupation	0.172 (0.263)	0.135 (0.287)	0.148 (0.286)		0.225 (0.172)
	Constitutional Order	0.0318** (0.0123)	0.0333* (0.0130)	0.0359** (0.0128)		0.0366*** (0.0106)
	Legacy	-3.298*** (1.002)	-2.729** (0.996)	-2.587** (0.983)		-3.406*** (0.815)
	Origin Year	-0.0084*** (0.0024)	-0.0088*** (0.0026)	-0.0090*** (0.0026)		-0.0057*** (0.0011)
<i>Regional Fixed Effects</i>	W. Europe/US/Canada	-0.835*** (0.211)	-0.995*** (0.223)	-0.975*** (0.222)		-0.554*** (0.141)
	E. Europe	0.410* (0.207)	0.385 (0.224)	0.432* (0.220)		0.383* (0.160)
	Sub-Saharan Africa	0.481* (0.213)	0.375 (0.227)	0.413 (0.224)		0.616*** (0.166)
	Middle East/N. Africa	-0.413 (0.297)	-0.458 (0.329)	-0.393 (0.323)		0.158 (0.214)
	South Asia	0.228 (0.372)	0.126 (0.379)	0.171 (0.377)		0.400 (0.312)
	East Asia	0.269 (0.239)	0.166 (0.250)	0.177 (0.249)		0.512** (0.194)
	Oceania	-1.751* (0.735)	-1.858* (0.737)	-1.809* (0.736)		-1.004 (0.595)
<i>Time-Varying Covariates</i>	Amendment Rate*log(t)	1.049** (0.370)	1.053** (0.388)	1.034** (0.389)	1.389*** -0.379	
	Origin Year*log(t)	0.0024* (0.0010)	0.0028** (0.0010)	0.0028** (0.0010)		
Observations	529	505	505	505	754	

Standard errors in parentheses

*** p<0.001, ** p<0.01, * p<0.05

**Table 2b: Zero-Inflated Negative Binomial Model for Amendment Frequency
(DV: Number of Amendment Years)**

	(1)	(2)
Negative Binomial: Amendment Frequency		
Scope	0.303 (0.888)	
Institutional Specificity		2.227** (1.083)
Rights Specificity		-0.757 (0.464)
Amend Ease	0.701*** (0.253)	0.656*** (0.243)
Detail	2.103** (0.920)	1.905** (0.809)
Judicial Review	-0.179 (0.211)	-0.226 (0.228)
Democracy	0.474** (0.192)	0.487** (0.199)
Occupation	0.374 (0.361)	0.202 (0.276)
Constant	0.864** (0.428)	0.514 (0.390)
Inflation (logit)		
Lifespan	-0.423*** (0.0474)	-0.429*** (0.0498)
Constant	2.668*** (0.337)	2.661*** (0.364)
	Observations	436
	[Nonzero obs]	249
		410
		242

Robust standard errors in parentheses (Huber-White)

*** p<0.01, ** p<0.05, * p<0.1

FIGURE 1a

