Delayed but not Derailed: Legislative Compliance with European Court of Human Rights Judgments

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Abstract

Achieving compliance with judgments is essential for the effectiveness of international human rights courts (IHRCs). While previous research highlights the country characteristics that influence compliance patterns, few studies investigate how compliance depends on the type of state action needed for compliance. This article investigates whether need for legislative change influences the compliance process. I suggest that the political and institutional hurdles of the legislative process increase the difficulties of complying with IHRC judgments. Using shared-frailty Cox regression on data from Grewal and Voeten (2015), I investigate whether it takes longer to comply with European Court of Human Rights judgments when legislative change is needed. I find that need for legislative change tends to delay compliance. The magnitude and statistical significance of this relationship diminishes as time pass since the judgment. Thus, while need for legislative change is initially an important obstacle to compliance, judgments affecting legislation are complied with at a similar rate as other judgments when states have had time to draft, deliberate, and enact necessary legislation.

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1 Introduction

Implementation of international human rights court (IHRC) judgments is an important avenue for improving domestic human rights standards. Following an adverse IHRC ruling, the respondent state is legally mandated not only to compensate the individual victims but also to implement general measures to rectify the domestic practices that led to the human rights violation concerned (e.g. Keller and Marti 2015). Such general measures may involve changing domestic jurisprudence, enacting new legislation, or implementing measures to raise awareness among state officials. As is a common challenge for courts that review the actions of state actors (e.g. Staton 2004, Vanberg 2005), existing IHRCs – the European Court of Human Rights (ECtHR), the Inter-American Court of Human Rights (ACtHR) and the African Court of Human and Peoples’ Rights (ACtHPR) – have few means of enforcement. They therefore face an implementation problem as compliance with judgments requires action by the states responsible for the violations. This implementation problem may be far from trivial as the required measures might imply high political and material costs (Hillebrecht 2014a).

Overcoming this implementation problem is widely considered to depend on domestic politics and institutions. Recent scholarship has found that compliance outcomes are associated with the strength of institutional checks and balances (Hillebrecht 2012; 2014a; b, Anagnostou and Mungiu-Pippidi 2014, Voeten 2014, Grewal and Voeten 2015), the incentives domestic actors have to use compliance as a means for advancing own policy agendas or entrenching domestic respect for human rights (Hillebrecht 2014b, Grewal and Voeten 2015), and the bureaucratic capacity states have for implementing challenging and costly compliance measures (Anagnostou and Mungiu-Pippidi 2014, Voeten 2014, Grewal and Voeten 2015). These studies provide important insights about the country characteristics that shape the implementation processes following IHRC judgments.

Compliance with IHRC judgments are, however, also likely to depend on the remedies states need to implement to comply with a ruling. Staton and Romero (2016) show that compliance with IACtHR judgments are less likely when the ordered remedies are specified in vaguer terms and that such vague orders are typically issued in more difficult policymaking contexts. Understanding how the needed remedies shape compliance dynamics is important for understanding how IHRCs’ implementation problem may vary depending on the case at hand and how judges ought to rule if concerned with implementation of
their rulings.

Few scholars have, however, systematically investigated how the types of state action needed for implementation influence compliance. Yet, there is significant variation in the kinds of state action needed to comply with different judgments. Different state actors will be responsible for different types of compliance measures. As different actors may have different preferences concerning compliance outcomes and face different institutional and political constraints during the compliance process, the type of action needed to implement a judgment can be expected to influence compliance (Hall 2011; 2014). Thus, as argued by Huneeus (2011: 513), to “fully explain compliance, the structural incentives and institutional culture of these state actors must be explored”.

In this article, I investigate how need for one type of measure that may be particularly challenging to implement, namely legislative change, affects the duration of the compliance process. Compared to other types of general measures that may be needed for compliance, such as jurisprudential change or executive action, legislative change often requires agreement among a larger set of veto players that are also more likely to be constrained by domestic political considerations. Even when a political consensus favours implementation of IHRC judgments, it usually takes considerable time and effort to draft, debate and pass appropriate legislation. However, the delaying effect of need for legislative change can be expected to decay over time. As time allows bills to be drafted, debated and voted on, a need for legislative change may become less likely to slow down implementation. Thus, even if initially delaying compliance, need for legislative change may not necessarily reduce the long-term likelihood of compliance.

The delaying effect of need for legislative change may also vary depending on the political institutions that shape the legislative process. Need for legislative change might be particularly likely to slow down compliance for states with non-majoritarian electoral systems, because higher fragmentation in the legislature may make it more difficult to secure support for needed legislative change. Similarly, the additional hurdle presented by a bicameral legislature might be expected to increase the delaying effect of need for legislative change.

To assess these expectations empirically, I analyze how need for legislative change influences the time it takes states to comply with ECtHR judgments. More specifically, I estimate a set of shared-frailty Cox models on data from Grewal and Voeten (2015).
Different variations of the model account for which other types of general measures were needed for compliance and for the total number of compliance tasks faced by the respondent state. I also conduct a set of tests to assess the robustness of the relationship between need for legislative change and delay in the compliance process.

Across different model specifications, the results confirm that need for legislative change is associated with longer compliance processes. In keeping with the theoretical expectations, the magnitude (and statistical significance) of this relationship decreases over time. There is thus some evidence that the delaying effect of need for legislative change on compliance becomes less pronounced as time passes.

Investigation of the hypothesized interactions between the domestic institutions and need for legislative change shows that the relationship between need for legislative change and delayed compliance exists only for countries with either proportional or mixed electoral systems. This finding may be due to non-majoritarian electoral systems producing larger and more diverse sets of veto players in the legislative process. There is, however, no significant difference between bicameral and unicameral legislatures.

The remainder of the article proceeds as follows. Section 2 discusses how the legislative process is likely to influence compliance with IHRC judgments and derives empirical implications to be tested in the subsequent analysis. Section 3 develops the research design. Section 4 presents the results and Section 5 concludes.

2 Legislative Change and IHRC Compliance

IHRCs – and the regional human rights systems they are part of – have few means of enforcing judgments. Furthermore, as IHRC judgments will typically only deal with matters internal to the respondent state, other states have few incentives to try to enforce compliance. Ultimately, compliance is therefore left to the states that are targeted by a judgment. The existence of an implementation problem does not mean that respondent states never comply; however previous research indicates that state authorities will often “resist and delay” (Staton 2004: 42) or comply only partially (Hawkins and Jacoby 2010).

Recent scholarship on compliance with IHRCs has therefore focused on the domestic politics of compliance and has produced important insights on how compliance varies, depending on the political institutions and incentive structures of the respondent state.
How the domestic politics of IHRC compliance unfold is likely to depend not only on characteristics of the respondent state, but also on the types of state action needed for compliance. Different types of compliance tasks will involve different configurations of state actors and different procedures for implementing the needed measures. Differences in the institutional setting of the implementation process and the incentives and constraints facing the relevant state actors will likely influence whether states comply with IHRC judgments and, if so, how long it takes to implement the needed compliance measures (Hall 2011; 2014, Huneeus 2011, Alter 2013: 20-21, 52). Understanding how the severity of IHRCs implementation problem may vary according to measures needed for compliance is important for understanding the conditions under which IHRCs can be effective in elevating human rights standards. There is, however, little scholarship that systematically links implementation outcomes to the type of measures needed for compliance.

One type of measure that is likely to make compliance more difficult is legislative change. Such change is often needed to address systematic human rights violations. Legislative change will generally be needed for compliance when an IHRC finds that existing legislation violates the respondent state’s human rights obligations. While the Inter-American Court of Human Rights (IACtHR) tends to enumerate the required compliance measures in its judgments, the need to change legislation is typically not spelled out as explicitly in ECtHR judgments. Nevertheless, where a judgment finds existing legislation violates international human rights standards, legislative change will be needed for compliance. For instance, the 2012 ECtHR judgment in the case of Lindheim and Others v. Norway created an obligation for Norway to change the Norwegian Ground Lease Act as the ECtHR found that the bar on increase of ground leases to violate land owners’ private property rights. Compliance will in such cases depend on the national legislative actors’ ability and willingness to adjust domestic legislation appropriately and to do so in a timely manner. In the case of Lindheim and Others v. Norway, this process lasted from Norway’s appeal to the Grand Chamber was dismissed in October 2012 until the Norwegian parliament in June 2015 passed the legislative changes proposed by the

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1There has also been a development in the practice of the ECtHR towards specifying needs for legislative measures in the judgments (Keller and Marti 2015:838, Guerra 2015:234). In most cases, identifying relevant compliance measures will, however, still be left to the respondent state under the supervision of the Council of Ministers.
government.

In contrast, other judgments may only generate a need for jurisprudential change, for executive action, for the publication and dissemination of the judgment, or for practical measures. Compared to these other types of compliance tasks, legislative change may be particularly difficult to achieve due to the way the legislative process unfolds. In the remainder of this section, I develop a theory of how the legislative process influences compliance with IHRC judgments and derive a set of testable hypotheses.

2.1 The Legislative Process and Delayed Compliance

Although legislative initiative may also come from the parliament, the legislative process typically begins with a new bill being prepared by the executive and ends when the bill is passed by the legislature. In addition, new legislation is often extensively debated in committees, in plenary sessions, and potentially in different chambers. In many systems, additional institutional features, such as an additional chamber in the legislature, have been introduced to further raise the bar for legislative change and thus increase policy stability (e.g. Congleton 2003). For good reasons, the legislative process is designed in a way that precludes hastened decisions and facilitates regulatory predictability.

The process of initiating, debating and voting on legislation may be time consuming and can therefore slow down the implementation process. In addition to these procedural hurdles, the legislative process involves a number of veto players: Different sets of governmental and parliamentarian actors may be able to block the legislative process (Tsebelis 1995); thus, enacting new legislation may require agreement among actors with different ideal points. Legislatures, and to some extent coalition governments, are contentious arenas where different political parties are represented. Even where support for quick compliance can be found among a large share of the members of parliament, difficulties may arise if parties or parliamentarians whose support is needed for the legislation to pass attempt to use their pivotal position to achieve other political goals. As Huneeus (2011: 510) argues for the Inter-American case:

It is not that it is difficult to re-write the legislation pursuant to the Inter-American Court’s demands or to sit in a parliament and vote for it. The challenge is getting different actors from competing political parties to sit down and agree to it.
Although issue linkage can increase the opportunity space, compliance will likely be slowed down if the needed legislative change becomes part of a larger political bargaining process. This aspect of the legislative process may be contrasted with measures that can be implemented by the executive alone, such as executive actions, publication of judgments or certain types measures of a practical nature. As explained by Huneeus (2011: 517),

legislatures are less apt to act by institutional design. Executives are top-down institutions designed for carrying out action. Legislatures are designed for democratic deliberation and contestation. To pass a law, a majority vote must be negotiated and series of procedural hurdles passed. One only has to see the differences [from executives] in structure to predict that legislatures will be slower and less likely to implement Court orders.

Although, national legal systems may also be slow-moving, national courts are unlikely to be constrained by deadlocks between different veto players in their efforts to comply with IHRC judgments through jurisprudential measures.

Such procedural and institutional aspects of the legislative process may delay compliance even in cases where compliance is favoured by a broad set of stakeholders. A large number of veto players can entail a substantial risk that a measure will be blocked or simply that the different players cannot agree on the exact design of the needed legislative measure. Consider Germany’s compliance with the 2009 ECtHR judgment in the case of M v. Germany, concerning the use of retrospective and indefinite preventive detention of sex offenders. According to a German parliamentarian interviewed by Donald and Leach (2015: 87-88), there was a consensus among German politicians that the judgment had to be implemented, but it still proved difficult to negotiate a satisfactory solution within the Bundestag’s legal committee. Thus, despite that there was will to comply with the judgment, implementation was delayed by difficulties in reaching agreement on the exact legislative changes to be enacted.

The compliance process may be further complicated in cases where there are domestic political benefits from delaying or avoiding compliance. As argued by Hall (2011; 2014), politicians may be reluctant to pass legislation that diverges from their own political preferences or that upset key constituencies. The members of government that will typically initiate legislation and the members of parliaments responsible for enacting legislation
are political actors that will be concerned with reaching their own policy ideal points and with their own chances of thriving within the domestic political system (Clark 2010: 80-81). Regarding the latter motivation, Strøm (1997) distinguishes between four objectives for parliamentarians: “reselection, re-election, party office, and legislative office”. In day-to-day work in a legislature, achieving prompt compliance with IHRC judgments will likely be subordinate to these goals. The same motives may be important for executives as they prepare and initiate legislation. Indeed, most previous accounts of the domestic politics of compliance have focused on the executives’ incentives for resisting compliance (Haglund 2014, Hillebrecht 2014a;b).

The problem is not only that judgments may diverge from the policy preferences of domestic politicians, but also that the legislation needed for compliance may be controversial among important audiences. Vanberg (2005) and Hall (2011; 2014) argue that politicians are less likely to comply with court judgments that are unpopular among domestic constituencies (see also Clark and McGuire 1996, Dai 2006). When there is resistance to a judgment among key constituents, politicians may have something to gain by objecting to the needed legislative change. Resisting compliance with unpopular decisions may fill similar position-taking purposes for politicians as those Clark (2010) identify for bills aiming to curb court power. An illustrative example may be found in the infamous Hirst case, in which the UK blanket ban on prisoners’ voting rights was found to violate the European Convention on Human Rights. This judgment has been deeply unpopular in the UK and the compliance process following the 2005 judgment has been slow. When the issue was voted on in Parliament on 10 February 2011, the current ban was upheld with 234 against 22 votes (Horne and White 2012: 1).

Political considerations may also facilitate compliance if the IHRC enjoys sufficient levels of public support for a decision and the compliance process is transparent to the relevant audiences (Vanberg 2001; 2005, Stephenson 2004, Carrubba 2009, Haglund 2014: 54). While the likelihood of legislative compliance in such cases may be higher than when the needed legislative change is unpopular, procedural challenges in drafting and passing appropriate bills may remain a source of delay. Consider the domestic political battles following the 1999 ECtHR judgment in the case of Dalban vs. Romania. The ECtHR found that Romania’s calumny laws violated the freedom of expression. Faced with public pressure, the government moved relatively quickly to comply with the judgments.
However, permanent legislation needed for compliance was not passed until 2006 and was then overturned by the Constitutional Court (Dragos and Mungiu-Pippidi 2013: 78-79). Although outright defiance and long-term compliance may become costly if it receives public attention, the relatively obscurity of most IHRC judgments for domestic audiences may mean that at least in the short term, concerns about domestic audience costs on non-compliance may be less important than in the domestic context (see e.g. Vanberg 2001:358). How the relationship between need for legislative change and compliance is expected to develop as time passes since the judgment is discussed in more detail below.

Of course, political considerations can also affect implementation of judgments that need executive action. As parliamentarians, executives may attempt to avoid implementing measures that are unpopular among important audiences or that diverge from their own policy preferences. If compliance only requires executive action, the need for agreement with other domestic actors is, however, limited. The smaller number of veto players and fewer institutional hurdles may increase the likelihood of timely compliance. Furthermore, Huneeus (2011: 513-517) notes that executives have particular institutional incentives for compliance because they interact directly with the IRHCs and other international human rights bodies. For instance, foreign ministries advocate internally for compliance. Moreover, the executive role as the main interlocutor between the international court and the state may facilitate timely compliance in cases where only executive action is needed. Similarly, Haghund (2014: 57) argues that the executive may be particularly vulnerable to international naming and shaming.

Compared to politicians, national courts may be relatively unconstrained by domestic political considerations (Hall 2011), although there may be cases where national courts try to resist the authority of international courts (Huneeus 2011:514-516, Alter 2013:13). Such resistance may be likely during periods where the domestic legal status of a judgment is unclear, but is unlikely to constitute a general obstacle to compliance. Concerning the relationship between the national courts of France, Germany and the UK and the ECtHR, Bjørge (2015: 4) argues that the national courts have gone far in “avoiding friction with the European Court”. Hillebrecht (2014a: 111-112) notes that British judges have been more willing than the elected branches of government to temporarily sacrifice popularity in order to comply with their human rights obligations.

To summarize the argument thus far, compliance is likely to be delayed if legislative
change is needed. The reason is that legislative change involves both more cumbersome formal procedures and more veto players with possibly contrasting interests. This general reasoning motivates a first main hypothesis:

**Hypothesis 1** Need for legislative change is associated with delayed compliance with IHRC judgments.

### 2.2 Longer Term Expectations

While hypothesis 1 may be reasonable for the early phase of the compliance process, the longer term expectations are arguably less clear. The procedural explanation for slow legislative compliance may become less credible as more time passes since the judgment. Even if the institutional setting and procedural rules may slow down law making, the process alone will unlikely account for prolonged non-compliance over many years. The inability to promptly make legislative change is, in other words, a better explanation for why it takes longer to implement some judgments than for why some judgments are never complied with at all.

The likelihood that political obstacles will be overcome may also increase over time. Even if judgments are initially resisted, changes for instance in which parties hold a majority in the parliament may allow for overcoming such obstacles. Prolonged non-compliance may also alter political incentives if domestic constituencies view such non-compliance unfavorably (Vanberg 2005). At least as long as domestic audiences place a value on the human rights protection offered by international human rights regime and trust the IHRCs’ ability to interpret the meaning of these rights, open defiance of IHRC decisions may lead to loss of support (e.g Vanberg 2015:177). At least in part, such costs of defiance may account for why partial compliance and “foot-dragging” appear to be preferred strategies for avoiding implementing IHRC judgments. Thus, even if prolonged non-compliance may be expected following highly controversial judgments, the negative effect of needed legislative change may more generally be be expected to diminish over time. This logic motivates a second hypothesis:

**Hypothesis 2** The negative relationship between need for legislative change and compliance with IHRC judgments decreases with time since the judgment.
2.3 Variation across Institutional Contexts

The strength of the anticipated relationship may depend on the institutions governing the legislative process. Investigating the institutions that influence the relationship between need for legislative change and compliance may provide additional avenues for exploring the mechanisms through which the legislative process influences compliance with IHRC judgments. If the hypothesized mechanisms behind slow legislative compliance are at work, the delaying effect of need for legislative change should be stronger in countries with greater institutional constraints on legislative change.

Consider the difference between majoritarian and consensus-oriented systems (see e.g Lijphart 1999). Whereas majoritarian institutional arrangements can be expected to be related to more efficient legislative action, consensus democracies have traits that make legislation more difficult. In particular, a higher number of actors must agree to legislative change.

A simple way of capturing the differences concerning the number of hurdles a bill must pass is to look at the structure of the legislature. In bicameral legislatures, legislation must pass through both chambers. Thus, the legislative process is more complex than in unicameral systems. Typically, the two chambers are elected according to different principles and may have different political majorities, which is is likely to increase policy stability by increasing the numbers of veto players (Tsebelis 1995: 290).\footnote{Along similar lines Sprungk (2013: 311) argues that diverging preferences between the two chambers of the German Bundestag contributed to the delay in legislative transposition of EU directive 2001/18/EC on the deliberative release into the environment of genetically modified organisms.} Chile’s process of amending its criminal law following the 2005 IACtHR judgment in the case of 

Hypothesis 3 The relationship between need for legislative change and delayed compliance is stronger in bicameral than in unicameral systems.

The influence of different electoral systems are also of interest. Majority or plurality elections tend to produce lower fragmentation in the parliament than other electoral systems. They also entail a higher likelihood that a single party will hold a parliamen-
tarian majority. Increasing the chance of clear parliamentarian majority and facilitating more effective governance are important arguments advanced in favour of majoritarian electoral systems (Norris 1997: 304). By contrast, proportional and mixed systems create fragmentation and representation by a larger number of parties, which may lead to slower decision-making and greater difficulties in achieving agreement concerning how to respond to an IHRC judgment. I thus expect that, when legislative change is needed for compliance, states with majority- or plurality-based electoral systems tends to reach compliance faster than states with other electoral systems.

**Hypothesis 4** The relationship between need for legislative change and slow compliance is weaker for states with majority or plurality based electoral systems than for states with other electoral systems.

### 3 Research Design

For the empirical analysis, I turn to implementation of ECtHR judgments, which is an interesting case for several reasons. In addition to being the most active IHRC, the ECtHR has been argued to be the “most effective human rights regime in the world” (Keller and Stone Sweet 2008: 28). Its ability to generate legislative changes has been pointed to as evidence of its authority (e.g. Shelton 2003:147, Cichowski 2013:326). In fact, previous research indicates that the ECtHR is able to motivate legislative change also in countries not directly affected by specific judgments (Helfer and Voeten 2014).

#### 3.1 Dataset

Assessing the hypotheses developed in Section 2 requires data on compliance with ECtHR judgments, as well as on the type of domestic action needed for compliance. While data on compliance can be constructed for the full population of cases from the ECtHR’s own HUDOC database, the most comprehensive data on measures needed for compliance is to my knowledge the dataset assembled by Grewal and Voeten (2015). The analysis, therefore, draws heavily on this data set. For further details on the data collection, I refer to the original article (Grewal and Voeten 2015: 502-503) and to the codebook for the data set (Grewal and Voeten 2013).
The dataset only includes adverse judgments in so-called lead cases, which are the judgments that identify new human rights violations within the respondent states. Due to slow and lacking judgments, the ECtHR has rendered most of its judgments in clone cases relating to the same structural problems as those identified in the judgments in lead cases. Compliance with the judgment of the lead case normally also leads to compliance with the clone cases, so it is appropriate to center the study of compliance on what happens following judgments in lead cases (Voeten 2014:231, see also Grewal and Voeten 2015:502).

In addition to the restriction to lead cases, it should be noted that this data set only includes judgments that were rendered before the end of 2006 against a country with a POLITY score of 6 or higher at the time of the judgment,\(^3\) that were not concluded through friendly settlements and that have importance levels of 1 or 2 in the HUDOC classification system, indicating that the judgment made at least some contribution to the case law of the Court.\(^4\)

The units of analysis are the compliance processes that follow judgments in lead ECtHR cases. Using the judgment as the unit of analysis is to some extent problematic as it is only possibly to study whether compliance is generally slower when legislative change is needed. Although it would have been useful to connect delayed compliance more directly to legislative politics, investigating whether compliance is slower in cases where legislative change is needed still provides a useful first step. As I discuss in more detail below, inferences can be made more robust by controlling for other types of general measures needed and for the total number of general measures needed to comply with a judgment.

While most judgments will require some individual measures, meaning measures to compensate or rectify the harm inflicted on the applicant, I exclude judgments where only individual measures were needed, as my main concern is to compare need for legislation to need for other types of general measures. The reported results are, however, robust to including the excluded judgments and instead including a variable indicating whether individual measures were the only measures needed to comply with the judgment.

\(^3\)This restriction only leads to the exclusion of judgments against Armenia and Azerbaijan. Methodologically, this limitation means that the legislative process in all countries included in the sample can be assumed to follow relatively democratic processes.

\(^4\)Importance level 3 judgments are only included in cases where they had follow-cases of importance level 1 or 2 (Grewal and Voeten 2015: 503).
3.2 Time until Compliance

I measure time until compliance as the number of days between an adverse ECtHR judgment and the case being closed by a final resolution being adopted by the Committee of Ministers (CoM). The CoM is the political body monitoring the compliance process (Grewal and Voeten 2015). Çali and Koch (2014) find that the CoM secretariat plays an important role in facilitating the consistent and professional monitoring even of politically difficult cases, which makes data from this body a reliable indicator of compliance. A final resolution is only rendered by the CoM when it is satisfied that there has been full compliance. In other words, cases where some measures have been adopted but are not considered sufficient are coded as still pending compliance. Judgments that have not been complied with by 22 September 2012 are right-censored (Grewal and Voeten 2015: 503).

One potential problem is that there may be significant delays from the date the judgment has been implemented and the date compliance is being recognized by the CoM. Particularly if the lag is greater for some types of measures than for others, the results might be biased. A possible alternative is to instead use the date for the implementation of the last measure reported in the final resolution. This date was also coded by Grewal and Voeten (2015), but because this information is not always available, the date of actual implementation is missing for 11% of the non-censored cases. For my main models, I therefore choose, in line with Grewal and Voeten (2015: 503), to use the date of the final resolution rather than the reported date of implementation. Results from a robustness test using the reported date of actual implementation are, however, reported in the supplementary material to this article.

3.3 Need for Legislative Change

Although the ECtHR generally does not “consider [itself] competent to make recommendations to the condemned State as to which steps it should take to remedy the consequences of the treaty violation” (Barkhuysen and Van Emmerik 2005: 3) and hence typically does not signal clearly whether legislative change is needed, Grewal and Voeten (2015) have identified the general measures needed for compliance based on documents from the CoM. In cases where compliance has been achieved, this information includes whether legislative change was made in order to comply with the judgment. For cases
where compliance is still pending, this information includes both whether legislation has been enacted and whether new or revised legislation is still needed for compliance.

To measure need for legislative change, I create a binary variable that captures whether legislation was actually enacted or required to achieve compliance. The coding is based on two questions from the original dataset: “Has the country already taken a legislative measure?” and “Does the country still need to take legislative measures to implement the judgment” (Grewal and Voeten 2013: 10). If either of these questions are coded affirmatively, I conclude that legislative change was needed for compliance.

This operationalization thus assumes that new legislation is only adopted in cases where the judgment is perceived to require legislation. This assumption is in line with claims made in the literature that states will typically opt for minimal compliance even when they are inclined to honor the judgment (von Staden 2012: 10). Yet, the assumption may be problematic if new legislation is also adopted to demonstrate a human rights commitment or for other domestic political reasons even where compliance could have been achieved without it. The available data do, however, not allow separating such cases from cases where legislative change was strictly needed.

3.4 Institutions of the Electoral Process

Data on the number of chambers in the parliament and the electoral system in the respondent state are needed to evaluate hypotheses 3 and 4. Such data are available from the Institutions and Elections Project (IAEP) database (Wig, Hegre and Regan 2015). I create two binary indicators capturing whether a parliament is bicameral and whether it is elected through either a majority- or plurality-based electoral system. To categorize electoral systems, I use the IAEP’s LELECSYSTEM variable. Systems where one chamber is elected through majoritarian elections while the other is not are coded as mixed systems and with a value of 0 on the majoritarian electoral system indicator. To investigate the hypothesized interaction effects, I create multiplicative interaction terms between each of these measures and need for legislative change.

5 For instance, involving the national parliament through a legislative process is one way in which coalition partners can check the discretionary power of the responsible cabinet member (Franchino and Hoyland 2009).
3.5 Accounting for Other General Measures

As discussed in previous sections, estimating the influence of need for legislative change is complicated by the presence of multiple compliance tasks that are needed to implement the same judgment. The primary concern is cases where other general measures, defined as measures aimed to address the systemic reasons for the identified human rights violations, are needed.

The presence of multiple needed general measures could bias inferences in two ways. Firstly, if need for legislative change tends to go together with other difficult general measures, these other general measures may confound the relationship between the legislative process and compliance. To address this concern, the first model includes indicators that capture need for each of the other general measure types as categorized in the original data. These other general measures are “jurisprudential measures”, “publication or dissemination of the judgment”, “practical measures” and “executive and/or administrative measures” (Grewal and Voeten 2013: 10). Of course, these measures are not mutually exclusive as some judgments may require several different general measures.

Secondly, judgments that require legislation may also be more likely to be particularly complex and therefore require multiple types of general measures. As would be expected based on veto player theory (Tsebelis 1995), previous research indicates that likelihood of compliance decreases when different tasks are needed by different actors (Huneeus 2011). To account for the presence of multiple types of general measures, I count the different types needed and estimate three different models accounting for the number of different types of general measures in different ways. The simplest strategy is to include this count as a control variable. A second and more robust strategy is to decompose the count variable and to include a set dummy variables for the different counts. This strategy allows the estimates for needed legislative change to be based only on comparisons between judgments with the same total number of needed remedy types. A third strategy is to stratify the event history models by the number of general measure types. The stratification allows the underlying duration dependency to vary according to the number of different types of general measures needed. The third strategy thus accommodates the intuition that compliance processes will proceed along different trajectories depending on the number of different types of general measures needed for compliance. For the main models, I present results based on all four strategies.
3.6 Other Control Variables

To account for other potentially confounding variables, I include control variables at both the country and case levels. The included control variables capture characteristics of the countries and judgments that may both be considered causally prior to the need for legislative change and that may be correlated with compliance (Angrist and Pischke 2014).

Both strategic decision-making by judges and systematic differences in the human rights violations different countries are responsible for could lead to systematic differences in the types of countries that need to make legislative change to comply with judgments. At the country level, I thus control for the respondent state’s capacity to implement judgments, using the capacity index created by Grewal and Voeten (2015: 507-508). This index is based on the International Country Risk Guide (icrg)’s BUREAUCRATIC CAPACITY and LAW AND ORDER measures. These indicators capture the strength and expertise of the national bureaucracy, the impartiality of the judicial system, and popular observance of the law (The PRS Group 2012: 5-7). The combined measure thus captures both the strength and autonomy of the bureaucracy and the strength and efficiency of the domestic judicial system. In addition to being more prone to delays in their compliance processes, countries with weaker bureaucratic capacity may be less apt at implementing the ECtHR’s case law prior to litigation, these countries may also be more likely to need legislative change to comply with their judgments.

I also control for the strength and consolidation of democratic institutions that previous research has found to be important predictors of compliance. Controls in this category include the measure of political constraints developed by Henisz (2000). This index measures the degree to which preference change for one political actor is likely to result in policy change and is based both on the number of veto players and the degree of party alignment between them. Similar to bureaucratic capacity, strong political constraints may both affect the propensity to face judgments generating need for legislative change, by restricting opportunities for pre-litigation adaptations to the ECtHR case law, and affect the compliance process. In line with veto player theory and the general framework of this article, higher political constraints have been found to initially slow down compliance with ECtHR judgments (Voeten 2014, Grewal and Voeten 2015). In the longer term, political constraints appear to be related to a greater chance of compliance, possibly because competing political actors hold each other accountable for compliance failures.
Because the political constraints index captures effects of institutional variables such as bicameralism and electoral system, it is omitted from the models investigating how these institutions mediate the influence of need for legislative change.

Grewal and Voeten (2015) show that new democracies are more likely to need legislative change to comply with ECtHR judgments. To capture the degree of democratic consolidation, I include a binary indicator for new democracies according to the operationalization of Grewal and Voeten (2015: 504). According to their definition, new democracies “are countries with Polity scores of 6 or higher but which have not yet enjoyed this status for thirty years”.

Some characteristics of the judgments that may affect the compliance process may also be expected to correlate with whether legislative change is needed. A primary concern is that legislative change may be most likely to be needed following judgments on societal issues that are inherently more complex. Such complexity may affect the compliance process, and will to the extent that they are related to the underlying human rights violations and not to the need for legislative change as such, confound the relationship between need for legislative change and the duration of the compliance process.

As a first measure of case complexity, I include a count of the number of articles found to be violated in the judgment. Human rights violations that relate to more ECHR articles are likely to be of a more systematic nature which complicates the compliance process. Where more articles are violated, it is also likely that legislative change will be needed to accommodate at least some of the identified violations.

I also expect need for legislative change to be less likely in judgments that apply more established case law. If legislative actors adapt to prior judgments against other countries by changing domestic legislation, as found by Helfer and Voeten (2014), violations of more established case law may be more likely to relate only to the application of existing legislation. Moreover, if appropriate measures for addressing such violations have already been identified by other countries, the compliance process may be expected to be less complex. I therefore include measure of the novelty of the judgment in terms of the ECtHR case law, as captured by the HUDOC importance levels.

Compliance processes may also unfold differently depending on the issue areas. Different issue areas may also vary in the degree to which legislation is needed for compliance. I therefore control for the type of human rights violation identified by the judgment, using
the five-category classification developed by Hillebrecht (2014a: 52). As there are very few violations of social, economic and cultural rights, I omit this category. The resulting four-category variable, their corresponding articles in the ECHR and the number of cases within each category are reported in Table 1.

Two more indicators may capture legal complexity. These are binary indicators of whether there was at least one separate opinion and whether the final judgment was settled in the Grand Chamber. In addition to indicating legal complexity, some scholars have hypothesized that judicial dissent undermines the chance of compliance by decreasing the legitimacy of the decision (Westerland et al. 2010: 894). While judgments reaching the Grand Chamber similarly indicates legal complexity, the decision to appeal may also indicate resistance by the respondent government. One potential concern is that the legal and political controversy captures by separate opinions and grand chamber judgments are affected by need for legislative change, making their inclusion in the regression models inappropriate (Angrist and Pischke 2014). Excluding these two variables does, however, not substantively affect the estimated effect of need for legislative change.

<table>
<thead>
<tr>
<th>Category</th>
<th>Articles</th>
<th>Number of cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical integrity rights</td>
<td>Articles 2 and 3</td>
<td>80</td>
</tr>
<tr>
<td>Civil and political rights</td>
<td>Articles 9, 10 and 11; Protocol 1, article 3; Protocol 4, articles 2 and 4</td>
<td>119</td>
</tr>
<tr>
<td>Legal procedure and due process rights</td>
<td>Articles 5, 6, 7, 13 and 14</td>
<td>507</td>
</tr>
<tr>
<td>Privacy and private property rights</td>
<td>Articles 8 and 12; Protocol 1, article 1</td>
<td>242</td>
</tr>
</tbody>
</table>

Summary statistics for the independent variable and all control variables are reported in Table 2.

### 3.7 Estimation

The dependent variable is the time until compliance measured in days. Moreover, about 20% of the compliance processes are right-censored. Thus, the appropriate framework for statistical modelling is continuous event history analysis (Box-Steffensmeier and Jones 2004). Event history models estimate the hazard rate, which is defined as the probability of the event of interest – i.e. compliance – occurring given that it has not yet occurred. This framework is consistent with best practices in the literature (Voeten 2014: 232) and allows making robust inferences about the factors that explain the duration of the compliance process even in the presence of right-censoring. As theory is agnostic about the shape of the underlying duration dependency and an incorrect specification of the duration
Table 2: Summary Statistics

<table>
<thead>
<tr>
<th>Statistic</th>
<th>N</th>
<th>Mean</th>
<th>St. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Need for legislative change</td>
<td>870</td>
<td>0.385</td>
<td>0.487</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Need for jurisprudential change</td>
<td>870</td>
<td>0.172</td>
<td>0.378</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Need for practical measure</td>
<td>870</td>
<td>0.136</td>
<td>0.343</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Need to publish judgment</td>
<td>870</td>
<td>0.790</td>
<td>0.408</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Need for executive action</td>
<td>870</td>
<td>0.332</td>
<td>0.471</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Number of measures needed</td>
<td>870</td>
<td>1</td>
<td>0.978</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>2 general measures needed</td>
<td>870</td>
<td>0.310</td>
<td>0.463</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>3 general measures needed</td>
<td>870</td>
<td>0.137</td>
<td>0.344</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>4 general measures needed</td>
<td>870</td>
<td>0.054</td>
<td>0.226</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>5 general measures needed</td>
<td>870</td>
<td>0.017</td>
<td>0.130</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Unicameral legislature</td>
<td>844</td>
<td>0.367</td>
<td>0.482</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Population electoral system</td>
<td>841</td>
<td>0.256</td>
<td>0.431</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Political constraints index</td>
<td>870</td>
<td>0.441</td>
<td>0.125</td>
<td>0.000</td>
<td>0.718</td>
</tr>
<tr>
<td>Capacity</td>
<td>833</td>
<td>0.793</td>
<td>0.187</td>
<td>0.375</td>
<td>1.000</td>
</tr>
<tr>
<td>New democracy</td>
<td>843</td>
<td>0.461</td>
<td>0.499</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Importance level 2</td>
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<td>0.484</td>
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<td>1</td>
</tr>
<tr>
<td>Importance level 3</td>
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<td>0.031</td>
<td>0.174</td>
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</tr>
<tr>
<td>Separate opinion</td>
<td>870</td>
<td>0.326</td>
<td>0.469</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Number of violations</td>
<td>870</td>
<td>1.303</td>
<td>0.661</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Grand chamber</td>
<td>870</td>
<td>0.115</td>
<td>0.319</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Physical integrity rights</td>
<td>870</td>
<td>0.092</td>
<td>0.289</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Civil and political rights</td>
<td>870</td>
<td>0.137</td>
<td>0.344</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Legal procedure and due process rights</td>
<td>870</td>
<td>0.686</td>
<td>0.464</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Privacy and property rights</td>
<td>870</td>
<td>0.278</td>
<td>0.448</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Dependency could bias inferences, I base the hypothesis testing on semi-parametric Cox models, which allow for unspecified duration dependency (Golub 2008).

Although the Cox model in its standard form assumes proportional hazards, meaning that the effects of covariates do not vary with compliance time, it is relatively straightforward to test and correct for relationships that vary during the compliance process (Box-Steffensmeier and Zorn 2001, Licht 2011). Throughout, the proportional hazard assumption is evaluated using the Grambsch and Therneau (1994) test based on ranked survival times (Park and Hendry 2015). Across all model specifications, the effect of need for legislative change as well as the effects of certain control variables are found to violate the proportional hazard assumption. To allow for non-proportional hazards, interactions are introduced between the offending variables and the natural logarithm of time (Box-Steffensmeier and Zorn 2001).

Because several judgments are rendered against the same country, the observations cannot be considered independent. Rather, different judgments are grouped within the same country, which makes it important to account for potential unobserved country-level heterogeneity that may influence implementation. To account for dependence between observations and such unobserved heterogeneity, I include a shared frailty term, which is assumed to follow a common Gaussian distribution, with a mean of 1 and a variance estimated from the data. The shared frailty term can be thought of as controlling for...
4 Results

4.1 Need for Legislative Change and Compliance

A set of Cox regression models with country-shared frailties are presented in Table 3. Each estimate is reported as a hazard ratio, which can be interpreted as the relative increase in the hazard rate of compliance given a one-unit increase in the variable of interest, keeping constant all other variables in the model (Licht 2011: 288). 95% confidence intervals for the hazard ratios are reported in parentheses. All reported models include the full set of control variables, but employ different strategies to account for need to implement other general measures.

In all models, the effects of need for legislative change and several control variables are found to violate the proportional hazard assumption and are thus interacted with the natural logarithm of time. Because the legislation variable variable is interacted with the natural logarithm of time, the estimated effect of need for legislative change cannot easily be assessed by inspecting the hazard ratios reported in Table 3. The hazard ratios for legislative change reported for each model in Table 3 reflect the estimated effects of need for legislative change at the first day of the compliance process (when $\log(t) = 0$). The hazard ratio for the interaction term reflect how the estimated effects of need for legislative change shift with $\log(t)$. Thus, while the reported hazard ratios for need for legislative change and the interaction with $\log(t)$ are closer to 1 and statistically less significant in models 2-4 than in Model 1, closer scrutiny to the effect of needed legislative change at each point of the compliance process is needed for accurate hypothesis testing (see e.g Licht 2011). As for all multiplicative interaction models, the effect must be calculated based on the coefficients for both constituent terms of the interaction (Brambor, Clark and Golder 2006). For binary variables in a Cox model, the appropriate interpretation is easiest to achieve by investigating how the relative hazard develops over time (Licht 2011). Relative hazards are the special case of the time-dependent hazard ratio capturing a change from 0 to 1 in the variable of interest and are here interpreted as the relative change in the hazard of compliance when legislation is required.\(^6\) Relative hazards over

\(^6\)The relative hazard is (in the case of a binary variable) given by $exp(\beta_1 + \beta_2 \ln(t))$. See Golub and
time for all models are shown in Figure 1. The shaded areas correspond to the 90, 95 and 99 per cent confidence intervals.

Table 3: Shared-frailty Cox regression models

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Need for legislative change</td>
<td>0.035***</td>
<td>0.177*</td>
<td>0.167*</td>
<td>0.272</td>
</tr>
<tr>
<td></td>
<td>(0.005,0.243)</td>
<td>(0.029,1.075)</td>
<td>(0.027,1.021)</td>
<td>(0.036,2.036)</td>
</tr>
<tr>
<td>Need for legislative change*log(t)</td>
<td>1.442***</td>
<td>1.212</td>
<td>1.222</td>
<td>1.139</td>
</tr>
<tr>
<td></td>
<td>(1.105,1.883)</td>
<td>(0.946,1.552)</td>
<td>(0.953,1.567)</td>
<td>(0.863,1.502)</td>
</tr>
<tr>
<td>Need for executive action</td>
<td>0.727***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.6.0.881)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Need for jurisprudential change</td>
<td>0.538***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.427,0.676)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Need for practical measure</td>
<td>0.547***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.393,0.761)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Need for publishing judgment</td>
<td>0.028***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.004,0.19)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Need for publishing judgment*log(t)</td>
<td>1.579***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1.211,2.059)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of measures needed</td>
<td>0.654***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.582,0.735)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 general measures needed</td>
<td></td>
<td>0.139***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.049,0.392)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 general measures needed</td>
<td></td>
<td>0.682***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.562,0.827)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 general measures needed</td>
<td></td>
<td>0.418***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.305,0.573)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 general measures needed</td>
<td></td>
<td>0.303***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.682***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.562,0.827)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Stratified by number of measures

<table>
<thead>
<tr>
<th>Country and case characteristics</th>
<th>No</th>
<th>No</th>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log-likelihood null model</td>
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<td>-3862.96</td>
<td>-3862.96</td>
<td>-3108.19</td>
</tr>
<tr>
<td>Log-likelihood</td>
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<td>-3668.37</td>
<td>-3667.97</td>
<td>-3010.88</td>
</tr>
<tr>
<td>AIC</td>
<td>7.508.28</td>
<td>7.408.09</td>
<td>7.413.24</td>
<td>6.093.13</td>
</tr>
<tr>
<td>Number of events</td>
<td>656</td>
<td>656</td>
<td>656</td>
<td>656</td>
</tr>
<tr>
<td>Number of observations</td>
<td>816</td>
<td>816</td>
<td>816</td>
<td>816</td>
</tr>
</tbody>
</table>

Estimates in hazard ratios. 95 per cent confidence intervals in parentheses. Hazard ratios for case and and country characteristics are omitted due to space limitations. Full models are available in the supplementary material.

Model 1 includes controls for whether each of the other types of general measures were needed for compliance. This model shows that also when controlling for the other general measures that may be needed for compliance, need for legislative change is associated with slower compliance. As can be seen from the hazard ratio for the interaction term and from the upper left panel of Figure 1, the strength of the relationship diminishes somewhat over time. Figure 1, shows that the relationship between need for legislative change and slow compliance remains statistically significant at the 1 per cent level until well beyond the first decade of the implementation process.

Although a useful first step, Model 1 only controls for whether each of the other general measure types were also needed, and not for the total number of general measures needed. Steunenberg (2007) and Licht (2011: 5) for further mathematical detail.
Figure 1: Relative hazards of implementation associated with needs for legislative changes. The shaded areas represent 90, 95 and 99 per cent confidence intervals.
The remaining three models reported in Table 3 employ different strategies for adjusting for the different types of general measures needed for compliance.

Model 2 includes a simple count of the number of general measure types that were needed for compliance. Accounting for the number of different general measure types reduces the magnitude and statistical significance of both the hazard ratio for need for legislative change and the interaction with \( \log(t) \). As can be seen from the upper right panel of Figure 1, there is, however, still a statistically significant relationship between need for legislative change and slower compliance during the first part of the implementation process. The relative hazard for legislative change is in this model statistically significant from 1 for approximately the first 5-6 years of the implementation process. Apart from the first days of the compliance process where the confidence intervals are wide due to lack of observations, the delaying effect of need for legislative change is strong and statistically significant early in the compliance process. The relationship then decreases with time. This time dependence is in line with Hypothesis 2 and may suggest that while need for legislative change initially delays compliance. However, once the total number of general measures are taken into account, need for legislative change does not make compliance significantly less likely in the long run.

A potential limitation of Model 2 is that it assumes a linear effect of the number of general measure types. This assumption may be problematic if for instance an increase from three to four general measures needed has a greater effect on the hazard rate than a change from one to two measures needed. Models 3-4 thus relax the linearity assumption in two different ways. In Model 3, the count of different measure types is decomposed into a set of dummy variables corresponding to each value. These binary variables are then introduced separately in the regression model. The hazard ratio for legislation in the resulting model is thus based only on variation between judgments with the same number of general measures needed. The substantive results are, however, unchanged compared to Model 2.

In Model 4, the number of general measures are not introduced as covariates. Instead, the count of general measures is introduced as a stratification variable, meaning that judgments are allowed to have different baseline hazards for compliance depending on the number of general measures needed for compliance. Again, the substantive results are very similar to those from Model 2.
To summarize, the estimated models provide consistent evidence that need for legislative change is associated with slower compliance with ECtHR judgments, but the effect diminishes over time. This finding holds when controlling either for needs for other compliance tasks or for the total number of different types of compliance task needed to implement a judgment.

Additional tests

Additional tests provide further support for the reported results. As already mentioned, the compliance duration was measured as the time between the judgment and a Final Resolution being passed by the CoM. However, the substantive conclusions are very similar if this operationalization is replaced with a duration variable based on when the final measure is reported to have been implemented nationally. This date is also available for most judgments from the Grewal and Voeten (2015) dataset. A re-estimation of Model 4 based on the alternative compliance date is reported in the supplementary material to this article. In the alternative model too, is need for legislative change initially associated with a lower rate of compliance, and the magnitude and significance of this relationship decreases over time. In the alternative model, the relationship becomes statistically insignificant at an earlier point in the compliance process, which is as expected given that the end point of the compliance process in this model is an earlier date.

An additional test for making sure that the estimated relationship is indeed driven by need for legislative change is to replace the need for legislative change variable with indicators of the other possible general measure types. If the estimated effect of the other general measure types were similar to the effect found for legislation, it would undermine the argument that there is something special about need for legislative change. Re-estimating Model 4, for each of the other general measures does, however, yields no significant effect for jurisprudential and practical measures, and positive effect for need for executive action (although this effect diminishes over time) and need for publication or dissemination. The models for other types of measures are reported in the supplementary material to this article. It appears that when we account for differences resulting from the number of needed measure types, it is only need for legislative change that significantly prolongs the compliance process. In contrast, other types of measures, such as executive action, may even increase the chances of prompt compliance.
For some of the cases where legislative change was needed, another type of measure – most often an individual measure – was reported to have been implemented last. Often such individual measures can be expected to be related to the adoption of new legislation, as is illustrated by the compliance process in the case of *Benjamin and Wilson v. United Kingdom* concerning the lack of satisfactory review of the continued detention of criminal offenders transferred from prison to mental hospitals. After the UK made the necessary legislative changes, one of the applicants was released in accordance with the new legislation (Council of Ministers 2010). By contrast, legislation followed by jurisprudential measures or executive action is much more rare, although there are a few examples in the data. However, it could still be seen as a cause for concern if the results concerning need for legislative change depended on the inclusion of cases where legislation was not the final measure to be implemented. As can be seen from the model reported in in the supplementary material to this article, the results remain almost unaltered when Model 4 is re-estimated after excluding such cases. One caveat from this model is, however, that in the re-estimation, the time dependence of the effect of need for legislative change is less pronounced. Part of the time dependence may thus be related to how individual measures that depend on legislation can be implemented relatively quickly once the needed legislation is passed. Further disaggregated data would be needed to more clearly separate these two explanations empirically.

### 4.2 Interaction effects

The analysis thus far has demonstrated that, in line with hypotheses 1 and 2, need for legislative change is initially associated with a lower compliance rate but that this relationship weakens as time passes since the judgment. This relationship can be explained by the procedural and political aspects of the legislative process. I now turn to investigating the additional implications these explanations have for differences between institutional settings as captured by hypotheses 3 and 4.

To allow the effect of need for legislative change to vary depending on the institutional context, need for legislative change was interacted with bicameralism and majoritarian electoral systems in models 5 and 6, reported in Table 4. Both models include controls at the case- and country levels, as well as country-shared frailties and have baseline hazards stratified by the number of different types of measures needed for compliance. However,
the political constraints index is not included in these models, as this index captures variation that may result from bicameralism and the electoral system.\textsuperscript{7}

Contrary to Hypothesis 3, the number of chambers in the legislature does not influence the relationship between need for legislative change and the duration of the compliance process. In other words, an additional chamber of the legislature does not appear to present an important hurdle to the implementation of ECtHR judgments when legislative change is needed.

In contrast, Model 6 indicates that electoral systems are important for the how need for legislative change influences the compliance process. In countries where the legislature is elected through a majority- or plurality-based system, need for legislative change does not have the same effect on compliance as in countries with proportional or mixed electoral systems. This interaction is displayed graphically in Figure 2, which shows the relative hazard associated with need for legislative change depending on the type of electoral system. While the relative hazard for countries with a non-majoritarian system is stronger and statistically more significant than the relative hazards from the main models, the relative hazard for countries with a majoritarian electoral system is close to 1 and statistically insignificant regardless of how much time has passed since the judgment.

\textsuperscript{7}Including the political constraints index in the model does, however, not substantially alter the results.

\begin{table}
\centering
\caption{Shared-frailty Cox regression models: Interactions between legislation needs and institutions governing the legislative process}
\begin{tabular}{lcc}
\hline
 & (5) & (6) \\
\hline
Need for legislative change & 0.315 & 0.269 \\
 & (0.042,2.344) & (0.037,1.983) \\
Need for legislative change$\times$\log(t) & 1.117 & 1.104 \\
 & (0.849,1.471) & (0.841,1.45) \\
Unicameral system & 1.309** & \\
 & (1.047,1.638) & \\
Unicameral$\times$need for legislative change & 0.895 & \\
 & (0.614,1.304) & \\
Majoritarian electoral system & 3.084 & \\
 & (0.78,12.187) & \\
Majoritarian electoral system$\times$need for legislative change & 1.897*** & \\
 & (1.272,2.829) & \\
Majoritarian electoral system$\times$log(t) & 0.831 & \\
 & (0.65,1.063) & \\
Stratified by number of measures & Yes & Yes \\
Country and case characteristics & Yes & Yes \\
Log-likelihood null model & -3108.19 & -3102.24 \\
 & & & \\
Log-likelihood & -3109.58 & -3103.78 \\
AIC & 6103.83 & 6075.76 \\
Number of events & 656 & 655 \\
Number of observations & 816 & 815 \\
\hline
\end{tabular}
\end{table}

Estimates in hazard ratios. 95 per cent confidence intervals in parentheses.
Hazard ratios for case and and country characteristics are omitted due to space limitations.
Full models are available in the supplementary material.
*p<0.1; **p<0.05; ***p<0.01
Figure 2: Relative hazards of implementation associated with needs for legislative changes depending on the type of electoral system. The shaded areas represent 90, 95 and 99 per cent confidence intervals.

The direction of the interaction effect identified in Model 6 conforms with Hypothesis 4. However, it is somewhat surprising that the relationship between need for legislative change and slower compliance is not at all be present for countries with majority or plurality based electoral systems. A possible explanation might be that strong legislative majorities are important for facilitating timely compliance with judgments affecting domestic legislation.

5 Conclusion

While recent scholarship on compliance with international human rights court judgments highlight the domestic political character of the implementation process, few studies have investigated how compliance is influenced by the type of domestic action needed to implement judgments. This article addresses this gap in the literature, by investigating how need for legislative change affects the duration of the compliance process.

The results from a set of shared-frailty Cox regression models show that ECtHR judgments are, initially, implemented slower when legislative change is needed. As more time
passes since the judgment, this relationship weakens and eventually becomes statistically insignificant. This time dependence can be explained by the fact that time allows for new legislation to be prepared, debated and passed by national parliaments. In addition, domestic changes in power may provide new opportunities for finding political compromises and the controversy surrounding a case may decrease. Even if need for legislative change initially tends to slow down compliance, judgments may thus be expected to be implemented eventually.

This relationship holds in different model specifications, controlling for other general measures needed for compliance, for how many different types of measures the responding country need to implement, and for other country and case-level predictors of compliance. The time dependence of the effect of need for legislative change is, however, reduced when judgments where legislative change was followed by other measures are excluded. A possible interpretation is that some of the reduction in the estimated effect of legislation during the compliance process is related also to how other measures that depend on legislative changes are not particularly difficult to implement once the needed legislation is passed.

I have also investigated whether the relationship between need for legislative change and compliance is conditioned by the institutional context. I found that bicameralism does not affect the relationship. In contrast, differences in electoral systems are important. A statistically significant relationship between need for legislative change and compliance exists only for countries where the legislature is elected through a proportional or mixed electoral system. The explanation may be that there is a larger and more diverse group of veto players involved in the legislative process when the legislature is elected through non-majoritarian elections.

Further research is needed to assess both whether the relationship between need for legislative change and slow compliance holds also for later ECtHR judgments and for judgments from the IACtHR. More robust statistical analysis of compliance with IACtHR judgments is needed to adequately compare with the results from the ECtHR. However, the bivariate analysis conducted by Huneeus (2011) suggests that need for legislative change presents a challenge to compliance in the Inter-American system. She finds lower rate of compliance in judgments where the legislature was involved in the compliance process. Her analysis also points to prosecution of accused perpetrators as another
compliance task which has been difficult to achieve for the states responding to the IAC-
thR judgments.

Another potential avenue for future research may be to investigate whether the decision making of IHRC judges is affected by which type of state action would be needed for compliance. To the extent that judges fear non-implementation, they may be less inclined to find violations in cases where legislative change would be needed for compliance. Indeed, Hall (2014) finds evidence that the US Supreme Court behaves in this way. Another possibility would be that IHRCs prefer to design their rulings in ways that circumvent the need for legislative.
References


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