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Measuring Procedural and Substantial Amendment Rules: An Empirical Exploration

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Abstract

Constitutional amendment difficulty or rigidity has generated extensive literature in recent times, both conceptually and empirically. Although constitutional scholars seem divided about the importance and significance of amendment limits, there has been a proliferation of indicators and statistical analysis. In this Article, while recognizing the normative debate, we provide an empirical exploration for thirty-seven countries based on factor analysis of both formal procedural rules—usually the focus of empirical work—and substantial amendment rules—which are less developed in the quantitative literature. We discuss the existing contradictions across available indicators. Implications for the literature are derived.

Keywords Measuring amendment difficulty; formal and substantial limitations; constitutional rigidity and flexibility; normative and empirical legal reasoning

A. Introduction

Constitutional amendment rules keep the constitutional text safe from political volatility and the caprices of occasional majorities by demanding higher requirements than the amendment of ordinary laws. An “optimal degree of flexibility” would be in the delicate balance of having a constitution not too easy yet not impossible to amend.¹ It is important to remember that amendment rules “are both sword and shield,” as they define which constitutional subjects can and cannot be changed or require severe hurdles to do so.²

Nevertheless, that ideal degree of flexibility varies across countries in response to many local determinants. Constitutions adjust mainly through formal amendment and informal interpretation.³ In broad terms, constitutional rigidity means that the constitution is more difficult to amend than ordinary laws.

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¹Ruth Gavison, *What Belongs in a Constitution?*, CONST. POL. ECON. 13, 89–105 (2002).

²Richard Albert, *The State of the Art in Constitutional Amendment (Introduction)*, in THE FOUNDATIONS AND TRADITIONS OF CONSTITUTIONAL AMENDMENT 1, 12–14 (Richard Albert et al. eds., 2017).

³Rosalind Dixon, *Constitutional Amendment Rules: A Comparative Perspective*, in COMPARATIVE CONSTITUTIONAL LAW 96 (Tom Ginsburg & Rosalind Dixon eds., 2011).

In this Article, we pursue an empirical exploration of *procedural amendment* rules—rules that regulate the process by which a constitutional amendment is passed—and *substantial amendment* rules—rules that limit what can be amended. Due to significant limitations concerning information about substantial amendment rules—particularly, potential implicit limits—we restrict the sample to the member states of the European Union plus some other countries in its periphery for a total of thirty-seven countries. We innovate at four levels: We expand the previous empirical discussion to explicitly account for substantial amendment rules in contrast with previous empirical approaches, which have historically focused primarily, if not solely, on procedural amendment rules; we combine factor analysis—that is, rather than subjective assessments, we let variance across jurisdictions drive the indicators—with conventional regression analysis; we explicitly compare previous indicators for “amendment difficulty” in order to assess their relative importance; we also explore possible explanatory variables within the sample of countries and find some relevant regularities across indicators.

Our findings suggest that there is no clear substitution effect between procedural and substantial amendment rules. If a procedure to amend is hard, then there is less need for substantive limits. Conversely, if a procedure to amend is easy, then there may be more substantive limitations. We cannot find empirical support to this reasoning in the context of the thirty-seven countries we include in our analysis.

Our findings must be interpreted in the context of comparative constitutional scholarship. If a decade ago, the field was starting to comprehend and measure the “actual determinants of the rate or difficulty of constitutional amendments,”⁴ today, such studies are flourishing.⁵ This new academic path seems quite promising. Clearly, constitutional design shapes structural choices, such as the enforcement of fundamental rights, influence on public policy, or the weight of social welfare.⁶

Initially, the challenge of written constitutions is creating permanence within plural societies, permeable to dynamic idiosyncrasies and politics.⁷ Without a doubt, amendment rules are quite relevant, as they minimize the risk of abusive constitutionalism and enable people to revisit their constitution.⁸

Modern constitutionalism usually relies on written and, therefore, rigid constitutions positioned on the top of the normative hierarchy or at least above ordinary state law. However, there are some exceptions to this tendency—including the well-known examples of the constitutional law of the United Kingdom and Israel—which are not codified in a single, unified document

⁴*Id.* at 105.

⁵See Lech Garlicki & Yaniv Roznai, *European Perspectives on Constitutional Unamendability*, 21 EUR. J.L. REFORM 217 (2019); PAUL YOWELL, CONSTITUTIONAL RIGHTS AND CONSTITUTIONAL DESIGN: MORAL AND EMPIRICAL REASONING IN JUDICIAL REVIEW (2018); RICHARD ALBERT, CONSTITUTIONAL AMENDMENTS: MAKING, BREAKING AND CHANGING CONSTITUTIONS, 92–72, 324–37 (2019); CONSTITUTIONAL CHANGE AND TRANSFORMATION IN LATIN AMERICA (Richard Albert et al. eds., 2018); QUASI-CONSTITUTIONALITY AND CONSTITUTIONAL STATUTES: FORMS, FUNCTIONS, APPLICATIONS (Richard Albert & Joel I. Colón-Ríos eds., 2019); FOUNDING MOMENTS IN CONSTITUTIONALISM (Richard Albert et al. eds., 2019); THE FOUNDATIONS AND TRADITIONS OF CONSTITUTIONAL AMENDMENT (Richard Albert et al. eds., 2017); ASSESSING CONSTITUTIONAL PERFORMANCE, (Tom Ginsburg & Aziz Z. Huq eds., 2016); COMPARATIVE CONSTITUTIONAL DESIGN, (Tom Ginsburg ed., 2012); COMPARATIVE CONSTITUTIONAL LAW (Tom Ginsburg & Rosalind Dixon eds., 2011); XENOPHON CONTIADIS, ENGINEERING CONSTITUTIONAL CHANGE: A COMPARATIVE PERSPECTIVE ON EUROPE, CANADA AND THE USA (2013); YANIV ROZNAI, UNCONSTITUTIONAL CONSTITUTIONAL AMENDMENTS: THE LIMITS OF AMENDMENT POWERS (2017).

⁶Bjørn E. Rasch & Roger D. Congleton, *Amendment Procedures and Constitutional Stability*, in DEMOCRATIC CONSTITUTIONAL DESIGN AND PUBLIC POLICY: ANALYSIS AND EVIDENCE 536, 537 (Roger D. Congleton & Birgitta Swedenborg eds., 2006).

⁷Catarina Santos Botelho, *Constitutional Narcissism on the Couch of Psychoanalysis: Constitutional Unamendability in Portugal and Spain*, 21 EUR. J.L. REFORM, 346, 347 (2019); see also M. Hisao Kurik, *Die Theorie der Verfassungsentwicklung*, in VERFASSUNGSÄNDERUNG, VERFASSUNGSWANDEL, VERFASSUNGSINTERPRETATION: VORTRÄGE BEI DEUTSCH-JAPANISCHEN SYMPOSIEN IN TOKYO 2004 UND FREIBURG 2005, 13, 20–21 (Rainer Wahl ed., 2010); Rosalind Dixon & David Landau, *Tiered Constitutional Design*, 86 GEO. WASH. L. REV. 438 (2018).

⁸Xenophon Contiades & Alkeme Fotiadou, *Amendment-metrics*, in THE FOUNDATIONS AND TRADITIONS OF CONSTITUTIONAL AMENDMENT 219, 227 (Richard Albert et al. eds., 2017).

labeled as “the constitution.”⁹ The Constitution of Canada is also an interesting case because it is partially compiled in an uncoded document and is one of the world’s most difficult democratic constitutions to change by formal amendment, even harder than the United States Constitution.¹⁰

Not surprisingly, measuring *amendment difficulty*¹¹ has hurdles of its own. Traditionally, the amendment rate was closely linked to the amendment procedure itself and to the several institutional factors that constrained constitutional amendments, such as high voting thresholds or intervention by numerous political actors. In this sense, stringent procedures would lower the number of constitutional amendments, and generous procedures would raise them. With this in mind, some scholars¹² prefer to measure constitutional rigidity not using amendment rule metrics but by focusing on the infrequency of amendments.¹³ When amendment frequency is too high, it might suggest the likelihood of a constitutional replacement.¹⁴ In this respect, there has been a proliferation of empirical measurements of and controversies over amendment difficulty in the last decade or so.¹⁵

Our findings confirm that different statistical methodologies produce inconsistent classifications to a degree. Correlations across indicators are not as high as expected, suggesting that different scholars may have measured different things under the same label of amendment difficulty. It could be that ongoing debates partially reflect the use of different datasets under the same designation of amendment difficulty.

This Article is structured as follows: In Section B, we develop our approach to amendment difficulty. In Section C, we present our empirical exploration. The results are contextualized in Section D, where we review current discussions on amendment difficulty across comparative constitutional law and empirical legal studies. Final conclusions and remarks about future research are presented in Section E.

B. Defining Concepts: From Amendment Difficulty to Substance and Procedure

This section introduces the important concepts about amendment difficulty and substantial and procedural amendment limits. We also discuss why previous literature failed to focus on this important distinction.

1. Why Substantial and Procedure Amendment Rules Matter

Most constitutional democracies share the common trait of having rigidly written constitutions, comprised of a formal entrenchment under a higher-than-ordinary rule of change. Therefore, this rigidity among constitutional democracies invites an important point: Constitutional rigidity can occur *a priori* (formal or substantial limitations or both) or *a posteriori* (judicial review of constitutional amendments).

⁹See Michael Hein, *The Constitutional Entrenchment Clauses Dataset*, UNIV. GÖTTINGEN (2018), <http://data.michaelhein.de>.

¹⁰Richard Albert, *The Difficulty of Constitutional Amendment in Canada*, 53 ALTA. L. REV. 85 (2015).

¹¹Tom Ginsburg & James Melton, *Does the Constitutional Amendment Rule Matter at All? Amendment Cultures and the Challenges of Measuring Amendment Difficulty*, 13 ICON 686 (2015). *Contra* George Tsebelis, *The Time Inconsistency of Long Constitutions: Evidence from the World*, 56 EUR. J. POL. RES. 820 (2017).

¹²Rasch & Congleton, *supra* note 6, at 545; Mila Versteeg & Emily Zachin, *Constitutions Unentrenched: Toward an Alternative Theory of Constitutional Design*, 110 AM. POL. SCI. REV. 657 (2016); *see also* Ginsburg & Melton, *supra* note 11, at 700.

¹³Versteeg & Zachin, *supra* note 12, at 661.

¹⁴Dixon, *supra* note 3, at 102.

¹⁵See Astrid Lorenz, *How to Measure Constitutional Rigidity: Four Concepts and Two Alternatives*, 17 J. THEORETICAL POL. 339, 336–39 (2005); George Tsebelis, *Constitutional Rigidity Matters: A Veto Players Approach*, BRIT. J. POL. SCI. (2021).

Within an a priori model, limits can be formal—procedural, temporal, and circumstantial—substantial, or both.¹⁶ *Formal limits* impose several requirements to constitutional reform, such as procedural, temporal, and circumstantial rules that bind the constitutional *veto players*.¹⁷

In fact, *procedural* limits can demand that the power to initiate a constitutional amendment belongs to a singular actor or multiple actors, single or multiple procedures for amendment, approval by multiple houses—a common trait in bicameral and presidential systems—super-majority threshold in Parliament, multiple rounds of voting, popular participation either direct (referendum) or indirect (dissolution of Parliament), and intervention or approval by other bodies such as councils, head of state, executive branch or a convening special constituent assemblies. Additionally, *temporal* limitations might establish a timeframe between amendments, and *circumstantial* limitations can impede amendments during a state of siege, a state of emergency, or a state of war amongst others.

Substantial limits relate to the constitutional core of a given society that is immune to change—these limitations are called *unamendable clauses*, *gag rules*, *immutable clauses*, *entrenchment clauses*, or *eternity clauses*. If some of the eternity clauses are intrinsic traits of a democratic state such as the separation of the state and the church, others reveal a specific political choice—federation or unitary state—or “re-join with the old idea of a natural law above the national and international legal positivation—human dignity and natural rights.”¹⁸

Substantial limitations can be explicit or implicit. Explicit—or express—substantial limitations are consecrated in the constitution, such as the famous Article 79(3) of the German Basic Law, the intriguing Article 121 of the Constitution of Norway,¹⁹ or, the longest unamendable clause in the world, Article 288 of the Portuguese Constitution.²⁰

In practice, many states recognize implicit unamendable clauses. Recent years have witnessed that not only states without eternity clauses such as Slovakia, Colombia, or India, but also states with eternity clauses, such as Brazil or Italy, have acknowledged some basic principles immune to constitutional change. To use John Rawls’ famous expression, the “constitutional essentials” might be the constitutional core of liberal democracies and the basic traits of a given constitution.²¹

Within an a posteriori model—meaning after amending the constitution—there may be signs of rigidity if the amendment is subjected to constitutional review. For example, in Turkey and the Czech Republic, constitutional amendments were invalidated for violating explicit unamendable clauses.²² Worth noting in the African context is the African Court on Human and People’s Rights, which has a wider material jurisdiction than other international judicial courts, such as the European Court of Human Rights, and can challenge regressive constitutional amendments.²³

¹⁶For a classification of constitutional amendment rules, see Richard Albert, *The Structure of Constitutional Amendment Rules*, 49 WAKE FOREST L. REV. 913 (2014).

¹⁷Tsebelis, *supra* note 15, at 14. (defining veto players as “series of collective or individual actors, such as one or both chambers of a legislature, or a special assembly, or a referendum, or an elected president, that are required to agree on the revised text in order for a revision to be approved”).

¹⁸Botelho, *supra* note 7, at 356.

¹⁹Article 121 states that “[s]uch amendment must never, however, contradict the principles embodied in this Constitution, but solely relate to modifications of particular provisions which do not alter the spirit of the Constitution.” CONSTITUTION OF NORWAY, ART. 121.

²⁰Botelho, *supra* note 7, at 363–67.

²¹JOHN RAWLS, *POLITICAL LIBERALISM* 227–31 (2005).

²²See Ulrich K. Preuss, *The Implications of “Eternity Clauses”: The German Experience*, 44 ISR. L. REV. 429, 429 (2011); Yaniv Roznai & Serkan Yolcu, *An Unconstitutional Constitutional Amendment — The Turkish Perspective: A Comment on the Turkish Constitutional Court’s Headscarf Decision*, 10 ICON 175, 175 (2012); Yaniv Roznai, *Legisprudence Limitations on Constitutional Amendments? Reflections on the Czech Constitutional Court’s Declaration of Unconstitutional Constitutional Act*, 8 VIENNA J. INT’L CONST. L., 29, 29 (2014).

²³Adem K. Abebe, *Taming Regressive Constitutional Amendments: The African Court as a Continental (super) Constitutional Court*, 17 ICON 89, 108–10 (2019).

However, the doctrine of *unconstitutional constitutional amendment* “has not yet matured into a global norm of constitutionalism.”²⁴

In Europe, it is important to mention the recent decision of the Constitutional Court of Slovakia, in which the Court declared the unconstitutionality of a constitutional amendment. This decision is of paramount importance, as it was the first time in Europe that a constitutional court exercised substantial judicial review of constitutional amendments grounded on implicit unamendable clauses.²⁵

The degree to which constitutional text is shielded from futile or impulsive changes depends on its measure of rigidity.²⁶ To some extent, rating constitutional amendments over a predetermined period of time²⁷ might be deceptive, as we would be comparing old and new constitutions.²⁸ The same goes for measuring constitutional change by frequency, as the amount of constitutional change can vary: There can be extensive amendments that significantly change a constitution, whereas minor amendments might be just slight cosmetic changes.²⁹ Thus, it is relevant not to treat all formal amendments as mere numbers irrespective of their “purpose, content, or scope.”³⁰

II. Previous Empirical Literature has not Explored the Distinction Between Substantial and Procedure Amendment Rules

In search of the ideal amendment rate, Donald Lutz presented some important propositions in his seminal work:

The longer a constitution is (the more words it has), the higher its amendment rate, and the shorter a constitution, the lower its amendment rate. . . . The more difficult the amendment process, the lower the amendment rate, and the easier the amendment process, the higher the amendment rate. . . . The more governmental functions dealt with in a constitution, the longer it will be and the higher its rate of amendment will be. . . . A low amendment rate, associated with a long average constitutional duration, strongly implies the use of some alternate means of revision to supplement the formal amendment process.³¹

However, Rasch and Congleton argue that Lutz’s, and also Ferejohn’s, empirical relationship between stringency and amendment rates lacks consistency.³² With this in mind, these authors state that the amendment rate is “an imperfect measure of constitutional stability” and that it “neglects other elements of change.” Additionally, amendment counts “assign equal importance” to both major and minor amendments.

Developing this idea, Tom Ginsburg and James Melton astutely outline the “amendment culture” as a far more important predictor of constitutional change than the constitutional

²⁴Richard Albert, Malkhaz Nakashidze & Tarik Olcay, *The Formalist Resistance to Unconstitutional Constitutional Amendments*, 70 HASTINGS L.J., 639, 642 (2019). The authors emphasize that the increasing prevalence of the unconstitutional constitutional amendment doctrine should not be perceived “as evidence of its appropriateness for all constitutional states.”

²⁵PL. ÚS 21/2014.96. See Lech Garlicki & Yaniv Roznai, *Introduction: Constitutional Unamendability in Europe*, 21 EUR. J.L. REFORM, 217, 217–18 (2019); see also Rosalind Dixon & David Landau, *Transnational Constitutionalism as a Limited Doctrine of Unconstitutional Constitutional Amendment*, 13 ICON 606, 606 (2015) (arguing that unconstitutional constitutional amendments grounded on implicit limits violations should depend on some “cross-country” consensus or, in other words, of a comparative constitutional approach).

²⁶Botelho, *supra* note 7, at 353.

²⁷Lorenz, *supra* note 15, at 348.

²⁸Ginsburg & Melton, *supra* note 11, at 695.

²⁹*Id.* at 702–03.

³⁰Contiades & Fotiadou, *supra* note 8, at 225.

³¹Donald S. Lutz, *Toward a Theory of Constitutional Amendment*, 88 AM. POL. SCI. REV. 335, 365 (1994).

³²Rasch & Congleton, *supra* note 6, at 545. For a sharp critique, see RICHARD ALBERT, CONSTITUTIONAL AMENDMENTS: MAKING, BREAKING AND CHANGING CONSTITUTIONS, 100–07 (2019).

amendment design.³³ Consequently, amendment difficulty did not relate to the traditional metrics of institutional indices or variables, but instead to extra-institutional forces such as constitutional behavior.³⁴ Ginsburg and Melton define “amendment culture” as “the set of shared attitudes about the desirability of amendment, independent of the substantive issue under consideration and the degree of pressure for change.”³⁵ In other words, stringent amendment procedures depend not only on institutional forces but also on more vague assertions, such as the “perceptions about the place of constitution in society.”

In either event, “both procedure and culture affect flexibility.” According to Contiades and Fotiadou, “the constitutional and political culture are sources of factual rigidity that blocks constitutional change even when it is procedurally available.”³⁶ In fact, there can be factual rigidities that block the constitutional amendment process even in the absence of explicit procedural or substantial limits.³⁷ Rather than respecting the constituent democratic will of the people, the apparent legislative omnipotence is restricted by other obstacles, such as judicial activism, the legal culture, or political liability.

Contrary to Ginsburg and Melton’s assertion, Tsebelis returns to Burgess’s statement that constitutional amendment rules do have a significant impact on amendment frequency, and argues that the relationship between constitutional rigidity and significant amendment frequency is “heteroskedastic.”³⁸ Besides this, Tsebelis introduced two innovations to the traditional approach: First, an index of constitutional rigidity on the basis of veto players, not just a subset of institutional rules;³⁹ second, one should consider amendment rules only in democratic states where institutional rules are expected to apply.

Additionally, instead of measuring the frequency of all constitutional amendments, Tsebelis explores their “significance”⁴⁰ and concludes that “constitutional rigidity leads to fewer significant amendments, and constitutional flexibility may or may not lead to the adoption of significant amendments.”⁴¹

The outcomes of Tsebelis’s research proved that “constitutional rigidity affects the frequency of significant amendments in the following way: 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 a higher variance of significant constitutional amendments. The higher the significance of amendments, the stronger the above relationship.”⁴²

In sum, there are two different schools of thought concerning the measurement of amendment rigidity, but neither has explicitly explored the distinction between substantial and procedural dimensions. The distinct role of procedural amendment rules—rules that regulate the process by which a constitutional amendment is passed—and substantial amendment rules—rules that limit what can be amended although widely recognized by the normative literature, has not been studied through the lens of empirical analysis. This Article aims to fill that gap.

³³*Id.* at 548; Albert, *supra* note 2, at 13. For a broader discussion regarding “constitutional culture,” see Gary Jacobsohn, *CONSTITUTIONAL IDENTITY* (2010), and Jason Mazzone, *The Creation of a Constitutional Culture*, 40 *TULSA L. REV.* 671 (2004).

³⁴Ginsburg & Melton, *supra* note 11, at 687.

³⁵*Id.* at 699.

³⁶Xenophon Contiades & Alkeme Fotiadiou, *Constitutional Resilience and Unamendability: Amendment Powers as Mechanisms of Constitutional Resilience*, 21 *EUR. J.L. REFORM*, 243, 246 (2019).

³⁷*Id.* at 253.

³⁸Tsebelis, *supra* note 15.

³⁹See Rasch & Congleton, *supra* note 6, at 543 (arguing that it becomes more difficult to amend a constitution “as the number of actors and decision points increase, and as the required degree of consensus increases”).

⁴⁰Tsebelis, *supra* note 15.

⁴¹*Id.* The questionnaire presented a three-class typology of amendment significance, consisting of “amendments of exceptional significance,” “significant amendments,” and “insignificant amendments.”

⁴²Tsebelis, *supra* note 15.

Table 1. List of Countries

Albania	Estonia (EU)	Israel	Poland (EU)	Sweden (EU)
Austria (EU)	Finland (EU)	Italy (EU)	Portugal (EU)	Switzerland
Belgium (EU)	France (EU)	Latvia (EU)	Romania (EU)	Turkey
Bulgaria (EU)	Germany (EU)	Lithuania (EU)	Russia	UK (EU)
Croatia (EU)	Greece (EU)	Luxembourg (EU)	Serbia	Ukraine
Cyprus (EU)	Hungary (EU)	Malta (EU)	Slovak Rep (EU)	
Czech Rep (EU)	Iceland	Netherlands (EU)	Slovenia (EU)	
Denmark (EU)	Ireland (EU)	Norway	Spain (EU)	

C. Exploring the Data

This section explores the empirical question. We start by describing the dataset using factor analysis. This exercise allows us to suggest two distinct indicators to measure substantial and procedural amendment limits. The following step is to apply the same methodology to a different dataset on constitutional amendments. The third stage is to compare all indicators and debate possible patterns of correlation. A final robustness check is to detect and interpret possible regularities across these different indicators by means of regression analysis.

1. Dataset

The authors have collected information about substantial and procedural amendment limits or rules as they were *de jure* in 2018 for all member states of the European Union plus a sample of countries in the European Union’s periphery. The nine additional countries are not a random sample, but those for which information about substantial amendment rules are available; information about procedural amendment rules per country is easier to find in the conventional literature. The thirty-seven countries included in the study are shown in Table 1, with particular reference to the twenty-eight members of the European Union—as it was in 2019. For each of the thirty-seven countries, the collected information about substantial and procedural amendment rules and other available indicators is detailed in Tables 2A and 2B.⁴³

Procedure includes eight dummy variables concerning amendment rules satisfying the following procedural requirements: (i) explicit constitutional regulation, (ii) approval by multiple houses of parliament, (iii) approval by supermajority, (iv) approval by referendum; (v) timeframe for approval is regulated by the constitution, (vi) approval requires dissolution of parliament and new general elections, (vii) approval by additional political bodies (excluding constitutional court), and (viii) approval by the constitutional court and subject to constitutional review.

Substance also includes eight dummy variables, but in this case concerning amendment rules satisfying the following substantive requirements: (i) comply with material limits to amendments, (ii) these material limits are explicit in a codified constitution, (iii) these explicit limits concern the form of government, (iv) these explicit limits concern the form of government as well as other political issues, (v) these explicit limits concern individual rights, (vi) these material limits are also implicit, (vii) these implicit limits concern general principles of law—such as the rule of law—and (viii) these implicit limits concern general principles of law as well as other legal issues.

Based on the collected information for each of the thirty-seven jurisdictions, we used factor analysis to construct two indicators—*procedure* and *substance*. Factor analysis provides for a

⁴³The information reflects their constitutional texts, statutes, and conventional principles—in the case of jurisdictions without codified constitutions such as the UK—and recent case law—for purposes of implicit substantive limits. The dataset is available from the authors upon request.

Table 2A. Variables Included in *Procedure* and *Substance*

Variable	Description	Variable	Description
<i>procedure</i>		<i>substance</i>	
regulated	Amendments are explicitly regulated	limits	There are substantial/material limits to amendments
double	Amendments require approval by multiple houses/chambers of parliament	explicit	These substantial limits are explicit
supermajority	Amendments require supermajority	form	These explicit substantial limits concern the form of government
referendum	Amendments require referendum	more than form	These explicit substantial limits concern the form of government and more
timeframe	Timeframe between amendments is regulated	rights	These explicit substantial limits include individual rights
dissolution	Amendments require dissolution	implicit	These substantial limits are implicit
further	Amendments require additional political bodies	general	These implicit substantial limits concern general principles of law such as rule of law
review	Amendments are subject to constitutional review	more than general	These implicit substantial limits concern general principles of law such as rule of law and more

statistical indicator that summarizes information about a set of variables by exploring differences in variance.⁴⁴ Both *procedure* and *substance* reflect in statistical ways the variance across the underlying eight dummy variables.⁴⁵ Therefore, the reported indicators are driven by data considerations rather than subjective conjectures about each variable's nature or additivity. For example, the weight each of the eight dummies has on a given indicator—*procedure* or *substance*—is determined by factor analysis and not some *ad hoc* consideration.

Considering *procedure*, we include the dummy variables from *regulated* to *review* in Table 2A. Denmark emerges with the lowest value, easy procedure for amendment, followed closely by Iceland and Croatia. Cyprus, the Czech Republic, and Germany emerge with the highest value, most complex and distinct procedure for amendment, followed closely by Romania. Statistically, this indicator reflects all included variables except *dissolution*, which does not seem significant for statistical purposes due to low variance because very few jurisdictions have such formal requirements.⁴⁶

The same methodology follows for *substance*, with the dummy variables from *limits* to *more than general* on Table 2A. A group of countries exhibits the lowest value: Albania, Bulgaria, Denmark, Finland, Hungary, Iceland, Ireland, Israel, Latvia, Malta, the Netherlands, Poland, Slovak Republic, Serbia, Slovenia, Spain, and Sweden. All of them have very few substantive restrictions according to our data collection. With the highest value, we find Cyprus, Germany, Greece, Norway, Portugal, Romania, and Turkey. Notably, this indicator is more polarized—in the sense that more countries are at each extreme—than *procedure* because only a subset of variables matters statistically. In fact, *substance* is mainly determined by the explicit rather than implicit substantive limits. Again, this is a statistical artifact derived from the low variance of

⁴⁴The information about the statistical determination of all indicators is available from the authors upon request.

⁴⁵The numerical indicators are reported for each country in appendix, Table A1.

⁴⁶The factor analysis for *procedure* is available from the authors upon request.

Table 2B. Other Indicators and Variables

Variable	Description	Data Limitation
CRI1	Constitutional Rigidity Index (Tsebelis)	Malta and Russia are excluded
CRI2	Constitutional Rigidity Index (Lorenz)	Fifteen countries are excluded
CRI3	Constitutional Rigidity Index (Anckar and Karvonen)	Fifteen countries are excluded
SUMGM	Summing Amendment Variables in Ginsburg and Melton	Israel and UK are coded as zeros for all variables in the original dataset
CRIGM	Factor Analysis with Amendment Variables in Ginsburg and Melton	Israel and UK are coded as zeros for all variables in the original dataset
year	Year of approval of constitution	
amendrate	Number of constitutional amendments as of 2018	
EU	EU membership as 2018	
common	Common Law legal family	
scandy	Scandinavian country	
former	Former Socialist country	
cr	No formal constitutional review	
uncodified	No formal codified constitution	
federal	Federal country	
gdppc	GDPpc (IMF, 2017)	
ruleoflaw	Rule of law indicator, World Bank (2016)	
lang	Linguistic diversity (Alesina et al) ⁴⁷	
rel	Religious diversity (Alesina et al)	

implicit, general, and more than general. In our sample of countries, very few jurisdictions are coded as having implicit substantive limits.⁴⁸

So now, by using factor analysis, we have reduced sixteen variables to two statistical indicators: *Procedure* and *substance*. In this next stage, we created a third indicator, *amendment*, which results from the previous two. Cyprus and Germany come out as the countries with the highest value—more procedural and substantive limits when combined. The opposite position goes to Denmark.⁴⁹

Table 3A shows the distribution of countries per indicator. A few countries are considered low across both indicators: Croatia, Denmark, Iceland, Ireland, Slovenia, and Sweden. Another group is reported as high across both indicators: Cyprus, Germany, Greece, Portugal, and Romania. The other twenty-six countries have different positions in between. We can also find the UK as low *procedure* and high *substance*, mainly due to the common law principle. At the opposite end, we have Austria, Hungary, Lithuania, and Spain as high *procedure* and low *substance*.

⁴⁷Alberto Alesina, Arnaud Devleeschauwer, William Easterly, Sergio Kurlat & Romain Wacziarg, *Fractionalization*, 8 J. ECON. GROWTH 155 (2003).

⁴⁸The factor analysis for *substance* is available from the authors upon request.

⁴⁹We think this approach is more consistent with our analysis of *substance* and *procedure*. An alternative view would be to apply factor analysis to all sixteen dummy variables at the same time. The results from this alternative approach are largely consistent with ours. All results are available from the authors upon request.

Table 3A. Distribution of Countries per *Procedure* and *Substance*

	Low Procedure	Intermediate Procedure	High Procedure
Low Substance	Croatia, Denmark, Iceland, Ireland, Slovenia, Sweden	Albania, Bulgaria, Estonia, Finland, Israel, Latvia, Malta, Netherlands, Poland, Serbia, Slovak Rep	Austria, Hungary, Lithuania, Spain
Intermediate Substance	Luxembourg	France	Czech Rep, Italy
High Substance	UK	Belgium, Norway, Russia, Switzerland, Turkey, Ukraine	Cyprus, Germany, Greece, Portugal, Romania

Table 3B. Distribution of Countries per *Amendment*

Low Amendment	Albania, Bulgaria, Croatia, Denmark, Estonia, Finland, Hungary, Iceland, Ireland, Israel, Latvia, Lithuania, Malta, Netherlands, Poland, Serbia, Slovak Rep, Slovenia, Sweden, UK
High Amendment	Austria, Belgium, Cyprus, Czech Rep, France, Germany, Greece, Italy, Luxembourg, Norway, Portugal, Romania, Russia, Spain, Switzerland, Turkey, Ukraine

Table 3B shows the distribution of countries in the composite indicator *amendment*. Countries considered low or high across both indicators are easily assigned in this table. The more interesting countries are those in the minor diagonal of Table 3A, with one high and one low indicator. One example is the UK, low *procedure*, high *substance*, which is assigned to low *amendment* as expected. A different example is Spain, high *procedure*, low *substance*, which is allocated to the opposite group, high *amendment*, also as expected.

In terms of correlation, following table 4A, we can see that *amendment* is highly correlated with the partial indicators (85%). However, the partial indicators are only correlated between themselves at a lower degree (45%). By factor analysis, *amendment* reflects equally *procedure* and *substance*. However, *procedure* and *substance* are only mildly positively correlated.

II. Ginsburg and Melton (2015) Dataset

In their seminal article, Tom Ginsburg and James Melton⁵⁰ explore a rich group of variables about constitutional amendments by making use of the Comparative Constitutions Project⁵¹ data. These variables provide extensive information about constitutional amendments in mainly three areas—the number of proposers, the number of approvers, and the political body making the last step in the constitutional amendment process. Following the previously explained methodology, we applied factor analysis to each group of variables. Factor analysis was applied a second time to encompass the three dimensions. The resulting indicator—CRIGM—measures “amendment difficulty” according to the data used by Ginsburg and Melton.⁵² It increases with both the number of approvers and final approver dimensions—an amendment is more difficult if it requires a significant number of actors. It decreases with number of proposers’ dimension—an amendment is easier if more actors can start the process. Under this new indicator, Italy and Romania come out as the least rigid while Bulgaria is the most rigid jurisdiction.

⁵⁰Ginsburg & Melton, *supra* note 11.

⁵¹COMPARATIVE CONSTITUTIONS PROJECT HOME PAGE, <http://comparativeconstitutionsproject.org/> (last visited on March 20, 2020).

⁵²The factor analysis is available from the authors upon request. The results per country are presented in appendix, Table A1.

Table 3C. Distribution of Countries per *Amendment* and Ginsburg and Melton (2015)

	Low <i>Amendment</i>	High <i>Amendment</i>
Low GM (2015)	Hungary, Israel, Netherlands, Poland, Slovak Rep, UK	Austria, Belgium, Cyprus, Czech Rep, France, Germany, Italy, Romania, Russia, Spain, Switzerland
High GM (2015)	Bulgaria, Croatia, Denmark, Estonia, Finland, Iceland, Ireland, Latvia, Lithuania, Malta, Serbia, Slovenia, Sweden,	Greece, Luxembourg, Norway, Portugal, Ukraine

Table 4A. Correlations with 37 countries

	<i>procedure</i>	<i>Substance</i>	<i>amendment</i>	SUMGM	CRIGM
<i>procedure</i>	1.00				
<i>substance</i>	0.45	1.00			
<i>amendment</i>	0.85	0.85	1.00		
SUMGM	−0.43	−0.25	−0.40	1.00	
CRIGM	0.02	−0.21	−0.11	0.18	1.00

Table 4A compares CRIGM and a second indicator using Ginsburg and Melton’s data—a simple sum of all variables in their dataset SUMGM—thus each variable has the same unitary weight as our own factor analysis indicators. Remarkably, CRIGM and *procedure* seem orthogonal. In fact, CRIGM has a zero correlation with *procedure*, a negative 21% correlation with *substance*, and a negative 11% with *amendment*. Therefore, reflecting the data’s actual dimensions, we might argue that CRIGM and our indicators measure very different constitutional limitations. Furthermore, our indicators have a significant negative correlation with SUMGM.

Table 3C reports the distribution of countries per *amendment* and CRIGM. The orthogonality is clear. The main diagonal is where we would expect countries to be, yet only eleven countries are there, including Israel and UK. The minor diagonal should be intrinsically exceptional because these are jurisdictions for which *amendment* and CRIGM provide contradicting numbers. Twenty-six countries are located in the minor diagonal.

III. Correlation Across Constitutional Rigidity Indicators

We turn now to comparisons with other available indicators, namely constitutional rigidity measured by Tsebelis (CRI1 in Table 2B)⁵³, Lorenz (CR2 in Table 2B)⁵⁴ and Anckar and Karvonen (CRI3 in Table 2B)⁵⁵ as documented by Lorenz. Confirming previous analyses, we find limited correlation across all these indicators.

Tables 4B and 4C show the results for thirty-five and twenty-two countries respectively. The reason for not using thirty-seven countries is that previous studies do not use the exact same sample of countries as we do. *Amendment* does not seem strongly correlated with any other indicator. However, CRIGM has a reasonable degree of correlation with CRI3, suggesting that both measure procedural rigidity on the same lines. In fact, CRI3 has a 45% correlation with *procedure* itself.

⁵³Tsebelis, *supra* note 15.
⁵⁴Lorenz, *supra* note 15.
⁵⁵Dag Anckar & Lauri Karvonen, Constitutional Amendment Methods in the Democracies of the World, Presentation at the XIIIth Nordic Political Science Congress (Aug. 15–17, 2002).

Table 4B. Correlations with 35 Countries (Excludes Malta and Russia)

	<i>procedure</i>	<i>substance</i>	<i>amendment</i>	SUMGM	CRIGM	CRI1
<i>procedure</i>	1.00					
<i>substance</i>	0.47	1.00				
<i>amendment</i>	0.86	0.85	1.00			
SUMGM	−0.44	−0.24	−0.40	1.00		
CRIGM	0.01	−0.22	−0.12	0.17	1.00	
CRI1	0.01	0.20	0.12	−0.09	0.26	1.00

Table 4C. Correlations with twenty-two countries (Excludes Albania, Croatia, Cyprus, Estonia, Iceland, Israel, Latvia, Luxembourg, Malta, Romania, Russia, Serbia, Slovak Rep, Turkey, Ukraine)

	<i>procedure</i>	<i>substance</i>	<i>amendment</i>	SUMGM	CRIGM	CRI1	CRI2	CRI3
<i>procedure</i>	1.00							
<i>substance</i>	0.36	1.00						
<i>amendment</i>	0.83	0.81	1.00					
SUMGM	−0.43	−0.22	−0.40	1.00				
CRIGM	−0.05	−0.54	−0.35	0.13	1.00			
CRI1	−0.28	−0.11	−0.24	−0.01	0.27	1.00		
CRI2	0.02	0.00	0.01	−0.35	0.22	0.40	1.00	
CRI3	0.45	−0.20	0.17	−0.18	0.39	0.09	0.25	1.00

CRI1 and CRI2 also come out as somehow related—about 40% correlation—while CRI2 is negatively correlated to CRIGM—about 35%.

In sum, the indicators on amendment rigidity are not entirely consistent. CRI1 and CRI2 seem familiar to each other but unrelated to *procedure* or *substance*. CRIGM seems positively related to all previous indicator, namely CRI1, CRI2 and CRI3. However, *procedure* and CRI3 emerge as significantly related. Finally, our own *amendment* seems to stand on its own—that is, with no strong correlation to any other previous indicator. Therefore, it is an empirical shortcoming that a collection of so many indicators on amendment rigidity reflects disturbing variations.

IV. Regression Analysis

In order to help or provide some guidance over which indicators of amendment rigidity seem more robust, we can investigate possible determinants. Such exercise is useful to assess the quality of the indicators by discussing how they respond to simple institutional variety. This is not empirical research about explaining amendment rigidity across countries as other authors have usefully done, but merely shedding some light on how different indicators reflect diversity over legal tradition or socioeconomic variables.

We start by studying the determinants of the partial indicators, *procedure* and *substance*. We apply a standard three-stage least squares (3SLS) method of regression due to the possibility that *procedure* determines *substance* and vice-versa, hence a simultaneous equation model. A simple least squares (OLS) method of regression would be wrong due to likely endogeneity, hence producing potentially spurious statistical results. As to *amendment*, combining both factors in this case, a simple OLS suffices.

Table 5A. Regression Analysis

	<i>procedure</i> (3SLS)	<i>substance</i> (3SLS)	<i>amendment</i> (OLS)
Observations	37	37	37
R-square	0.67	0.71	0.45
constant	−0.01	13.46***	7.91*
year	0.00	−0.01***	−0.00
amendrate	0.01	−0.01	−0.00
EU	−0.40	−0.39	−0.46
common	−0.35	−0.57	−0.53
scandy	−1.84***	−0.85	−1.58**
former	−0.95***	−1.35***	−1.35***
cr	−1.25	−1.41*	−1.57
uncodified	−1.60*	−1.26	−1.64
federal	−0.36	0.38	0.01
gdppc	−0.00002**	−0.00	−0.00
Rule of law	0.01	−0.01	−0.00
lang	0.00	0.00	0.00
rel	0.01	0.01	0.01

*** significant at 1%, ** significant at 5%, *significant at 10%

The independent variables of the regression analysis are summarized in Table 2B: Year of the current constitution; the number of constitutional amendments as of 2018; GDP per capita as of 2017 (International Monetary Fund); the rule of law indicator as of 2016 (World Bank); linguistic and religious diversity; and a group of dummy variables reflecting EU membership as of 2018 such as common law, Scandinavian and former socialist legal families—as in the standard legal origins literature—no formal constitutional review, no formal codified constitution, and federal country.

The results are reported in Table 5A.⁵⁶ Due to the limited sample, all regressions exhibit a decent degree of statistical power.⁵⁷ Concerning *procedure*, there are four negative statistically significant coefficients: Scandinavian countries; former socialist countries; countries with uncoded constitutions—Israel and the UK, only at 10% significance; and GDP per capita—only at 5% significance. No other variable seems statistically significant.

As to *substance*, there are two negative statistically significant coefficients: Year of the current constitution; former socialist countries; and countries without formal constitutional review—only at 10% significance level. Everything else seems statistically insignificant.

Finally, for *amendment*—which combines both partial indicators by factor analysis—we find that “amendment difficulty” has two negative statistically significant coefficients: Scandinavian countries—only at 5% significance—and former socialist countries. No other variable seems statistically significant.

Therefore, the only variable that seems statistically significant across the three regressions is former socialist countries with a negative coefficient in all specifications. Also, notice that any

⁵⁶The STATA outputs are available from the authors upon request.

⁵⁷The statistical results concerning the coefficients do not indicate any particular concern with autocorrelation.

Table 5B. Regression Analysis

	<i>amendment</i> (OLS)	CRIGM (OLS)	CRI1 (OLS)
Observations	37	37	35
R-square	0.45	0.55	0.53
constant	7.91*	−0.02	0.69
year	−0.00	0.00	0.00
amendrate	−0.00	0.01	−0.01**
EU	−0.46	−0.42	0.17
common	−0.53	0.78	0.30*
scandy	−1.58**	0.87	0.24
former	−1.35***	1.01*	−0.15
cr	−1.57	0.33	0.04
uncodified	−1.64	−0.99	0.33
federal	0.01	−0.68	0.20
gdppc	−0.00	0.00	−0.00
Rule of law	−0.00	−0.01	−0.00
lang	0.00	0.00	−0.00
rel	0.01	−0.01	−0.00

*** significant at 1%, ** significant at 5%, *significant at 10%

possible concern about using *amendrate* on the right-hand-side of the estimated equations are reduced when we find that it has very little statistical power.⁵⁸

We also explore the determinants of two alternative indicators: CRIGM and CRI1. Concerning the indicator using Ginsburg and Melton's data, we find that former socialist countries have a positive impact on the indicator—at 10% significance level. With CRI1, we lose two observations—Malta and Russia. The main result is that the number of constitutional amendments in the past is negatively related to rigidity in 2018, not a surprising result given the way Tsebelis has built the indicator he reports. It also shows that common law jurisdictions, at a significance level of 10%, seem to have a negative impact on the indicator, a result we would not emphasize given the lower number of common law jurisdictions in our European sample.

Overall, by comparing the three regressions stated in Table 5B, we can see that our *amendment* indicator seems more robust to institutional variety, while the other two indicators, CRIGM and CRI1, seem somehow more random. Additional indicators, CRI2 and CRI3, were not inspected by regression analysis due to the limited number of observations, only twenty-two.

In conclusion, our *amendment* indicator seems to capture institutional variety in more consistent ways within the sample of thirty-seven countries we have than the other two alternative indicators. This, by itself, does not imply in any way that our indicators are superior to the other existing indicators. In our view, it simply reflects that using factor analysis seems to be a more consistent method to absorb institutional differences in relation to *procedure*, *substance*, and *amendment*.

⁵⁸ Amendment rates reflecting past experience could influence current “amendment rigidity,” but, at the same time, it is likely that current “amendment rigidity” follows past “amendment rigidity,” which in turn shapes amendment rates.

D. Limits of Comparative Constitutional Theory

This section contextualizes our findings in the previous section in a critical way. The existing contradictions across available indicators reflect variations on methodology and confusing conceptualization in relation to procedural and substantial amendment rules. It is important to explore current understandings of constitutional rigidity. At the same time, contradicting empirical evidence seems to support skepticism by the more traditional literature towards recent trends in scholarship. On the contrary, we suggest that contradicting empirical evidence requires a more nuanced view of results and legal implications.

A liberal democracy's "minimum core,"⁵⁹ "constitutional DNA,"⁶⁰ or "the *alma mater* of modern constitutionalism"⁶¹ could offer protection against populist constitutional transformations that have recently taken hold in certain modern constitutional liberal democracies.⁶² Unsurprisingly, supporters of illiberal democracy argue for unlimited constitutional amendment powers, which means "an absolute primacy of politics over the rule of law."⁶³ The weakness, however, concerns the inability of unamendable theories to prevent "democratic backsliding."⁶⁴

For one thing, unamendable clauses are not a common constitutional trait. In fact, "out of the 742 constitutions that were examined, 212 constitutions (28%) include or included unamendable provisions."⁶⁵ Substantively constraining the power of constitutional amendment is the same as prohibiting total constitutional amendments, hence tightening the range of democratic deliberation. Therefore, the constitutional amendment process will always be a partial one, as some aspects of a given constitutional identity are shielded by the constitutional text.

I. Current Arguments Against and for Measuring the Quantum of Change in Dissimilar Constitutional Experiences

When compared with the interpretation of ordinary norms, constitutional interpretation poses different challenges.⁶⁶ On the one hand, constitutional design is often abstract, flexible, and drawn with high substantial density. To maintain its democratic legitimacy, a constitution should accommodate many worldviews.⁶⁷ Thus, it is abstraction that allows the existence of several societal and political choices under the same constitutional roof.⁶⁸ On the other hand, constitutional text tends to be more laconic than ordinary laws, although one should stress that some aspirational constitutions, such as the Portuguese or the Brazilian, are quite prolix.⁶⁹

⁵⁹Rosalind Dixon & David Landau, *Democracy and the Constitutional Minimum Core*, in *ASSESSING CONSTITUTIONAL PERFORMANCE* 268 (Tom Ginsburg & Aziz Z. Huq eds., 2016).

⁶⁰Botelho, *supra* note 7, at 373 ("[T]he constitutional DNA from modern liberal constitutionalism shares a few 'constitutional essentials,' such as the democratic principle, popular sovereignty, universal suffrage, political and personal rights and freedoms, and (in several constitutional traditions) social rights intrinsically connected to human dignity (minimum core of health, basic education, housing, and social security).").

⁶¹*Id.*

⁶²Gábor Halmi, *From a Pariah to a Model? Hungary's Rise to an Illiberal Member State of the EU*, in *EUROPEAN YEARBOOK OF HUMAN RIGHTS* 35–45 (Wolfgang Benedek et al. eds., 2017).

⁶³*Id.* at 35–45; Gábor Halmi, *Populism, Authoritarianism and Constitutionalism*, 20 *GERMAN L.J.* 296, 306 (2019); Julian Scholtes, *The Complacency of Legality: Constitutionalist Vulnerabilities to Populist Constituent Power*, 20 *GERMAN L.J.* 351, 354 (2019); Luigi Corrias, *Populism in a Constitutional Key: Constituent Power, Popular Sovereignty and Constitutional Identity*, 12 *EUR. CONST. L. REV.* 6, 16. (2016).

⁶⁴Oran Doyle, Erik Longo & Andrea Pin, *Populism: A Health Check for Constitutional Democracy?*, 20 *GERMAN L.J.* 401, 406 (2019).

⁶⁵ROZNAI, *supra* note 5, at 21.

⁶⁶Botelho, *supra* note 7, at 351–52.

⁶⁷CASS R. SUNSTEIN, *A CONSTITUTION OF MANY MINDS* 19–20 (2009).

⁶⁸Versteeg & Zachin, *supra* note 15; Víctor Ferreres Comella, *Una Defensa de la Rigidez Constitucional*, 23 *DOXA. CUADERNOS DE FILOSOFÍA DEL DERECHO* 29, 34–35 (2000).

⁶⁹Catarina Santos Botelho, *Aspirational Constitutionalism, Social Rights Proximity and Judicial Activism: Trilogy or Trinity?*, 3 *COMP. CONST. L. & ADMIN. L.Q.* 62 (2017).

For these reasons, in democracies with written constitutions, the constitution is rigid and more difficult to amend than ordinary norms.⁷⁰ As noted above, formal constitutional amendment usually requires a stricter procedure, super-majorities or double-majorities, and involves more actors than the amendment of ordinary rules. The use of qualified majorities protects minorities as it “creates constitutional inertia.”⁷¹ As Ginsburg and Melton point out, “entrenchment is at the heart of constitutional stability.”⁷²

Nevertheless, adjusting the “living constitution” within the realm of a constitutional text is difficult. What are the relevant societal, political, and cultural factors worthy of constitutional consecration and constitutional change? One can easily think of a few.

In many European states, before the failed referenda for the approval of the European Constitution, there was a need to adapt some constitution to allow the potential loss of national constitutional sovereignty. Likewise, many states had to adapt their constitutions to increasing international integration. That was the case, for example, of the International Criminal Court, which has jurisdiction over genocide, crimes against humanity, war crimes, and crimes of aggression committed by a state party national, in the territory of a state party, or in a state that has accepted the jurisdiction of the court.

Moreover, there are a host of problems that come with evolving constitutional interpretation. In states encouraging dialogic communication between constitutional or supreme courts and legislatures, formal constitutional amendments can also play a significant role in constitutionalizing some changes through judicial interpretation.⁷³ Epistemically, constitutional or supreme court judges and legislators are “fellow interlocutors of the requisite demands of a constitutional democracy.”⁷⁴

Constitutional interpretation is not exclusive to the judiciary; if it were, it would form a hermeneutical circle. If constitutional courts, in some states, have the final word regarding the constitutionality of legislation, the legislator is the first constitutional interpreter.⁷⁵ With this in mind, Rosalind Dixon stresses that constitutional amendment can allow legislative and popular actors to either influence or be influenced by constitutional courts’ interpretation of the constitutional design.⁷⁶

Last but not least, formal amendments might also constitutionalize previously accomplished informal constitutional changes. These are the “quasi-constitutional amendments” where constitutional actors circumvent the “onerous rules of formal amendment” and “resort instead to sub-constitutional means—for instance, legislation or political practice—whose success requires less or perhaps even no cross-party and inter-institutional coordination.”⁷⁷ Alternatively and more

⁷⁰Michel Rosenfeld, *Constitutional Adjudication in Europe and the United States: Paradoxes and Contrasts*, in EUROPEAN AND US CONSTITUTIONALISM 197, 217–18 (Georg Nolte ed., 2005). ROBERT CHR. VAN OUYEN, POLITIK UND VERFASSUNG: BEITRÄGE ZU EINER POLITIKWISSENSCHAFTLICHEN VERFASSUNGSLEHRE 24 (2006); Ulrich Ramsauer, *Die Rolle der Grundrechte im System der subjektiven öffentlichen Rechte*, 111 ARCHIV DES ÖFFENTLICHEN RECHTS 501, 513 (1986).

⁷¹Rasch & Congleton, *supra* note 6, at 544.

⁷²Ginsburg & Melton, *supra* note 11, at 688.

⁷³Cass R. Sunstein, *Constitutional Agreements Without Constitutional Theories*, 13 RATIO JURIS 117 (2000); Catherine A. Fraser, *Constitutional Dialogues Between Courts and Legislatures: Can We Talk?*, 14 CONST. F. CONSTITUTIONNEL 7 (2005); Janet Hiebert, *Parliament and the Human Rights Act: Can the JCHR Help Facilitate a Culture of Rights?*, 4 ICON 1 (2006); Kent Roach, *Constitutional and Common Law Dialogues Between the Supreme Court and Canadian Legislatures*, 80 CAN. BAR REV. 481 (2001); Kent Roach, *Sharpening the Dialogue Debate: The Next Decade of Scholarship*, 45 OSGOODE HALL L.J. 169 (2007); Luc B. Tremblay, *The Legitimacy of Judicial Review: The Limits of Dialogue between Courts and Legislatures*, 3 ICON 617 (2005). Mark Tushnet, *Dialogic Judicial Review*, 61 ARK. L. REV. 205 (2008); Roberto Gargarella, *‘We the People’ Outside the Constitution: The Dialogic Model of Constitutionalism and the System of Checks and Balances*, 67 CURRENT LEGAL PROBS. 1 (2014); and William H. Rehnquist, *Notion of a Living Constitution*, 29 HARV. J.L. & PUB. POL’Y 401 (2006).

⁷⁴PO JEN YAP, CONSTITUTIONAL DIALOGUE IN COMMON LAW ASIA 22–23 (2015).

⁷⁵Botelho, *supra* note 68, at 76–78.

⁷⁶Dixon, *supra* note 3, at 98.

⁷⁷Richard Albert, *Quasi-Constitutional Amendments*, 65 BUFF. L. REV. 739, 741–42 (2017).

broadly, others refer to “controlled” or “uncontrolled silent constitutional change caused by facts that are not accompanied by a demonstrable intention or awareness of the change on the part of constitutional actors.”⁷⁸

The possibility of amending a constitutional text is of paramount importance. First, amending a constitution somehow resembles the foundational moment and allows the current generation to completely or partially untie itself from the “constitutional handcuffs” entrenched by the constitutional founders.⁷⁹ Second, amending the constitution allows the constitutional text to remain normative and adapt to evolving constitutional culture.

More importantly, the amount of constitutional rigidity is clearly a constitutional design option. Rigidity can be perceived as the guardian of constitutional stability or its enemy, as distancing the constitution from the people can provoke revolutionary attitudes. For a constitution, the *norma normarum* of the internal legal order, an amendment is consequently a higher challenge than ordinary norms amendments.

In fact, “if the Constitution is swept away by the unpredictability, manipulation, and the caprices of the given times, it will not be able to influence and to serve as a barometer of the legal, political, and societal tissue.”⁸⁰ Constitutional amendment rules thus appear as absorbers of external shocks that, if not neutralized, can irritate the constitutional tissue and transform constitutional stability into constitutional “amendmentitis.”⁸¹

The power to amend a constitution lies in a “gray area” between the constituent and the constituted power.⁸² When constitutional actors amend the constitution, they act through a constituted power—as the rules of the amendment process are entrenched and defined in the constitution—but there is a kind of constituent power renaissance. The constituent part of amending a constitution can be, for example, the insertion of a new right in the fundamental rights catalog or the consecration of increased constitutional justice guarantees.

The degree of constitutional entrenchment depends on the constitutional amendment’s difficulty or, to use Yaniv Roznai’s words, on the idea of a “constitutional escalator.”⁸³ On the one hand, demanding amendment procedures reflects a romanticized recollection of the constituent power as a complete, inclusive, and democratic process of constitutional design. Thus, the idea is to entrench the amendment formula as much as possible so that the constitutional amendment would be a renaissance of the constituent moment.

On the other hand, more relaxed amendment procedures somehow distance amendment power from the foundational constitutional moment.⁸⁴ Additionally, new constitutional rigidity trends are arising, such as detailed norms that impose strict limitations to constitutional actors—for example, courts, legislators, and the executive.⁸⁵

Some states’ constitutional design, such as Spain, adhere to a “selective rigidity,” where some constitutional provisions demand a more robust process for alteration, whereas other non-fundamental constitutional provisions can benefit from easier amendment processes.⁸⁶

⁷⁸Reijer Passchier, *Quasi-Constitutional Change Without Intent—A Response to Richard Albert*, 65 *BUFF. L. REV.* 1077, 1084–85 (2017); see also LOUIS FISHER, *CONSTITUTIONAL DIALOGUES: INTERPRETATION AS POLITICAL PROCESS* (2014).

⁷⁹Richard Albert, *Constitutional Handcuffs*, 42 *ARIZ. ST. L.J.* 663 (2010); see also Abebe, *supra* note 23, at 102.

⁸⁰Botelho, *supra* note 7, at 353.

⁸¹Kathleen M. Sullivan, *Constitutional Amendmentitis*, 23 *AM. PROSPECT* 20 (1995).

⁸²Yaniv Roznai, *Amendment Power, Constituent Power, and Popular Sovereignty: Linking Unamendability and Amendment Procedures*, in *THE FOUNDATIONS AND TRADITIONS OF CONSTITUTIONAL AMENDMENT* 23, 38 (Richard Albert et al. eds., 2017).

⁸³Roznai, *supra* note 5, at 164–68.

⁸⁴David S. Law, *Imposed Constitutions and Romantic Constitutions*, in *THE LAW AND LEGITIMACY OF IMPOSED CONSTITUTIONS* 34 (Richard Albert et al. eds., 2018); Contiades & Fotiadou, *supra* note 36, at 249; Roznai, *supra* note 81, at 23–49.

⁸⁵Versteeg & Zachin, *supra* note 12, at 660.

⁸⁶David Landau, *Abusive Constitutionalism*, 47 *U.C. DAVIS L. REV.*, 189 (2013); Richard Albert, *The Expressive Function of Constitutional Amendment Rules*, 59 *MCGILL L.J.* 225 (2013); Roznai, *supra* note 82, at 40.

II. Empirical Approach to the Study of Constitutional Amendments in the Comparative Constitutional Literature: Villain or Ally?

As we have previously addressed, though constitutional amendment was not initially a favorite subject of legal scholarship, by now, comparative law amendment is a solid and distinct field of study in public law.⁸⁷ Similarly, empirical constitutionalism, which developed in the 1970s, is increasingly focused on constitutional amendment rates and their interpretation.⁸⁸ Yet empirical legal studies are often perceived as less intellectually sophisticated, with the criticism that the scholarship merely addresses quantitative approaches. These preconceived notions tend to obscure rather than illuminate the debate on comparative constitutional law.

The supposed inferiority of empirical legal studies is more evident in civil-law countries with highly dogmatic legal traditions.⁸⁹ Specifically, empirical causal inferences can distress traditional normative mindsets. However, the relevant question remains: Is the empirical approach enriching to constitutional scholarship or, on the contrary, is it a “distinct way of understanding constitutional law[?]”⁹⁰

There might be a powerful response to that question. We have reason to believe that *in medio stat virtus*, or, in other words, the right answer lies in between. The normative and empirical perspectives have different methodological and epistemological approaches.⁹¹ To a larger extent, the normative legal approach focuses on the perfection of a legal system through the theoretical discussion about what the law—or, in this case, the amendment rules—“ought” to be. In contrast, the empirical legal approach explores what amendment rules “are” in a given polity, their concrete manifestations, and quantitative relevant data.

This distinction resembles the Kantian dualism amid “is” and “ought” and flanked by “constitutional text and constitutional reality” (*die Unterscheidung von sein und sollen, (Verfassungs-)Recht und (Verfassungs-)Wirklichkeit*).⁹² One can wonder if either the “is” and “ought,” or the “text” and “reality” are truly separate or if they connect on some level.

An interesting way to unveil this theoretical oxymoron is by recalling Karl Löwenstein’s famous dilemma. Löwenstein was a German philosopher exiled in the United States during World War II. Having experienced the fragility of human rights protection and how constitutions lacked the strength to block fundamental rights’ violations, he longed to discover the magic formula for a lasting constitution.⁹³ In his search for how to balance old constitutional texts with new societal and political scenarios, he designed the “theory of the normative force of the constitution,” still very popular in European academia.⁹⁴ According to his theory, to prevent being merely semantic or nominal, the constitutional text should not be detached from political and sociological realities—the *living constitution* or the *law in action*. In this sense, both constitutional text and constitutional reality, in other words the living constitution, are of paramount importance and influence one another. What a constitution “is” and what it “ought” to be are not worlds apart. Likewise, joint normative and empirical studies on constitutional amendments are bound to be a combined line of inquiry.

⁸⁷Albert, *supra* note 2, at 3; Sanford Levinson, *Designing an Amendment Process*, in CONSTITUTIONAL CULTURE AND DEMOCRATIC RULE 271, 275 (John A. Ferejohn et al. eds., 2001).

⁸⁸LEE EPSTEIN & ANDREW D. MARTIN, AN INTRODUCTION TO EMPIRICAL LEGAL RESEARCH 352 (2014); David Law, *Constitutions*, in THE OXFORD HANDBOOK OF EMPIRICAL LEGAL RESEARCH 398 (Peter Cane & Herbert Kritzer eds., 2012).

⁸⁹Yung-Chien Chang & Peng-Hsiang Wang, *The Empirical Foundation of Normative Arguments in Legal Reasoning* (Coase-Sandor Working Paper Series in Law and Economics, Working Paper No. 745, 2016). See also Joshua B. Fischman, *Reuniting ‘Is’ and ‘Ought’ in Empirical Legal Scholarship*, 162 U. PA. L. REV. 117, 168–77 (2013).

⁹⁰Contiades & Fotiadou, *supra* note 8, at 221. See also Pablo Castillo-Ortiz, *Constitutional Review in the Member States of the EU-28: A Political Analysis of Institutional Choices*, 47 J.L. & Soc’y 87 (2020).

⁹¹Passchier, *supra* note 78, at 1084.

⁹²PETER HÄBERLE, SCHRIFTEN ZUM ÖFFENTLICHEN RECHT 29–30 (2008).

⁹³Botelho, *supra* note 7, at 353–54.

⁹⁴KARL LÖWENSTEIN, VERFASSUNGSLEHRE 151–54 (2000).

Notwithstanding the current official rhetoric, bridging normative and empirical approaches—the former more focused on the theoretical and qualitative questions and the latter more concerned with the interpretation of quantitative data—will certainly contribute to the development of legal scholarship and guide pertinent legal reforms.

Constitutional design, either through a constitutional foundation or constitutional change, is one of the most intriguing and fascinating subjects of constitutional theory. Constitutional theory scholars discuss the deepest theoretical constitutional dilemmas: What is a constitution? Why the need for a constitution? Is there an ideal constitution? Can there be constitutionalism without a written constitution? What is the material constitution? Which cultural, societal, and historical factors determine constitutional design? Is it better to have a prolix or a laconic constitutional text? Do social, economic, and cultural rights belong in the constitution? Should constitutions be entrenched? Can entrenchment reveal a given constitutional identity? Are substantial limitations to the amendment power consistent with deliberative democracy? How can constitutionalism survive its intrinsic democratic paradox? Can constitutional or supreme courts declare the unconstitutionality of constitutional amendments? How can a constitutional text survive inconsistency over time? What is the normative force of a constitution? How can a constitutional text truly reflect and influence the living constitution?⁹⁵

If amendment rules are “the gatekeepers”⁹⁶ of the constitutional text, how should scholarship approach such a delicate constitutional law subject? Should it only be through doctrinal studies? Or is there room for empirical analysis?

As Lutz emphasized, “little has been written about the empirical patterns that result from constitutional choice.”⁹⁷ It seems that a good constitutional design will have a constitutional text that is neither too easy nor too difficult to amend, therefore balancing the democratic volatility with constitutional endurance.

Measuring constitutional design will always be a challenge to empirical studies. Constitution-making and amending are not entirely predictable, as neither are precise exercises of constitutional design.⁹⁸ In fact, many factors contribute to this volatility, such as political bargaining, popular participation, and historical and sociological predispositions. The “overwhelming variety of national constitutional amendment procedures” results in complex methodological challenges.⁹⁹ Even when a constitutional text consecrates highly-rigid procedures or entrenches several subjects from ever being amended through eternity clauses, empirical evidence shows us that:

⁹⁵Amongst many seminal contributions, see AKHIL R. AMAR, *THE CONSTITUTION TODAY: TIMELESS LESSONS FOR THE ISSUES OF OUR ERA* (2016); BRUCE ACKERMAN, *WE THE PEOPLE: FOUNDATIONS* (1991); CASS R. SUNSTEIN, *A CONSTITUTION OF MANY MINDS*, (2009); CHRIS THORNHILL, *A SOCIOLOGY OF CONSTITUTIONS* (2011); DIETER GRIMM, *DIE ZUKUNFT DER VERFASSUNG* (1991); CONSTANTINO MORTATI, *LA COSTITUZIONE IN SENSO MATERIALE* (1940); EDUARDO GARCÍA DE ENTERRÍA, *LA CONSTITUCIÓN COMO NORMA Y EL TRIBUNAL CONSTITUCIONAL* (2006); GEORG JELLINEK, *ALLGEMEINE STAATSLEHRE*, 394–434 (1986); GUNTHER TEUBNER, *CONSTITUTIONAL FRAGMENTS* (2012); HANS Kelsen, *PURE THEORY OF LAW* (2009); KARL LÖWENSTEIN, *VERFASSUNGSLEHRE* 151–54 (2000); KONRAD HESSE, *DIE NORMATIVE KRAFT DER VERFASSUNG* (1959); LAURENCE TRIBE, *THE INVISIBLE CONSTITUTION* (2008); LAURENCE TRIBE & MICHAEL C. DORF, *ON READING THE CONSTITUTION* (1993); MARK A. GRABER, SANFORD LEVINSON & MARK TUSHNET, *CONSTITUTIONAL DEMOCRACY IN CRISIS?* (2018); MARTIN LOUGHLIN & NEIL WALKER, *THE PARADOX OF CONSTITUTIONALISM* (2007); Mattias Kumm, *Constituent Power, Cosmopolitan Constitutionalism, and Post-Positivist Law*, 14 *ICON* 697 (2016); NOBERTO BOBBIO, *L'ETÀ DEI DIRITTI* (1990); OTTO BACHOF, *VERFASSUNGSWIDRIGE VERFASSUNGSNORMEN?* (1951); Panu P. Minkinnen, *Political Constitutionalism vs. Political Constitutional Theory: Law, Power and Politics*, 11 *ICON* 585 (2015); PETER HABERLE, *VERFASSUNGSLEHRE ALS KULTURWISSENSCHAFT* (1998); RAN HIRSCHL, *TOWARDS JURISTOCRACY: THE ORIGINS AND CONSEQUENCES OF THE NEW CONSTITUTIONALISM* (2004); Richard Epstein, *Can We Design an Optimal Constitution? Of Structural Ambiguity and Rights Clarity*, 28 *SOC. PHIL. & POL'Y* 290 (2011); RONALD DWORKIN, *TAKING RIGHTS SERIOUSLY* (1978) Rudolf Smend, *Integrationslehre*, in *STAATSRRECHTLICHE ABHANDLUNGEN UND ANDERE AUFSÄTZE* 475 (1968).

⁹⁶Albert, *supra* note 2, at 1.

⁹⁷Lutz, *supra* note 31, at 355. See also Rasch & Congleton, *supra* note 6, at 549.

⁹⁸Anna Fruhstorfer, *Consistency in Constitutional Design and Its Effect on Democracy*, 26 *DEMOCRATIZATION* 1028 (2019).

⁹⁹Lorenz, *supra* note 15, at 341.

(i) informal constitutional change works around these limitations through judicial review or the approval of new legislation,¹⁰⁰ or (ii) in extreme circumstances, obsolete eternity clauses are indeed abolished through constitutional amendment.¹⁰¹

E. Conclusions

Our Article pursues an empirical exploration of the institutional process for constitutional amendments, or *amendment difficulty*, by looking at *procedural* and *substantive* limits. We make use of a unique dataset collected by the authors, the dataset explored by Tom Ginsburg and James Melton¹⁰² and three past indicators, namely George Tsebelis,¹⁰³ Astrid Lorenz,¹⁰⁴ and Dag Anckar and Lauri Karvonen¹⁰⁵ as reported by Lorenz.

Our indicators result from factor analysis. They reflect procedure—a standard dimension already echoed by previous authors—and substance—an additional dimension usually neglected. The inclusion of explicit and implicit substantive limits constrains the sample of countries to the European Union and other jurisdictions in its periphery.

Previous literature has underlined the lack of consistency across indicators of constitutional rigidity. Although we find some similar patterns of results, we identify a few important features. Some indicators are related to a certain degree and measure to procedural limitations. However, no indicator seems to capture the mix of procedure and substance in the way we suggest in this Article.

Extending the present methodology to a larger group of countries would be an important test on the consistency across indicators and the relationship between procedure and substance when determining the amendment indicator. However, gathering information about explicit and implicit substantive limits might pose a challenge to empirical research.

The visible differences in the way certain countries are characterized in each indicator—for example, Bulgaria or the Czech Republic—suggest that the process of aggregating constitutional mechanisms and instruments is inevitably controversial and subject to varying empirical assessments. Rather than taking this as a shortcoming, we should view it as an exploring exercise that helps scholars identify regularities that require further research and more detailed country analysis.

Most empirical studies presuppose that codified rules matter, meaning that they actually succeed in constraining or shaping constitutional amendment. This is not always the case, even with democratic constitutions. Inevitably, expanding the traditional empirical analysis of procedural rules to account for substantive amendment rules is not enough. A further step in the research agenda should be to include uncoded rules that are respected. As Richard Albert points out, “rankings of amendment difficulty are doomed to failure unless they become much more sophisticated in what they set out to measure and why.”¹⁰⁶

¹⁰⁰Versteeg & Zachin, *supra* note 12, at 660.

¹⁰¹Abebe, *supra* note 23, at 104. See also Botelho, *supra* note 7, at 363–67.

The current version of the Portuguese Constitution contains 14 clauses of entrenchment, since some were removed or altered in the constitutional amendment of 1989. Therefore, it is quite clear that the unchangeable clause was indeed changed. . . . The Portuguese Constitution does not seem to allow a simultaneous double revision, which is the synchronized amendment of the entrenchment clause and of the principles and articles related to that limit. However, the sheer fact is that the 1989 amendment did operate a simultaneous amendment, eliminating former paragraph j) from the substantial limits list and also some obsolete and politically biased norms which allowed only one form of economic organisation. At the same time, article 81 of the Constitution was modified regarding “nationalizations” and “rural estate property,” while other significant changes were introduced in the economic Constitution, concerning the “structure of the means of production.”

¹⁰²Ginsburg & Melton, *supra* note 11.

¹⁰³Tsebelis, *supra* note 15.

¹⁰⁴Lorenz, *supra* note 15.

¹⁰⁵Anckar & Karvonen, *supra* note 55.

¹⁰⁶Albert, *supra* note 32, at 126.

The motivation behind constitutional amendment rules is not always crystal-clear. In fact, that is why Xenophon Contiades and Alkeme Fotiadou interestingly wrote that constitutional change “is an enigmatic process.”¹⁰⁷ In this sense, amendment rates may not truly capture the essence of a given constitution. The visible constitution can certainly be measured and rated in comparison with other constitutional texts. However, the invisible constitution, which lies beneath constitutional reality and constitutional culture, is difficult to manifest in pure statistical numbers.¹⁰⁸

At the same time, in the vein of Tom Ginsburg and James Melton,¹⁰⁹ the contradictions observed in the literature on indicators might simply reinforce the view that amendment rules, both procedural and substantive, are much less important than a certain political tradition or amendment culture.

Appendix

Table A1. Procedure, Substance, and Amendment Indicators

	<i>procedure</i>	<i>substance</i>	<i>amendment</i>	<i>Ginsburg Melton Data</i>
Albania	−0.20	−0.84	−0.61	0.75
Austria	0.99	−0.75	0.14	−0.20
Belgium	0.01	1.01	0.60	−1.67
Bulgaria	−0.33	−0.84	−0.69	2.24
Croatia	−1.91	−0.84	−1.61	0.92
Cyprus	1.55	1.45	1.76	−0.38
Czech Rep	1.55	0.66	1.30	−2.00
Denmark	−2.25	−0.84	−1.81	0.16
Estonia	−0.23	−0.84	−0.63	0.99
Finland	−0.31	−0.84	−0.68	0.88
France	0.11	0.54	0.38	−1.52
Germany	1.55	1.45	1.76	−1.20
Greece	0.88	1.45	1.37	1.18
Hungary	0.55	−0.84	−0.17	−0.38
Iceland	−2.03	−0.84	−1.68	0.14
Ireland	−1.27	−0.84	−1.24	0.65
Israel	−0.40	−0.84	−0.73	−0.20
Italy	0.99	0.63	0.95	−2.17
Latvia	−0.20	−0.84	−0.61	0.67
Lithuania	0.64	−0.83	−0.11	0.23

(Continued)

¹⁰⁷Contiades & Fotiadou, *supra* note 8, at 219.

¹⁰⁸Günter Frankenberg, *Comparative Constitutional Studies: Between Magic and Deceit* 74 (2018) (arguing that comparatists should realize that “they are not merely fact-hunters, but interpreters of culture and cultural artefacts”).

¹⁰⁹Ginsburg & Melton, *supra* note 11.

Table A1. (Continued.)

	<i>procedure</i>	<i>substance</i>	<i>amendment</i>	<i>Ginsburg Melton Data</i>
Luxembourg	−0.20	0.54	0.20	0.01
Malta	0.33	−0.84	−0.49	0.67
Netherlands	0.01	−0.84	−0.44	−0.97
Norway	0.32	1.45	1.04	−0.70
Poland	0.11	−0.84	−0.43	0.36
Portugal	0.86	1.45	1.35	−0.90
Romania	1.33	1.45	1.63	−2.17
Russia	0.00	0.99	0.58	−0.03
Serbia	−0.32	−0.84	−0.61	0.86
Slovak Rep	0.33	−0.84	−0.30	−0.38
Slovenia	−0.55	−0.84	−0.82	0.62
Spain	1.01	−0.84	0.10	−1.57
Sweden	−1.71	−0.84	−1.50	0.87
Switzerland	0.13	1.02	0.67	−0.35
Turkey	0.33	1.45	1.04	0.75
UK	−1.78	1.01	−0.45	−0.20
Ukraine	0.00	1.02	0.60	0.99