**CONSTITUTIONAL RIGIDITY MATTERS: A VETO PLAYERS APPROACH**

**By**

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Traditionally, constitutional amendment rules are considered to be the most important part of a constitution. Nevertheless, recent empirical analyses argue that constitutional amendment rules do not matter at all. I show that the dispute is due to the misuse of independent and dependent variables as well as inappropriate methodology. I create a new constitutional rigidity index covering 94 democratic countries on the basis of veto players theory. The index aggregates all institutional provisions in a logically consistent way. I then explain why the lack of constitutional rigidity is a *necessary but not sufficient* condition for significant constitutional amendments in democratic countries. Finally, I create a new dataset on the *significance* of constitutional amendments and estimate the appropriate (heteroskedastic) model, which corroborates the theoretical expectations and more significant amendments lead to a better fit.

**Keywords**: constitutions, amendments, veto players, constitutional rigidity, democratic countries, constitutional amendment rules, constitutional amendment significance

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“…Amending clause…describes and regulates…amending power. *This is the most important part of the constitution.*”

 (John W. Burgess, *Political Science and Constitutional Law* 1890: 137).

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(Ginsburg and Melton J (2015) *Internat. Journal of Constitutional Law*13(3), 686-713.

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John Burgess dedicates four chapters of his book to the “amending clause,” because it explains “whether the state shall develop with peaceable continuity or shall suffer alternations of stagnation, retrogression, and revolution.” (Burgess (1890:137)). Also, the amendment rules specify the delegation of “the constituent power”, which is considered “the truth of modern democracy” since “formulating popular sovereignty as constituent power is to affirm the basic democratic value of self-government.” (Kalyvas 2012: 1). From a theoretical point of view, constitutional amendment rules are extremely important and require thorough examination. Most theoretical expectations hypothesize that stringent amendment rules will reduce the frequency of constitutional amendments.

From the empirical point of view, Ginsburg and Melton (2015), who consider as many as 790 current and previous constitutions, argue that constitutional amendment rules do not matter at all. Ginsburg and Melton (2015) make the most forceful statement regarding lack of relationship between amendment rules and frequency of revision, but they are by no means the only ones who find this tenuous relationship. Relatedly, although Rasch and Congleton appreciate formal rules, they summarize the literature as follows: “Clearly, there may be much more to be learned about the relationship between amendment rates and amendment procedures.” (Rasch and Congleton 2006, 549). After finding no impact of amendment rules on the frequency of amendments, Ginsburg and Melton (2015) “go on to develop a measure of amendment culture as an alternative to institutional factors that constrain amendment.” (2015, 691). They conclude that their measure of political culture, which is a lagged dependent variable, matters more than institutional factors. Their article has created a real “acquis communautaire” among students of constitutional law- so much so that some of them have abandoned the use amendment rules altogether and present the (in)frequency of amendments as a measure of constitutional rigidity or “entrenchment.” The argument is that “The measure does not rely on formal amendment rules because these rules are mediated so dramatically by political norms (Ginsburg and Melton 2015; Klug 2015).” (Versteeg and Zackin 2016, 661).

The combination of the theoretical and empirical points of view creates a major paradox. Often people argue that “institutions matter.” If this is true, it should a fortiori apply to constitutions, and even more forcefully to the most important rules of the constitution, the amendment provisions. Given the importance of constitutional amendment rules to the theoretical literature, if empirical research leads to the conclusion that these rules hardly matter (as Rasch and Congleton (2006) argue after reviewing all the literature), or do not matter at all (Ginsburg and Melton 2015), or can be ignored altogether (Versteeg and Zackin 2016), then such conclusions of irrelevance are even more justified for all the other institutions which are less significant than constitutional amendment rules.

Contributing to this literature, I show that constitutional amendment rules have a significant impact on amendment frequency. Using the veto players theory, I construct an index of constitutional rigidity, which includes the 94 countries that are democracies (those that have a Polity score of 6 or above in 2013 (Marshall 2016)). Using this measure of constitutional rigidity and data on the significance of constitutional amendments that I collected, I corroborate Burgess’ claim. The paper starts with a review of the literature on constitutional rigidity. Most of this literature only uses a subset of institutional rules and does not focus on democratic countries. Focusing on democracies is important, as these are the only countries where institutional rules are likely to apply. I also show that a segment of the literature mixes amendment rules with contextual conditions, making it difficult to assess the role of institutions. I then present a model of constitutional rigidity by explaining how to measure the core of a constitution- that is the outcomes that cannot be changed given the existing amendment rules and the preferences of the actors.[[1]](#footnote-1) The model takes all of the amendment rules into account and evaluates them only in democratic countries. The relationship is evaluated in isolation, without interaction between institutions and contextual factors. This permits future analyses to examine the added value of any particular theory that specifies non-institutional factors are likely to affect constitutional revisions.

With my model, I explain the discrepancy between Burgess’ expectation and the contemporary empirical research. I argue that there are three reasons that empirical research contradicts Burgess’ arguments: 1. The independent variable. 2. The dependent variable. 3. The methodology used.

1. The independent variable I use is a proxy for the size of the core. Most authors have used similar ideas but not consistently. A few scholars have adopted a different approach, including contextual and cultural variables. Most authors have applied their analysis to a limited number of countries (around 30), to all countries, or to countries regardless of their status in terms of how democratic they are (Ginsburg and Melton (2015). I use only the periods where the constitutions in place in 2013 in 94 countries were ranked at 6 or above in the Polity Index.
2. The dependent variable in the literature so far has been the frequency of all constitutional amendments.[[2]](#footnote-2) On the basis of the model, I explain why the appropriate variable should be the significant amendments. I include the variable “significance”[[3]](#footnote-3) my calculations.
3. The use of linear regression is an inappropriate method, because the theory provides a necessary but not sufficient condition for the frequency of significant amendments. Advancements in methodology (See Goertz and Starr (2002) and Goertz (2017)) indicate that the necessary but not sufficient conditions lead to two different predictions: one on the size of the dependent variable, and the other on its variance. The appropriate method treats the predicted differences in variance (heteroskedasticity) as an asset instead of a liability in the estimation. Therefore, I corroborate that constitutional rigidity leads to fewer significant amendments, while constitutional flexibility may or may not lead to the adoption of significant amendments.

These three changes (independent variable, dependent variable, and the methodology) are the focus of the article. Here I want to explain the methodology of the presentation. There are many steps in the argument: it covers a theory of constitutional amendment designed to translate constitutional provisions (text) into measurable quantities (the core), the derivation of an index of constitutional rigidity (translation of the core into a scalar), the measurement of significance of amendments in 94 countries, and the empirical evaluation of the different theoretically derived propositions with the appropriate methodology. The most important explanations are included in the text, and the more detailed investigations are delegated to the two long appendixes. More interested readers may look there for additional answers. In addition, the appendixes contain information that will enable further research on the basis of different assumptions. For instance, the article presents a particular way of mapping a multidimensional object (the constitutional core) into a scalar (the constitutional rigidity index). This technique is based on a series of simplifications, which may generate reasonable objections. The appendixes provide the necessary material for alternative choices.

In the conclusion, I argue that the combination of the independent variable I use (size of the core), the inclusion of amendment significance as a dependent variable, and the application of the appropriate methodology (heteroskedastic regression) corroborate the century old theoretical expectation. In the discussion, I present some additional areas in which the constitutional rigidity index can be applied.

1. THE LITERATURE ON CONSTITUTIONAL RIGIDITY

Constitutions systematically involve two categories of items (in addition to Burgess’s “most important” amending clauses): human rights and the rules of the political game. These two categories of items require time consistency. That is, human rights and the rules of the political game must be well known in advance, respected by all participants, and remain constant (as long as they have not become obsolete). This is so all participants know their rights and obligations. For this reason, constitutions make modification difficult.

Constitutions include provisions requiring qualified majorities of one body, concurrent majorities of several bodies, or both in order to be modified. In addition, many constitutions specify alternative procedures for constitutional amendments. For example, some alternatives provide for less stringent majorities in the legislature if the modifications are supported by a referendum. Finally, many constitutions involve provisions that cannot be modified at all, such as human rights or the broad political regime existing in a country.

The multiplicity of these constitutional amendment provisions is extremely important for the way the political game is played in different countries. Stringent amendment rules can render political institutions almost “exogenous”, with the outcome resulting from decisions made in the past and imposed on the current players. On the other hand, if these restrictions are weak, actors will include a constitutional revision in their agenda any time the actors disagree with the constitutional rules.

For example, in some countries, such as France (Art. 77), the rules concerning the electoral system are set by ordinary legislation. This is why the electoral system became the subject of political competition in 1985 (when it switched from plurality rules to proportional representation) and 1986 (when it switched back to plurality). In other countries, like Slovenia (Art. 80), a two-thirds majority is required for a change of the electoral system. In Greece (Art. 54), the electoral system is protected by two alternative amendment procedures: either a requirement of a two-thirds majority in Parliament, or the changes “shall be applicable as of the elections after the immediately following ones.” As such rules are evidently consequential for the political game, students of constitutions have been studying the issue of constitutional amendment provisions, under different names: “constitutional flexibility”, “constitutional entrenchment”, or “constitutional rigidity,” which is the term that I will use in the remainder of this article.

Studies on constitutional rigidity have been done at the normative and theoretical levels, starting with the debate between Jefferson (who advocated frequent changes of the constitution) and Madison (who prevailed in establishing a long-standing one). They have also been done at the empirical level, such as those that attempt to assess the level of constitutional rigidity in different countries. Given the variety of locking mechanisms in constitutions and the ability of founders to combine them either as supplements or as substitutes, the range of constitutional rigidity is extremely large with diverse empirical conclusions.

*Measuring Constitutional Rigidity*

In the literature, there are two major approaches to measuring constitutional rigidity. The first only uses institutional measures, while the second combines those measures with others that include the frequency of amendments as well as indicators on which this frequency depends. Focusing on the institutional factors alone, constitutional rigidity may differ from one article of a constitution to the next.[[4]](#footnote-4) The constitution itself may provide for different provisions for the modification of different articles (not to mention the prohibition of amending certain articles like human rights or the regime type); for the same article or sets of articles, alternative methods of revision may provide a choice of alternative political institutions. Finally, there is a wide array of applicable revision procedures that range from multiple bodies, to referendums, to time delays that sometimes involve intermediate elections, and sometimes to even create special bodies, e.g. constitutional assemblies.

*Institutional criteria*

Focusing on institutions, some authors only consider a subset of issues. For example, Lutz and Lijphart focus on the qualified majorities required in the amendment process (Lutz (1994) and Lijphart (2012) cited in Lorenz (2005, 341-342)), whereas Anckar and Karvonen focus mainly on the political actors involved (Anckar and Karvonen (2002) cited in Lorenz (2005, 344-345)). Lutz studied 82 constitutions (the fifty US state constitutions as well as 32 countries), but Lorenz was not able to successfully apply Lutz’s index to “measure the rigidity in countries which are not mentioned by him…” (Lutz 1994; Lorenz 2005, 342). Lijphart created a fourfold typology depending mainly on the majority threshold required for approval. He finds that this classification correlates with the strength of judicial review, which he assesses independently and also classifies in a fourfold group (Lijphart 2012, 214-215). Schneier uses a similar method and classifies 101 constitutions in five categories and nineteen subcategories (Schneier, 2006).

Other authors (e.g. Elster (2000) and Lane (2011)) also use non-voting criteria, such as time delays. Similarly, La Porta et al. examine a group of countries whose constitutions have remained unchanged since 1980 (La Porta, et al. 2004, 448). They measure constitutional rigidity on a scale from 1 to 4, which is broken down in La Porta et al.’s Table 1:

“One point each is given if the approval of the majority of the legislature, the chief of the state, and a referendum is necessary in order to change the constitution. An additional point is given for each of the following: if a supermajority in the legislature (more than 66 percent of votes) is needed, if both houses of the legislature have to approve, if the legislature has to approve the amendment in two consecutive legislature terms, or if the approval of a majority of the state legislatures is required”. (La Porta, et al. 2004, 451).

Other authors, such as Rasch and Congleton use institutional information they have on formal amendment rules (Rasch and Congleton 2006). They then “create indexes of consensus and of the number of central government veto players or points of agreement required to secure a constitutional amendment” (Rasch and Congleton 2006, 546). Lorenz focuses on a mix of institutional and contextual variables and combines elements from Lutz, Lijphart, and Anckar and Karvonen to identify “the type of majority rule with the number of voting arenas or actors” (Lorenz 2005, 346).

*Mixed Factors*

Turning now to the combination of institutional and other factors, the most recent and sophisticated effort has been done by the Comparative Constitutions Project from Elkins, Ginsburg, and Melton (2009). These authors start with the premise that constitutional rigidity should be calculated using a combination of the institutional procedures required for amendment and the actual frequency, or lack thereof, of amendments. According to them, neither of these two components is sufficient on its own. While they can assess the institutional component by looking at the constitution (though with difficulties that they enumerate and that this literature review corroborates), the frequency of amendments depends on a host of social and historical factors: “Thus, we regress the amendment rate on a set of amendment procedure variables as well as a host of factors that should predict political reform more generally, including those factors included in our model of constitutional duration” (Ginsburg and Melton 2015, 695). Such factors include percentages of different ethnic groups, economic development, amendment rate, amendment rate squared, etc. (Elkins, Ginsburg and Melton 2009, 227-228). Tsebelis and Nardi (2016) use the same indicators in their analysis. But statements such as “constitutional rigidity [has] a negative effect on amendment frequency,” which most of this literature shares,[[5]](#footnote-5) cannot be accurately evaluated with the use of measures that include amendment frequency as an ingredient of constitutional rigidity. This is most likely the reason that this composite index was not used in subsequent analyses by Ginsburg and Melton (2015).

*Effect of rigidity on amendment frequency*.

Given the variety of variables included in the different indexes of constitutional rigidity, it is not surprising that there is low correlation among them (Ginsburg and Melton 2015, 698). In fact, “only three combinations yield a correlation greater than .5: Anckar and Karvonen with Lijphart, Lijphart with Lorenz, and Lorenz with Lutz. The other correlations are smaller than 0.5 and correlation between the CCP and Lorenz measures is even negative” (Ginsburg and Melton 2015, 697). The fact that the Comparative Constitutions Project indicator of rigidity is negatively correlated with other indexes implies the significance of the departure from institutional variables (their analysis included social, economic, and other ingredients). In addition, as a series of authors point out, the correlation between the different measures of constitutional rigidity and amendment frequency is low (Rasch and Congleton (2006), Lorenz (2005), Ginsburg and Melton (2015)), Ferejohn (1995)).

 There is a potential explanation for this low correlation. The institutional indexes of rigidity are based mainly in one of the two methods that the founders of each country use to protect the constitution: either the number of veto players (institutions or actors required to agree for a constitutional amendment) or the required majorities in each one of them (Tsebelis 2017a). Yet, the founders use these methods in a complementary way: bicameral legislatures require lower qualified majorities for approval than unicameral ones.[[6]](#footnote-6) Depending on the weight of these two components, constitutional rigidity may take different values. As for the indexes involving other than institutional components, it goes without saying that the results will depend on the composition of the mix. I address the issue of the different institutional components alone with the construction of a new index of constitutional rigidity.

II. Constitutional Veto Players and Constitutional Core

Every constitution includes a series of articles that specify the rules concerning its future revision. The rules of constitutional revision specify a series of collective or individual actors, such as one or both chambers of a legislature, a special assembly, a referendum, or an elected president, that are required to agree on the revised text in order for a revision to be approved. In other words, they specify the set of constitutional veto players. In the same or subsequent articles, the constitution specifies a series of provisions, such as required quorums, majorities, time constraints, and additional rules, such as intermediate elections, that govern the decision of each one of these constitutional veto players. It is often the case that constitutions present a series of alternative mechanisms for revision- a type of system that Albert calls “multi-track” (Albert 2014, 917). If these alternative paths of revision are followed, the previously specified constitutional veto players are rescinded or quashed, either partially or completely. For example, if a constitution requires a two-thirds majority of both chambers, then these qualified majorities are veto players (their agreement is required for a constitutional revision). Alternatively, if it is necessary to have simple majorities in both chambers along with a referendum, then all three actors become veto players. Lastly, if a country (like Italy) uses either of these provisions, then neither of the two sets is required, because each one of them can overrule the other. In other words, the articles of constitutional revision both set and can rescind constitutional veto players.

This section will analyze constitutional rigidity on the basis of the “constitutional veto players” defined by the constitution and the “constitutional core” that they produce. The constitutional core is the set of provisions that cannot be changed on the basis of the rules specified by the constitution and the preferences of the actors that are required to approve constitutional changes. For example, if revisions require a two-thirds majority in a unicameral legislature, and a minority controlling more than one-third of the seats is in favor of the status quo, then the status quo is in the constitutional core. However, if this minority shrinks to one-fourth of the seats, and three-fourths agree, then the status quo is not part of the constitutional core. On the basis of this definition, the higher the required majorities—say a two-thirds majority instead of a three-fifths majority or a simple majority—the more rigid the constitution. It is also obvious that the higher the required majorities, the more provisions will remain unchangeable, that is, the larger the constitutional core. As a special case, if the requirement for revision is unanimity, as is the case for treaties within the European Union, then revisions become almost impossible. I underline the word almost, because the EU was, after almost ten years of attempts, negotiations and referendums, able to achieve unanimous support of the Lisbon Treaty in 2007.

My definition of the core differs from the one in the legal literature, which only considers the provisions that the constitution explicitly declares as unamendable as the core (Albert 2015). One significant difference from the legal definition is that because it takes into account the preferences of the different actors, it may identify cases where changes are impossible (that is, we are located inside the core the way I define it) because of disagreement of the actors involved, despite the fact that we are not inside the legal core (that is, there are no unamendable provisions). For example, the Equal Rights Amendment (women’s equality) was not adopted in the US, although it does not belong to the set of unamendable provisions. Below I specify the implications of different rules for the size of the constitutional core.

Starting with the location of the constitutional core, consider the preferences of a series of actors in a two dimensional policy space like in the Figures 1 and 2. The core of this political system is in the center of the political spectrum, because anything located further away from the center (in any direction) will be overruled by the specified qualified majority. Consequently, in a democracy, one should not expect the constitution to include “extreme” positions- that is positions that are objected by an overwhelming majority of the citizens. While this statement is true in general, the precise study of the institutional provisions by which constitutional revision become possible allow a deeper understanding of constitutional rigidity.

The fundamental mechanism of constitutional revisions is a qualified majority of an existing legislative body (parliament) or some specifically elected institution (constituent assembly). In addition to this qualified majority, other institutions may be added, either as complements or as substitutes. If they are complements, the number of constitutional veto players increases. If they are substitutes, the previously defined constitutional veto players are rescinded. Next, I will discuss how the mechanisms of adding or subtracting veto players as well as the effect they have on the constitutional core.

*Adding and subtracting veto players*

To understand the case of adding a veto player, think of a requirement that specifies a qualified majority of two different institutions. For instance, a lower house and an upper house that are required to agree to an identical text, or a unicameral legislature that is required to approve the same text twice (both before and after an election), or a referendum required for the approval of a text produced by a unicameral legislature. Figure 1 presents the cores C1 and C2 of the two required institutions.

Any outcome located inside the core of either institution also belongs to the bicameral constitutional core. In Figure 1, points X and Y are part of the constitutional core, since any modification of X would fail to command the required majority inside Veto Player One, and any modification of Y would fail to command the required majority inside Veto Player Two. The new constitutional core is not restricted to the combination (union) of the two cores. It also includes the whole area between the two cores. If one connects X and Y with a straight line, the segment XX’ is located inside the core of Veto Player One and consequently cannot be modified. Similarly, the segment YY’ is located inside the core of the Veto Player Two and cannot be modified. The segment X’Y’ also cannot be modified, because each one of the two veto players would pull the points on this segment in opposite directions. Consequently, the whole segment XY is part of the bicameral core, no matter where X and Y are located inside the cores of Veto Players One and Two. In other words, the addition of a second institutional veto player does not simply extend the core to include the core of this second veto player, but it now includes all the area between the two cores (the area A1A2B1B2 in Figure 1). This is a general statement relating to any additional constraint the constitution may introduce. It neverreducesthe size of the previously existing core.

Figure 1



What happens if the constitution adds alternate methods of revision, rather than adding constraints? Figure 2 presents such a situation. Consider that in addition to a three-fourths majority required for approval by a bicameral legislature, represented by chambers A1A2A3 and B1B2B3, the constitution requires either approval by a referendum, represented by Player P, or by an elected president of the Republic, represented by Player Q. On the basis of the previous analysis, the bicameral core would be the whole area A1A2A3B3B2B1. The additional requirement of a referendum would expand the core to the area A1A2A3PB2B1, while the alternative route of asking for the approval of the President of the Republic would generate the core A1A2A3QB2B1. However, the dotted areas in the picture are not parts of the constitutional core of the country. The points in the dotted areas can be modified by *one* of the two permissible mechanisms—either the referendum or the president. The constitutional core will be the intersection of the two possible cores, represented by the shaded area in Figure 2.

Figure 2



The two figures demonstrate the logic of constitutional revisions. Their extent depends not only on the institutional provisions but also on the positions of the actors involved. For example, in Figure 1 the constitutional cores of the two chambers could be smaller or overlap, leading to a reduction of the size of the constitutional core. On the other hand, they could be larger and further away from each other, leading to its expansion. Similarly, in Figure 2, one of the two procedures could become easier than the other. For example, if Q is inside the triangle PA2B2, then the intersection of the two cores will be identical with the core and requiring approval by Q and P will become irrelevant.

 There are two rules that will produce stable effects on constitutional cores. The first is that *adding constraints will never reduce a constitutional core, although it may not affect it, depending on the positions of the actors*. The second is that *adding alternatives will never expand the constitutional core, although again, depending on the position of the actors, it may result in no change*. I will use these two rules extensively in the calculation of constitutional cores for the sample of countries in this analysis.

Whether a country will have constitutional revisions or not will depend on many factors, like the preferences of the different actors involved, social or economic changes, etc. However, how successful any attempt to change the constitution will be depends on constitutional rigidity, that is, the rules regarding how the constitution can be changed, or, in our analysis, the size of the constitutional core. No matter what the prevailing conditions in a country, constitutional revisions will be less successful if the qualified majority threshold increases, say from three-fifths to three-fourths, or the number of actors required—veto players—increases, say from two to three.

1. CONSTRUCTING A CONSTITUTIONAL RIGIDITY INDEX

As Figures 1 and 2 indicate, the size of the constitutional core depends not only on the institutions regulating amendments, but also on the positions of the different actors involved. These positions are functions of many contextual factors, like the underlying dimensions of amendment (or conflict), the prevailing conditions at the time of the debate, etc. Think of issues like discrimination based on gender, race, or sexual preference and how much attitudes towards these issues have changed over the years. They can become issues of conflict or of political consensus- sometimes over long periods of time and other times extremely quickly (as social issues go). Similarly, if a provision about the environment is to be included, the relevant positions are not simply the left-right dimension, but the positions of the different actors with respect to the environment. This argument indicates that for any specific amendment procedure in a country, one could calculate the positions of the different actors and have a better approximation than the aggregate comparative indicator I present here.[[7]](#footnote-7) However, there is no way to include these variations in a cross-national study involving constitutions ranging for centuries. Consequently, I will have to restrict the analysis to institutional factors alone. I will focus on the constitutions of countries included in the “Constitute Project” (<https://www.constituteproject.org/>), which includes constitutions in effect in 2013. I will restrict my analysis to only “democratic” countries, which I will operationalize as countries ranking 6 or above in the *Polity* Index.[[8]](#footnote-8)

When there are several alternative procedures, I measure only the one that is presented in the constitution first, which is the one intended by the founders to be the primary process. I focus on this method because the particular procedure that will actually be used depends on which one is “easier” in the prevailing political conditions, which in their turn, depend on the policy positions of the actors involved. For example, the Italian Prime Minister Mateo Renzi could have attempted his constitutional revision either through a two-thirds majority of both Chambers or through a simple majority in both Chambers and a referendum. He chose the second procedure, because the proposed constitutional revision was significantly reducing the powers of the Italian Senate. Hence, it was impossible to have it accepted by two-thirds of the Senators. It turned out that the proposed amendment did not get voters’ approval and failed anyway (Tsebelis 2017b). Similarly, the Chilean Constitution specifies three alternative ways of amendment, and the intersection of the corresponding cores is the empty set, but applying the first method made the constitutional revision fail in 2017 (Tsebelis 2018). Therefore, I focus on the method of constitutional revision that is mentioned first in the constitution, which I call the “usual” method. If there are subsequent methods, they will be included in the calculation (see below), and if there are different procedures for explicitly enumerated articles of the constitution they will be ignored.

The fundamental method for calculating the index is the summation of the approval thresholds of different elected institutions. This combines the veto players required by the founders of the constitution with the qualified majorities included to protect it. For all countries, any popularly elected body that must approve a constitutional amendment is included in the formula with the value representing the threshold that must be reached in order for approval to be granted. Included in this formula, if applicable, are the executive (in Presidential systems), the legislative, people (referendums), and regional governments. For example, if a legislative body must pass an amendment by a simple majority, 0.50 is added to the formula. If an intervening election is required between two rounds of majority approval, 0.5 + 0.5 is added. For example, in Greece two votes are required by two successive parliaments (with an intervening election) One of the two majorities is three-fifths and the other is .50. As a result, the basic score for constitutional rigidity in Greece is (3/5 +.50)=1.10 (See line 32 Appendix I).

*Measure of Bicameral Legislatures*

The second chamber of a bicameral legislature requires a separate discussion. It may be argued that it is an independent majority from the lower chamber (after all, usually it has a different composition), or it may be argued that it is part of a bicameral legislature. Most of the time, the founders of a constitution designate the legislature as a required veto player for revisions and specify the required majority for a valid decision. If the legislature is composed of two chambers, then usually both of them are designated as veto players.[[9]](#footnote-9) I use the Euclidean distance between the two chambers as a measure of their disparity: If one legislature is composed of parties with proportions x1, x2, x3, …xn, while in the second legislature the same parties have percentages x’1, x’2, x’3 …x’n, the compositional distance between the two chambers is [(x1-x’1)2+(x2-x’2)2+(x3-x’3)2+…(xn – x’n)2].5, which increases as a function of the difference in the percentage that each party wins in each chamber. If the two chambers have identical composition, which is what Lijphart (2012, 99) calls “congruent,” then this indicator counts them the same as a single unicameral legislature. According to this index, constitutional revisions become significantly more difficult as the difference in the composition of the two chambers increases.[[10]](#footnote-10) To be clear, I measure the difference in the composition of the two chambers at the end of 2013. My choice implies that this difference approximates the average difference over the whole period of democratic rule in a country, which would have been a more accurate measure. For example, in Germany both chambers of a bicameral legislature have to agree for a constitutional revision with two-thirds majority. The Euclidian distance of the two chambers is .281. Consequently, constitutional rigidity in Germany is calculated as 2/3\*1.281=.85 (see line 30 of Appendix I)

*The Epsilon Rule*

In addition, I am incorporating any modification of the rules that makes constitutional amendments more or less difficult than specified in the fundamental method by adding or subtracting an epsilon (i.e. a small number- in this case 0.01) for any provision that would increase or decrease rigidity. Examples of this modification of the rules, and therefore an addition or subtraction of an epsilon, would be a provision outlining the percentage of members required for a quorum, a requirement that a revision be passed twice, a delay from one passage to the next, etc. If there is an alternative procedure specified, an epsilon is subtracted (see section II).

This method ensures that *every single rule* that addresses constitutional revisions is incorporated into my measure, including any compositional differences of the two legislative chambers. What is missing is the actual ideological distance of the different parties, or other institutional veto players.[[11]](#footnote-11)

While these rules are applied in a consistent way, regardless of the combination of procedures specified by the constitutions, they are not the only ones possible. For example, under the current assumptions, it makes no difference for the constitutional rigidity of a country if the Parliament votes by simple majority for the amendments followed by a referendum, or if there is a new election and the new Parliament approves the amended provisions, as long as simple majorities in Parliament and the referendum are required. Some might object to this simplification. The voters may have different preferences than a subsequent Parliament, and it is not obvious which one of them is closer to the positions of the initial Parliament. However, the calculation of the constitutional rigidity index would be: .5+.5=1 in both cases. Similarly, it makes no difference in the index if a double passage by the same parliament is required or if there is a quorum requirement. Both cases require the addition of an epsilon to the indicator. In order to clarify things, the reader can refer back to Greece and Germany in lines 32 and 30 of Appendix I. For Greece, an epsilon is added because of two votes required in the first reading, and an epsilon subtracted because of the two alternative procedures. This leaves the index unchanged at 1.10. For Germany, an epsilon is added representing the requirement of two-thirds of the total number of members of the chambers (and not of the members present); the final result for Germany is .864. These choices are the simple application of assumptions outlined earlier in this article. The only thing I claim at the theoretical level is that the rules I use are reasonable and consistently applied. For the researchers that do not share my assumptions and simplifications, Appendix I provides the necessary information to alter them and produce a different indicator of constitutional rigidity in Appendix I.

 From the empirical side, the indicator of constitutional rigidity is negatively correlated with the frequency of constitutional amendments in all the current constitutions of democratic countries as of 2013. This is an indirect validation of the index. Looking closer at the data, they are a subset of Ginsburg and Melton’s (2015) data on amendment frequency. Ginsburg and Melton (2015) use the constitutions of all countries in their sample, which cover up to 790 constitutions of different countries regardless of their democratic status. They also include multiple constitutions per country. I consider only the constitutions in effect in 2013 (see above) and the constitutional history of countries only when they are democratic. If a country falls below 6 in the Polity index, the corresponding years are eliminated. Given that I use the rate of amendment years over the total democratic years, the elimination of a year may affect the numerator of my variable (number of amendment years) but will certainly affect the denominator (total number of democratic years).[[12]](#footnote-12) These restrictions leave a sample with a wide range of both constitutional rigidity and constitutional amendment frequency. The range of the constitutional rigidity scale extends from 0.5 to 1.51 with a standard deviation of 0.27. These numbers roughly correspond from one to three different veto players with simple or qualified majorities. An intuitive way of understanding this measure is to say that a change of two standard deviations is roughly equivalent to adding a referendum or the approval of a popularly elected President as a requirement for the validity of a constitutional amendment. With respect to amendment frequency, the range is from 0 (no amendments in any democratic year) to 1 (amendments passed in every democratic year). The average constitutional rigidity in the sample is 0.9 and the average amendment frequency is 0.28 amendments per year (that is, an amendment every four years).

 Figure 3 looks at the relationship between the two variables, which shows a negative slope between restrictive amendments rules and amendment frequency. When amendment frequency is regressed against veto player constitutional rigidity, the standardized results produce a negative coefficient of -0.290 with a p-value of 0.004.[[13]](#footnote-13) The significance of these numbers is that one standard deviation increase in constitutional rigidity is associated with an almost one-third of a standard deviation decrease in amendment frequency.[[14]](#footnote-14) Also, adding a referendum requirement will decrease amendment frequency by half a standard deviation. In other words, adding a referendum requirement halves amendment rate in eight years. So, the answer to the question that Ginsburg and Melton ask: “Does the constitutional amendment rule matter at all?” is a resounding “yes” for democratic countries (Ginsburg and Melton 2015).

 Figure 3



This first result corroborates Burgess’, as well as much of the rest of the literature’s, expectations. However, as I will show below, this is only part of the story. The theoretical expectations should be more precise and as a result the empirical tests more discriminating. I will show that, at the theoretical level, my predictions cover not only the relationship between constitutional rigidity and frequency of amendments, but also the negative effect of constitutional rigidity on the variance of this relationship. Therefore, heteroskedasticity should be included in the theoretical predictions and empirically tested. I now turn to this point.

IV. CONSTITUTIONAL AMENDMENT THEORY AND TESTS

Figure 4 presents two different constitutional cores, one Large and one Small (a subset of the Large). This is the case when one removes restrictions from the amendment rule (say a move from a three-fourths to a three-fifths majority, or if only one chamber of a bicameral legislature is required to approve constitutional revisions, as is the case in Austria). The configuration presents three different potential positions of the status quo. In the first case the status quo (SQ) is located inside the small core, and therefore no constitutional revision is possible. In the second case, the status quo (SQ’) is located outside the small core but inside the large core, and constitutional revisions are possible if the core is small, but impossible if the core is large. In the third case, the status quo (SQ”) is located outside both cores, and constitutional revisions are possible, but the set of possible constitutional revisions is larger in the case in which the constitutional core is small. All these statements are true in both cases regardless of the position of the status quo in each one of the three areas.

 Figure 4



Note: Large Core produces smaller winset, no matter where SQ is

There are several conclusions from this analysis. First, regarding the *frequency* of amendments: the expectation that the larger the core, the fewer constitutional amendments are possible is justified. This expectation is shared by most of the literature I have reviewed and is corroborated with the use of the new index I present in this paper (Figure 3). Second, the arguments above produce necessary but not sufficient conditions for constitutional amendments. Constitutional amendments are impossible when the status quo is inside the core, but just possible (though not necessary) in cases where the status quo is outside the core. This has implications about the variance of the relationship between constitutional rigidity and the frequency of amendments: lower constitutional rigidity will present higher variance, because more constitutional amendments become possible (but again, not necessary). Consequently, my analysis predicts not only a negative relationship between constitutional rigidity and amendment frequency but a heteroskedastic one too.

 Second, regarding the *significance* of amendments, significant amendments are the ones that make important modifications to the constitution. Figure 4 demonstrates a big distance between the old constitution (the status quo) and the new one (which inaugurates a new status quo). Figure 4 also demonstrates that this is not possible with a large core. Consequently, the negative heteroskedastic relationship expected in the argument above will be more pronounced the more significant the amendments under consideration.

This particular expectation about significance is congruent with the findings in the literature on legislative output both in the US (federal and state level) and in the comparative perspective. For example, Howell et al. (2000) divided federal legislation into three different categories: landmark, significant, and trivial. They find that while a divided government depresses the production of landmark legislation by about 30 percent, it has no substantive effect on the production of important, albeit not landmark, legislation and actually has a positive effect on the passage of trivial laws (Howell, et al. 2000). In a study of policymaking in state legislatures, Crosson measures the size of the legislative core and finds substantively larger results when accounting for bill significance (Crosson 2019). Finally, Tsebelis divided legislation in European countries into two categories, and found that veto players and their distance are negatively correlated with the production of significant legislation but not with the production of non-significant pieces of legislation (Tsebelis 2002).

To test the idea that the importance of amendments increases the significance of the relationship between rigidity and frequency, I had to assess the significance of the constitutional amendments in my sample. I created a survey that contained the constitutional data from Ginsburg and Melton organized by country, such that country experts could evaluate the significance of all of the amendments in countries of their expertise (Ginsburg and Melton 2015). I posted a link to the survey on the constitutional law blog I-CONnect[[15]](#footnote-15) in addition to personally reaching out to a range of people from other lists of country-experts.

The questionnaire presented a three-class typology of amendment significance, consisting of “amendments of exceptional significance,” “significant amendments,” and “insignificant amendments.” These categories break down as follows:

* Category 3 includes “amendments of exceptional significance” that, at the time of passage, transformed the understanding of at least one area of the constitution of the country. In other words, amendments in this category transform how legislative bargaining or interbranch relations transpire, introduce an entirely new class of individual rights to a citizenry, or were subsequently deemed "unconstitutional" by the Supreme Court of a given country.
* Category 2 includes “significant amendments,” meaning changes that added or modified an important aspect of the constitution. These amendments alter (but do not transform) key institutional features of the legislative, executive, or judicial bodies of government, or their relation, expand the electorate (but not fundamentally alter it) in some way, or add onto already existing individual rights.
* Category 1 is the residual category of “not significant, or insignificant amendments.” Given that the bar is very high for Categories Two and Three, most amendments will belong to this residual category.

The survey elicited multiple sets of answers for numerous countries (from one to six).[[16]](#footnote-16) In the case of discrepancies between sets of ratings, I used the median rating.[[17]](#footnote-17) If the median was not an integer but an interval (a possibility with two or four responders), I used the more conservative estimate (the lower of the two numbers).

V. Constitutional rigidity and significance of amendments: a negative heteroskedastic relationship.

The collection of data on the significance of constitutional amendments enables the testing of the predictions generated in the previous section: The relationship between constitutional rigidity and amendment frequency will have three dimensions:

1. On average, the frequency of amendments will decline with constitutional rigidity.
2. The variance of the relationship will decline with constitutional rigidity.
3. The significance of the relationship will increase as a function of the significance of amendments.

In order to test these predictions, I use a heteroskedastic regression model. Heteroskedasticity is generally considered a liability in empirical estimations, because it reduces the reliability of coefficients, which is exactly what all the literature has found. But my analysis predicts heteroskedasticity, so the discovery of such a feature should not be considered a liability. I expect a negative coefficient for the relationship between constitutional rigidity and the frequency of amendments as well as on the variance of this frequency. I also expect to find more significant results when the amendments under consideration are more significant.

Table 1 tests all of these predictions. It examines three different categories of significance: first, all of the amendments (Categories 1, 2, and 3 in Appendix II), second, the more significant ones (Categories 2 and 3), and third, the most significant ones (Category 3). For each category, three regressions are performed: the null model (assuming no relationship between constitutional rigidity and frequency), the linear model (assuming a linear but not heteroskedastic relationship between constitutional rigidity and frequency of amendment), and the heteroskedastic model (assuming a negative effect of rigidity on both the frequency of constitutional amendments and the variance of this frequency). In all three cases, I produce the added explanatory value of each model by reporting the p-values from a Likelihood Ratio test comparing the specified models.

Table 1

COMPARISON OF THREE MODELS OF EFFECTS OF CONSTITUTIONAL RIGIDITY (NULL, MEAN ONLY, AND HETEROSKEDASTIC) ON AMENDMENT FREQUENCY

(Likelihood Ratio tests)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Significance Categories | Models | chi2 statistics | P-values | Observations |
| Frequency of All Amendments | Null model vs. Mean-only model | 8.47 | 0.004 | 94 |
| Mean-only model vs. Heteroskedastic model | 1.01 | 0.316 | 94 |
| Null model vs. Heteroskedastic model | 9.47 | **0.009** | 94 |
| Frequency of Major + Fundamental Amendments | Null model vs. Mean-only model | 5.24 | 0.022 | 94 |
| Mean-only model vs. Heteroskedastic model | 9.63 | 0.002 | 94 |
| Null model vs. Heteroskedastic model | 14.88 | **0.001** | 94 |
| Frequency of Fundamental Amendments | Null model vs. Mean-only model | 3.10 | 0.078 | 94 |
| Mean-only model vs. Heteroskedastic model | 59.98 | 0.000 | 94 |
| Null model vs. Heteroskedastic model | 63.08 | **0.000** | 94 |

Table 1 underlines two main points. First, as predicted, the coefficients of constitutional rigidity are negative for both the mean frequency and the variance of this frequency. Second, the added value, denoted by the highlighted p-value of the difference between the null model and the heteroskedastic model, increases with the significance of amendments, moving from 0.009 for all amendments, to 0.001 for significant and fundamental amendments, and to 0.000 for fundamental amendments. In other words, the relationship between constitutional rigidity and the frequency of constitutional amendments is heteroskedastic, as predicted, and the significance of this relationship increases with the significance of amendments under consideration. This new finding is consistent with the findings of the literature on legislation (mentioned above)

CONCLUSIONS

I started my analysis with a puzzle generated by the theoretical literature which considers constitutional amendment rules to be of paramount importance, and the empirical analyses who find reduced impact (most of the literature), no impact at all (Ginsburg and Melton 2015), as well as constitutional analyses that take the “no impact” assessment for granted and use amendment frequency as a proxy for constitutional entrenchment (Versteeg and Zackin 2016). I argue if these empirical findings are valid, then they should apply not only to constitutions, but to other (less fundamental) institutional settings and lead to the conclusion that institutions do not matter at all.

In order to resolve the puzzle, I slightly modified the theory. Instead of the standard argument “constitutional rigidity reduces amendment frequency,” I test the argument “institutional rigidity is a sufficient but not necessary condition for low amendment frequency”. In order to make a theoretically informed empirical analysis, I used the veto players theory to construct the core of the constitutions of all democratic countries, and reduce it to the index presented in Appendix I. The ideas behind it, are not different from the independent variables in other analyses, except 1. no constitutional provision (whether it added restrictions or produced alternatives) was ignored, and 2. they were all combined in a consistent way. The countries I studied are not a restricted sample, or the universe of constitutions, but the universe of democratic countries and for the periods they were democratic only. The reason is that one cannot use constitutional constraints to explain behavior when the constitution itself is not respected. Finally, using an expert opinion survey, I constructed a variable for the importance of amendments. For the empirical analysis, I used the appropriate heteroskedastic regression and concluded that the more significant the amendments, the more my expectations were corroborated.

Constitutional rigidity affects the frequency of significant amendments in the following ways: high rigidity makes amendments rare, but low rigidity simply enables amendments, which may or may not occur, depending on political, social, or economic factors. As a result, low constitutional rigidity produces a higher average rate and higher variance of significant constitutional amendments. The higher the significance of amendments, the stronger the above relationship. This evidence corroborates Burgess’ statement that opened this article and demonstrates why the heteroskedastic data (who are necessarily noisy) if not analyzed correctly lead to misleading and unwarranted conclusions that constitutional amendment rules do not matter at all and should either be replaced by cultural explanations (Ginsburg and Melton 2015), or completely ignored (Versteeg and Zackin 2016).

Constitutional rigidity does not only affect the frequency of constitutional revisions, it is also associated with the importance of constitutional courts in different countries. Cooter and Ginsburg (1996) and Tsebelis (2002) among others have made the argument that at the theoretical level, the larger the size of the core, the less afraid the judges are that they will be overruled by the political system (Cooter and Ginsberg 1996; Tsebelis 2002). The evidence for this proposition is usually restricted to ordinary legislation (see Tsebelis (2002) for developed countries and Andrews and Montinola (2004) for developing countries).[[18]](#footnote-18) The only exception is Santoni and Zucchini, who have examined the Italian Constitutional Court from 1956-1992 and found that the frequency with which it disputes the constitutionality of laws increases when the constitutional core increases (Santoni and Zucchini 2004). In their case the core increases as a function of the policy positions of the parties necessary to participate in a procedure of constitutional revision. While most of the literature on the judiciary focuses on judicial independence, as measured by the length of tenure, and the procedures of appointment and possible replacement of judges, it is actually the interaction between independence and discretion, as indicated by the index of constitutional rigidity I present here, that should produce important judicial decisions. This is another reason why the rigidity index presented here has to be included as an independent variable in the studies of significant constitutional court decisions and why it is relevant to constitutional studies more generally.

**SUPPLEMENTAL MATERIALS**

Appendix I: Veto Players Rigidity Index by Country

For additional information about how the index is calculated, please see the author’s website.

|  |  |
| --- | --- |
| Country | VP Rigidity |
| Albania | 0.677 |
| Argentina | 1.277 |
| Australia | 1.093 |
| Austria | 0.667 |
| Belgium | 0.791 |
| Benin | 1.250 |
| Bolivia | 1.167 |
| Botswana | 0.667 |
| Brazil | 0.702 |
| Bulgaria | 0.770 |
| Burundi | 1.110 |
| Canada | 1.167 |
| Cape Verde | 0.667 |
| Chile | 1.209 |
| Colombia | 0.536 |
| Comoros | 1.333 |
| Costa Rica | 1.187 |
| Croatia | 0.697 |
| Cyprus | 1.343 |
| Czech Republic | 0.887 |
| Denmark | 1.510 |
| Dominican Republic | 0.697 |
| East Timor | 0.677 |
| El Salvador | 0.677 |
| Estonia | 1.110 |
| Finland | 1.157 |
| France | 1.086 |
| Georgia | 0.697 |
| Germany | 0.864 |
| Ghana  | 0.707 |
| Greece | 1.100 |
| Guatemala | 1.177 |
| Guyana | 1.000 |
| Honduras | 0.687 |
| Hungary | 0.677 |
| Iceland | 1.010 |
| India | 0.560 |
| Indonesia | 0.510 |
| Ireland | 1.085 |
| Israel | 0.500 |
| Italy | 1.095 |
| Jamaica | 0.532 |
| Japan | 1.315 |
| Kenya | 0.723 |
| Kyrgyz Republic | 0.707 |
| Latvia | 0.687 |
| Lebanon | 0.687 |
| Lesotho | 1.000 |
| Liberia | 1.490 |
| Lithuania | 0.697 |
| Luxembourg | 0.687 |
| Macedonia | 0.687 |
| Malawi | 0.677 |
| Malaysia | 0.947 |
| Mauritius | 0.677 |
| Mexico | 1.232 |
| Moldova | 0.687 |
| Mongolia | 0.760 |
| Montenegro | 0.697 |
| Namibia | 0.749 |
| Nepal | 0.677 |
| Netherlands | 0.817 |
| New Zealand | 0.500 |
| Nicaragua | 0.610 |
| Niger | 1.240 |
| Norway | 0.677 |
| Pakistan | 0.848 |
| Panama | 1.010 |
| Paraguay | 1.102 |
| Peru | 0.990 |
| Philippines | 1.394 |
| Poland | 0.828 |
| Portugal | 0.677 |
| Romania | 1.249 |
| Senegal | 1.000 |
| Serbia | 0.677 |
| Sierra Leone | 0.697 |
| Slovak Republic | 0.610 |
| Slovenia | 0.687 |
| Solomon Islands | 0.697 |
| South Africa | 0.717 |
| South Korea | 1.197 |
| Spain | 0.785 |
| Sweden | 0.990 |
| Switzerland | 0.990 |
| Taiwan | 1.270 |
| Thailand | 0.530 |
| Trinidad and Tobago | 0.923 |
| Turkey | 1.110 |
| Ukraine | 0.687 |
| United Kingdom | 0.500 |
| United States | 1.430 |
| Uruguay | 0.500 |
| Zambia | 0.697 |

Appendix II: Amendment Significance Classification by Country

For a breakdown by country and year, please see the author’s website.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Country | Insignificant Amendment | Major Amend. | Fundamental Amend. | Total Amend. | # Democratic Years Under Constitution in Force in 2013 |
| Albania | 2 | 1 | 0 | 3 | 12 |
| Argentina | 1 | 1 | 0 | 2 | 30 |
| Australia | 6 | 0 | 2 | 8 | 112 |
| Austria | 33 | 14 | 1 | 48 | 68 |
| Belgium | 19 | 7 | 4 | 30 | 155 |
| Benin | 0 | 0 | 0 | 0 | 23 |
| Bolivia | 0 | 0 | 0 | 0 | 4 |
| Botswana | 5 | 8 | 1 | 14 | 47 |
| Brazil | 14 | 8 | 0 | 22 | 25 |
| Bulgaria | 2 | 1 | 1 | 4 | 22 |
| Burundi | 0 | 0 | 0 | 0 | 8 |
| Canada | 21 | 6 | 1 | 28 | 126 |
| Cape Verde | 1 | 2 | 0 | 3 | 21 |
| Chile | 11 | 5 | 1 | 17 | 25 |
| Colombia | 10 | 4 | 2 | 16 | 22 |
| Comoros | 0 | 0 | 1 | 1 | 10 |
| Costa Rica | 4 | 22 | 6 | 32 | 64 |
| Croatia | 1 | 2 | 0 | 3 | 14 |
| Cyprus | 2 | 3 | 1 | 6 | 48 |
| Czech Republic | 4 | 1 | 1 | 6 | 20 |
| Denmark | 0 | 0 | 0 | 0 | 60 |
| Dominican Republic | 0 | 0 | 0 | 0 | 3 |
| East Timor | 0 | 0 | 0 | 0 | 11 |
| El Salvador | 7 | 1 | 0 | 8 | 30 |
| Estonia | 2 | 0 | 1 | 3 | 21 |
| Finland | 2 | 0 | 0 | 2 | 14 |
| France | 8 | 4 | 0 | 12 | 45 |
| Georgia | 2 | 4 | 3 | 9 | 10 |
| Germany | 27 | 6 | 1 | 34 | 64 |
| Ghana  | 0 | 0 | 0 | 0 | 13 |
| Greece | 2 | 1 | 0 | 3 | 38 |
| Guatemala | 0 | 0 | 0 | 0 | 18 |
| Guyana | 1 | 4 | 1 | 6 | 22 |
| Honduras | 13 | 2 | 0 | 15 | 27 |
| Hungary | 0 | 0 | 2 | 2 | 2 |
| Iceland | 2 | 4 | 1 | 7 | 69 |
| India | 12 | 25 | 9 | 46 | 64 |
| Indonesia | 0 | 1 | 3 | 4 | 15 |
| Ireland | 8 | 9 | 3 | 20 | 76 |
| Israel | 22 | 11 | 3 | 36 | 55 |
| Italy | 15 | 1 | 0 | 16 | 66 |
| Jamaica | 6 | 4 | 1 | 11 | 51 |
| Japan | 0 | 0 | 0 | 0 | 62 |
| Kenya | 0 | 0 | 0 | 0 | 3 |
| Kyrgyz Republic | 0 | 0 | 0 | 0 | 3 |
| Latvia | 4 | 4 | 2 | 10 | 22 |
| Lebanon | 0 | 0 | 0 | 0 | 9 |
| Lesotho | 0 | 4 | 0 | 4 | 17 |
| Liberia | 0 | 0 | 0 | 0 | 8 |
| Lithuania | 0 | 4 | 1 | 5 | 21 |
| Luxembourg | 7 | 11 | 1 | 19 | 119 |
| Macedonia | 6 | 1 | 0 | 7 | 22 |
| Malawi | 4 | 2 | 0 | 6 | 16 |
| Malaysia | 4 | 2 | 2 | 8 | 17 |
| Mauritius | 7 | 2 | 9 | 18 | 45 |
| Mexico | 9 | 6 | 1 | 16 | 17 |
| Moldova | 2 | 3 | 1 | 6 | 19 |
| Mongolia | 0 | 0 | 1 | 1 | 21 |
| Montenegro | 0 | 0 | 1 | 1 | 6 |
| Namibia | 2 | 0 | 0 | 2 | 23 |
| Nepal | 2 | 1 | 1 | 4 | 6 |
| Netherlands | 18 | 1 | 0 | 19 | 92 |
| New Zealand | 48 | 25 | 13 | 86 | 156 |
| Nicaragua | 2 | 1 | 1 | 4 | 24 |
| Niger | 0 | 0 | 0 | 0 | 3 |
| Norway | 51 | 2 | 1 | 54 | 111 |
| Pakistan | 0 | 2 | 1 | 3 | 4 |
| Panama | 2 | 1 | 0 | 3 | 25 |
| Paraguay | 1 | 0 | 0 | 1 | 21 |
| Peru | 3 | 1 | 0 | 4 | 13 |
| Philippines | 0 | 0 | 0 | 0 | 26 |
| Poland | 2 | 0 | 0 | 2 | 16 |
| Portugal | 1 | 6 | 0 | 7 | 37 |
| Romania | 0 | 0 | 1 | 1 | 18 |
| Senegal | 5 | 1 | 0 | 6 | 12 |
| Serbia | 0 | 0 | 0 | 0 | 7 |
| Sierra Leone | 0 | 1 | 0 | 1 | 7 |
| Slovak Republic | 5 | 1 | 3 | 9 | 21 |
| Slovenia | 2 | 2 | 2 | 6 | 22 |
| Solomon Islands | 4 | 2 | 0 | 6 | 31 |
| South Africa | 11 | 0 | 0 | 11 | 17 |
| South Korea | 0 | 0 | 1 | 1 | 27 |
| Spain | 0 | 2 | 0 | 2 | 35 |
| Sweden | 29 | 1 | 0 | 30 | 39 |
| Switzerland | 8 | 4 | 0 | 12 | 14 |
| Taiwan | 0 | 0 | 1 | 1 | 13 |
| Thailand | 0 | 0 | 0 | 0 | 3 |
| Trinidad & Tobago | 13 | 1 | 0 | 14 | 37 |
| Turkey  | 6 | 4 | 1 | 11 | 26 |
| Ukraine | 2 | 0 | 2 | 4 | 17 |
| United Kingdom | 48 | 8 | 1 | 57 | 103 |
| United States | 6 | 6 | 1 | 13 | 205 |
| Uruguay | 3 | 0 | 1 | 4 | 28 |
| Zambia | 1 | 0 | 0 | 1 | 10 |

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1. This definition of a “core” is different from the one in the law literature, which considers as “core” only the constitutional provisions that are not allowed at all to be modified (Albert, The Unamendable Core of the United States Constitution 2015). See below. [↑](#footnote-ref-1)
2. It would be more appropriate to call the variable “amendment events” since if multiple amendments are introduced the same year, they are considered as a single amendment. This is a reasonable choice since most of the time all of them are voted in the same procedure. I will follow the literature on the matter, and refer to “amendments” instead of “amendment events”. [↑](#footnote-ref-2)
3. From the Comparative Constitutions Project dataset. I thank Tom Ginsburg for providing the data. See below for discussion. [↑](#footnote-ref-3)
4. On the basis of this, Albert distinguishes constitutions as either “comprehensive” (if the whole constitution can be modified with the same rules), “restricted” (if different provisions are subject to different rules), or “exceptional” (where different rules are used exclusively for one provision or a set of related provisions) (Albert 2014). [↑](#footnote-ref-4)
5. See Lutz (1994, 365-366), Lijphart (2012, 211), Rasch and Congleton (2006, 542), as well as Dixon (2011, 106). [↑](#footnote-ref-5)
6. 89 percent of the countries that require just one body for constitutional changes also require a two-thirds majority or greater. Among countries that require two bodies, that percentage decreases to 63 percent, whereas only 52 percent of countries that require three bodies also require a two-thirds majority or greater. The most extreme countries (using only one of the two methods and generating the negative correlation) are Bulgaria and Mongolia on the one hand (requiring a three fourths qualified majority from a single chamber) and Australia, Canada, Denmark, France, Iceland, Ireland, Italy, and Paraguay on the other, requiring a simple majority for approval in three different bodies, usually including a bicameral legislature. The interested reader can find details of constitutional amendment procedures in Appendix. [↑](#footnote-ref-6)
7. See, for example, Tsebelis (2017) about Italy, and Tsebelis (2018) about Chile. [↑](#footnote-ref-7)
8. These restrictions yield 92 countries. To these, I added Israel and the UK, bringing the number of countries to 94 (they are not included in Constitute because they do not have a written constitution, but they do have fundamental documents that are functionally equivalent). The choice of cut off point is arbitrary (although 6 is usually used in the literature). I replicated my calculations using all the higher cut off points (7,8,9,10) and the results are robust to this change. Also, three of the countries I cover—the UK, Turkey, and Taiwan—modified their amendment rule during the time covered by my study. Given that their constitution changed in the dimension I am examining here, I considered only the more recent part of their amendment history. The alternative would have been to consider these three countries as two observations each, bringing the total number to 97 instead of 94. [↑](#footnote-ref-8)
9. Austria is an exception and the upper chamber participates only in constitutional revisions related to Federalism. South Africa’s upper chamber functions similarly. Burundi requires different majorities for each of its chambers (4/5ths for the lower and 2/3rds for the upper). [↑](#footnote-ref-9)
10. I have also calculated two alternative measures. One considers (weighs) all bicameral legislatures as 1.5 of unicameral ones and the other considers the chi2 distance in the composition of the two chambers. The correlations among these indices are extremely high so I only report the results of Euclidean distances alone. This method is close to Negretto’s (2012) approach. He considers the effective number of parties in each legislature as creating an obstacle to the passage of constitutional reforms. All these methods use numeric approximations to spatial distributions; hence they rely on strong *ceteris paribus* assumptions. For Negretto, such assumptions rely on the similarity of Latin American countries. For this article, the comparison is only between the two legislatures of the same country. [↑](#footnote-ref-10)
11. It is possible that, in a country that requires approval by a bicameral legislature and a referendum, the position of the electorate is between those of the House and the Senate; hence the electorate should not be included in the calculations since it would be absorbed as a constitutional veto player (Tsebelis 2002). Yet, the formula here would include the referendum as an additional constraint, despite the fact that, if the measures are approved by the two houses, they would not be rejected by the referendum. [↑](#footnote-ref-11)
12. I also drop amendments from the sample if the individuals coding the significance of these amendments agreed that there was no amendment in a given year. This occurred in the following cases: Austria 1954, Cape Verde 1992, Czech Republic 2013, El Salvador 2003, Guatemala 1986, Honduras 2012 and 2013, Latvia 2013, Luxembourg,1988, Malaysia 1959 and 1961, Nicaragua 1994, Switzerland 2007 and 2011. In Nepal, there was an amendment in 2012 that was missing from the data. Given that out of 866 classified amendments only 15 cases of disagreement were identified, the Ginsburg and Melton (2015) amendment data are very reliable. The reader can consult Appendix II for a complete list of amendments. [↑](#footnote-ref-12)
13. A linear regression gives a coefficient of -0.290 (with the same p-value). [↑](#footnote-ref-13)
14. This is just over 0.06 amendments per year [↑](#footnote-ref-14)
15. http://www.iconnectblog.com/2017/10/constitutional-amendment-significance-a-survey/ [↑](#footnote-ref-15)
16. I scored the countries for which I received no answer after several attempts. [↑](#footnote-ref-16)
17. Unless the answers indicated a violation of the instructions. For example, all amendments approved on the basis of constitutional rules, but rejected by the Constitutional Court on the basis of substance (not procedure), were classified as 3, since (on the basis of the Court’s judgment) they were unconstitutional. [↑](#footnote-ref-17)
18. In legal terms, statutory interpretation, that is judicial decisions based on laws, not the constitution. [↑](#footnote-ref-18)