

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/273600065>

# EU law revisions and legislative drift

Article *in* European Union Politics · June 2014

DOI: 10.1177/1465116513513345

---

CITATIONS

4

---

READS

25

2 authors, including:



**Enrico Borghetto**

New University of Lisbon

17 PUBLICATIONS 67 CITATIONS

SEE PROFILE

Some of the authors of this publication are also working on these related projects:



Democracy in times of crisis: Power and Discourse in a three-level game [View project](#)



The Comparative Agendas Project (CAP) [View project](#)

# EU law revisions and legislative drift

Enrico Borghetto\*

Lars Mäder†

## Abstract

EU research has made great strides in understanding the dynamics of the EU decision-making process. In contrast to this progress, the dynamics unfolding after an EU secondary legislative act is enacted have been largely ignored. Some of these acts remain in force in their original form for several years while others are revised soon after their enactment. What factors account for this variation? We empirically analyze the proposition that in the presence of “legislative drift”, i.e. the inter-temporal variation of decision-makers’ preferences, major revisions of EU legislative acts are more likely to occur. Based on an analysis of the revision histories of 158 major EU acts in the time period between 1958 and 2003, we find significant support for this hypothesis.

## Keywords

EU legislative process, law revision, legislative drift, repeated event history analysis.

---

\*University Nova of Lisbon, Portugal.

†MZES, University of Mannheim, Germany.

## Introduction

The European Union's constitutional framework has evolved considerably since the mid-1980s. At least six waves of treaty amendments have contributed to change the basic parameters of EU foundational rules in this period. Such dynamism contrasted with the relative institutional stasis which followed the adoption of the Founding Treaties of the European Communities in the 1950s. This acceleration in the pace of the integration process has not failed to catch the attention of scholar and practitioners, who analysed extensively the origins and consequences of these rounds of treaty reform (e.g. Moravcsik 1998). Indeed, it was argued that: "Such now has become the regularity of ICGs that an expectation has become established that the treaties will be changed at regular intervals" (Nugent 2006: 146). Conversely, much less attention has been devoted to understanding the evolution of the complex system of secondary legislation governing EU activities and policies in the diverse domains making up the *acquis communautaire*.<sup>1</sup>

Likewise treaty provisions, also secondary measures are subject to numerous revisions after they enter the books. In fact, the evolution of the EU policy framework is not simply additive, but a large portion of the legislative acts are constantly amended and repealed. Most importantly, one finds significant variations in the revision histories of EU legislative acts. For instance, Regulation 729/70 on the financing of the common agricultural policy was revised a first time after only 2 years, while the first amendment to Council Directive 76/207/EEC of 9 February 1976 on the implementation of the principle of equal treatment for men and women was adopted 26 years after the enactment of the original act. In other words, some acts - embodying the policy compromises reached by the legislative actors at the time of their adoption - are more persistent than others. One can expect that the enacting coalition is not only interested in the short term distribution of costs and benefits but also in locking in the terms of the agreement and ensuring their stability

over time.

This article analyses the proposition that the inter-temporal fluctuation of decision-makers' preferences mainly explain the occurrence and the timing of first major legislative revisions in the EU. Moe (1990) referred to it as the problem of "political uncertainty". Since the concept of "propriety rights" in the private sphere has no analogous in the public sphere, there is no legal guarantee that what is created by today's policy authorities will not be reverted by future decision-makers in power. Horn and Shepsle (1989) labeled this phenomenon "legislative drift", so as to distinguish it from the concept of "bureaucratic drift". In both cases, the central concern is the capacity of political authorities to ensure that their favoured policies and programs are carried out as effectively as possible. They differ in so far as the former considers the possibility of temporal inconsistency of decision-makers' views toward a policy, while the latter identifies the problematic control of elected politicians over public agencies. Remarkably, whereas the issue of oversight over supranational agents has been extensively studied (e.g. Franchino 2007), little is known on the theme of "legislative drift".

This article aims to unveil the temporal dynamics of legislative revisions in the EU by exploring the factors that make the occurrence of the first major EU act revision more or less likely.<sup>2</sup> The impact of "legislative drift" on the stability of an EU policy is tested by examining the interaction of two factors: the legislative rules in use and the preference configuration of relevant political actors. Over the years treaty amendments have substantially altered the legislative procedures (consultation, cooperation, co-decision I and II - now ordinary procedure) and Council voting rules (unanimity or qualified majority voting, QMV) in many policy areas. Furthermore, preferences of EU legislative actors have changed constantly as a result of national government turnovers modifying the ideological composition of the Council, the elections of new EU Parliaments and the

appointments of new EU Commissions. Rules define how decisions are made and who participates, namely which preferences should be pivotal in the decision-making process. Instead of testing for the independent effect of each of these factors, the present study opted for analyzing their interaction as captured by the concept of the legislative gridlock interval (Krehbiel 1998; Crombez and Hix 2012). The width and location of the gridlock interval is calculated as the distance between the positions of the left and right pivotal actors on a uni-dimensional policy space. At the time of enactment the status quo is assumed to lie within the interval and thus it cannot be readily revised. Subsequent changes at the level of preferences or decision-making rules may modify the location and/or width of the gridlock interval. We expect that a decrease in the relative interval overlap between the time of the enactment and a subsequent time point increases the likelihood that the parent act is revised. Using a novel dataset, which integrates the selection of 158 major laws carried out by Franchino (2007) with data drawn from the comprehensive legislative database EUR-Lex, our applied event history analysis finds significant support for this hypotheses.

Studying the pace of EU act revisions contributes, firstly, to a better understanding of the evolution of the complex regulatory system of the Union. Because of its nature, European governance has to constantly face a trade-off between continuous and credible action, which is typical of non-majoritarian institutions, and responsiveness to changing citizens' requests, which fits a majoritarian logic. In the area of internal market policies, for instance, business actors may value a stable regulatory framework (Posner and Landes 1975). One way in which national legislators show the credibility of their commitment towards a policy is by tying their own hands in a policy area through the transfer of law-making power to supranational institutions.<sup>3</sup>. Conversely, others may advocate a politically active Union, capable of prompt adaptation when new important or urgent issues enter the agenda. This article does not take sides in the debate between advocates

of stability and flexibility. Indeed, the dimension of policy revision considered in this article (the time elapsed until an EU enactment is amended for the first time) does not allow addressing the question of policy responsiveness to citizens' preferences or analyzing the magnitude of policy change. Secondly, such an analysis complements other works on EU decision-making efficiency which have addressed similar questions on the timing of decision-making but primarily focused on the pre-enactment process and considered whether the above-mentioned factors made the passing of a new measure more or less swift (e.g. Golub 2007; König 2007).

The paper is organized as follows. The next section briefly summarizes the relevant literature on EU policy revision and statutory durability in the US which it builds on. This is followed by the description of our spatial model of legislative revision and the description of the dataset used for its analysis. The third section reports the results of our empirical analysis and the final section draws the conclusion.

## **The study of legislative stability in the EU**

Several authors have highlighted the shared understanding on matters of institutional engineering linking the authors of the Federalist Papers and (almost two centuries later) the founding fathers of the European Communities (e.g. Weiler 1991; Selck 2006). Madison's endorsement for the "necessity of some institution that will blend stability with liberty" (Federalist Paper n.63) was embodied in the US Constitution by means of supermajority requirements, bicameralism and the presence of numerous veto points disseminated along the law-making cycle. These factors were expected to combine and produce a self-correcting system, balancing change and negative-feedback processes, without at the same time stifling the decision-making system. Also the architects of the EU institutional framework have had to agree on multiple solutions to the trade-off between policy

stability and flexibility over the years.<sup>4</sup> Differently from other constitutional systems, almost every round of treaty revision brought about changes in the rules and procedures of the decision-making process reflecting changes in the compromise. The most notable reforms concerned the expansion of the majority threshold in intra-Council decisions and the involvement of new institutions (mainly the EU Parliament) in the process.

Academic research has devoted lots of effort to understand the implications of different institutional arrangements for EU decision-making. A substantial number of studies focused on the effects of treaty reforms on the inter-institutional balance of power. They addressed the topic of bicameral bargaining between the European Parliament and the Council under different legislative procedures (e.g. Crombez 1996; Tsebelis and Garrett 2001; Tsebelis and Yatahanas 2002; König and Bräuninger 2004) as well as the effect of different institutional configurations on the power of the judiciary and the bureaucracies (e.g. Tsebelis and Yatahanas 2002). Turning to policy implications, it was shown that, once accounted for the effect of enlargement and an ever-expanding EU policy agenda, the progressive expansion of QMV in many policy areas has expedited decision-making while the greater voice of the EU Parliament under co-decision has slowed it down (Golub 1999; 2007; 2008; Golub and Steunenberg 2007; König 2007;2008; Schulz and König 2000).

These works also agreed on the effect of ideological conflict - it delays decision-making - although they differed on the operationalization of member state preferences. Golub (1999; 2007) and Golub and Steunenberg (2007) measured ideological diversity in the Council by including a dummy variable for the years when Margaret Thatcher (allegedly an extreme preference outlier) was in office. König (2007) estimated government policy positions by using the Manifesto Research Group data and created measures of within Council ideological divergence in four policy areas and on the pro/anti European integration dimension. A more recent contribution by Klüver and Sagarzazu

(2013) shows that an increase in the maximum ideological distance between all relevant legislative bodies (Council, but also Commission and EU Parliament) significantly extends the duration of policy-making processes in the EU.

However, none of these studies have considered the question what happens after a legislative measure is enacted.<sup>5</sup> These studies have mainly investigated the path leading to the equilibrium underlying every legislative act at the moment of its adoption. However, stopping at these very central questions in politics leads to forget that political equilibriums may be less durable than it is often thought. As Riker puts succinctly: “Disequilibrium, or the potential that the status quo be upset, is the characteristic feature of politics” (Riker 1980: 443). Acknowledging that an act after adoption enters a disequilibrium path does not contrast with the observation that it may exhibit a relative stability for even an extended period of time. Rather, given the substantial variation in the duration of EU legislative acts, it brings to the fore the question of which factors can facilitate or delay this process of destabilization.

Previous studies on the revision of legislative acts are extremely limited and they have exclusively focused on the US domestic context. Maltzman and Shipan (2008) showed that acts adopted in a period of divided government and relevant bicameral differences are less durable than acts adopted during unified government and low policy disagreement between the Senate and the House. Additionally, an increasing preference division between the two chambers has an impact in the post-enactment phase - more specifically it contributes to consolidate the gridlock. Also Ragusa (2010) studied the lifespan of legislative enactments but he operationalized policy revision in terms of repeals, thereby delimiting his analysis to a subset of the population of amendments. His findings corroborate Maltzman and Shipan’s conclusions in regards to the impact of divided government, but only when applying a short term perspective (up to a threshold of ten years).



In the long run, “legislation passed during divided government is less likely to be repealed than legislation passed during unified government” (Ragusa 2010: 1038). Finally, Berry, Burden and Howell’s study (2009, see Lewis 2002 for similar findings) on the durability of federal programs reports that they are affected by changes in partisan composition or partisan strength of the enacting majority.

These contributions draw attention to the impact of political division between the legislative branches on the likelihood of post-enactment amendments. If we want to apply their analytic framework to the EU decision-making setting, we need to account for variation in majority thresholds and voting procedures following treaty amendments. If, as argued by Shepsle (1979), institutions can induce equilibrium, then a change in the rules can tilt the balance towards a different equilibrium. As already emphasized, these changes are expected to have policy consequences, which is why they have so often become the subject of intense debate in intergovernmental conferences preceding the adoption of a major treaty revision. The extended time-frame used in this paper allows us to incorporate the effect of changing institutions on EU policy equilibrium. However, institutions are not the only sources of variation in policy stability. Government turnovers have altered considerably the preference configuration within the Council. Moreover, one has to account for the destabilizing effect of a newly elected EP and a newly appointed Commission. This work offers one of the first systematic analysis of how both institutional and preference factors affect the stability of EU legislative decisions.

## **A spatial model of legislative revision**

We build a spatial model of policy change where legislative revision is a function of the location of the status quo with respect to the gridlock interval (Krehbiel 1998; Crombez and Hix 2012).

The width and the location of the gridlock interval vary based on the configuration of decision-makers' preferences and the respective institutional rules. Our model assumes that any policy status quo lying outside of the gridlock interval will be subject to revision and vice versa. In an attempt to strike a balance between model manageability and accuracy of description, we consider the interaction of three different types of pivotal actors in the law-making process of the EU, i.e. member states' government representatives in the Council, the European Parliament and the Commission (Crombez and Hix 2012; Klüver and Sagarzazu 2013). The width and the location of the gridlock interval results from the interaction between their collective preference configuration, the EU legislative procedures (either consultation or co-decision) and the voting rules in the Council (either unanimity or QMV).

The formal structure of the model assumes that the involved political actors have Euclidean preferences, i.e. each actor has a single ideal policy in a uni-dimensional policy space and maximizes his utility function, which is symmetrically decreasing as one moves further away from his most preferred ideal point. In order to capture the fact that the Council decides either by a QMV or by an unanimity vote, it is represented as a  $m$  (1 to 7) member committee, which decides by a  $k$  majority rule:  $k = 7/7$  when unanimity applies and  $k = 5/7$  under majority rule. In addition, we include the position of the median member of the European Parliament ( $p_{EP}$ ) and the Commission ( $p_C$ ). Both are assumed to decide under a simple majority rule with open amendments, therefore they can be represented as unitary actors with single ideal points.

Figures 1, 2, and 3 illustrate the inter-temporal dynamic of our model in three different decision-making situations. At period  $t_{-1}$  the location of the status quo is exogenously given and a priori assumed to be outside the respective gridlock interval. The adopted parent act moves the status quo somewhere inside the legislative gridlock interval at period  $t_0$  (Steunenberg and Selck 2006).

The logic of the model assumes that EU legislation enacted at period  $t_0$  cannot be revised in subsequent periods unless the newly defined status quo lies again outside of the gridlock interval. This will only be the case if one of the following three events occurs between  $t_0$  and  $t_n$ , with  $n > 0$ : a change in the location of the status quo, a change in the location of the gridlock interval, or a contraction in the width of the gridlock interval. While the change in the location of the status quo due to an exogenous shock (such as a crisis event or the emergence of new technologies) is treated as a random variable  $\pi$  and incorporated as an error term in the following statistical analysis, the model directly controls for the change in the width and the location of the gridlock interval as a function of changing actor's preferences and changing rules of the EU legislative process.

*Figure 1 about here*

Figure 1 shows a hypothetical case where the Council at period  $t_0$  decides on a policy under the consultation procedure by a unanimity vote, i.e.  $k = 7/7$ . According to this procedure the Commission first submits a legislative proposal to the Council. After examining it, the Council makes an unanimous decision of either adopting or amending it. In this example, the gridlock interval is defined as the distance between the ideal points of the leftmost ( $m_L$ ) and rightmost ( $m_R$ ) Council members.<sup>6</sup> At period  $t_n$ , the actors' preferences remained constant while the voting rule for the legislative act under consideration changed from unanimity to QMV ( $k = 5/7$ ). The change in the applied voting rule affected the width of the gridlock interval. The interval shrinks substantially (as shown by the bold gray line) and is reduced to the distance between the pivotal Council member with a  $k$ -majority of votes to its left  $m_{PR}$  and the Commission. In this case we would expect an increase in the likelihood of revision, since the smaller relative size of the new gridlock interval increases the likelihood that the status quo lies again outside of the gridlock interval at  $t_n$ .<sup>7</sup>

*Figure 2 about here*

In the second example, displayed in Figure 2, the respective parent act is adopted under consultation with QMV at period  $t_0$  and the legislative procedure changes from consultation to co-decision at time  $t_n$ . Likewise to consultation, the co-decision procedure starts with a Commission proposal, however, the EP has the right to amend the proposal and to submit a joint text to the Council. If the joint text of the EP is adopted by the Council by QMV it will be enacted. In contrast to the previous example the change in the legislative procedure leads to an increase of the gridlock interval, which is now defined as the distance between the ideal point of the Commission and the ideal point of the EP. Stated more generally, it corresponds to the set  $[\min\{m_{PL}, p_{EP}, p_C\}, \max\{m_{PR}, p_{EP}, p_C\}]$ , i.e. the distance between the left pivotal Council member or the EP or the Commission and the right pivotal member or the EP or the Commission. In this case, we would expect the likelihood of legislative revision to decrease since the gridlock interval of  $t_0$  is only a subset of the gridlock interval at  $t_n$ , which implies that (*ceteris paribus*, namely if no shock occurred prior to  $t_n$ ) the status quo still lies again inside the gridlock interval at  $t_n$ .

*Figure 3 about here*

Finally, Figure 3 illustrates a case in which only the preferences of Council members change between  $t_0$  and  $t_n$ , while the legislative procedure, the applied voting rule, and the preference of the EP and Commission remain constant. In this case the overall size of the gridlock interval remains the same: all Council members shift to the right by the same margin and the Commission still lies within the gridlock set between the leftmost and rightmost member of the Council. What varies is the location of the gridlock interval. Since we assume that the status quo is located at the end of  $t_0$  somewhere inside the interval, a shift of the gridlock reduces the overlapping region and increases the likelihood that at  $t_n$  it lies again outside the gridlock interval.

These examples aim at illustrating how it is possible to derive empirically testable hypotheses on the likelihood of EU law revision based on the expected location of the status quo in the gridlock interval. Once the EU sets a policy, the status quo moves inside the gridlock interval. Whereas the impact of external shocks as drivers of change in the status quo is treated as the error term, an analysis of changes in actors' preferences and decision-making rules allows formulating expectations on the location of the status quo with respect to the gridlock interval at different points in time. Taking the gridlock interval at time period  $t_0$  as our reference point, we expect a law to be more likely to be revised at time  $t_n$  under three conditions: a) when the location of the interval moves and the width stays fixed; b) vice versa, when the interval contracts but the location remains fixed; c) when both changes occur simultaneously. According to our model, in all these cases we expect an increase in the odds that the status quo lies outside the interval, thus a greater likelihood of legislative revision. If the interval widens at  $t_n$  and incorporates the original interval, we expect no revision. These considerations lead to the following hypothesis:

**Hypothesis:** *The smaller the relative overlap between the gridlock intervals at  $t_0$  and  $t_n$ , the greater the likelihood of major EU law revision.*

## Control variables

In addition, we control for the effects of parent act-specific characteristics, such as the initial policy conflict among legislative actors at the time of its enactment, whether it is part of an EU general or action program, whether it includes sunset provisions, its complexity, and its legislative type.

Firstly, we analyze whether the initial policy conflict, i.e. the gridlock interval at  $t_0$ , has any effect on the durability of the parent act. In the end, it might be the case that certain acts are bound to experience a revision sooner than others, regardless of changing conditions in the post-

enactment phase. In the literature on the US congress several authors argued that laws enacted under divided government, i.e. at times of higher policy conflict, will be more stable since the reached compromise relies on a broad support from members of both parties. On its turn, this broad support should decrease the likelihood of future revisions. In contrast to this view, Maltzman and Shipan (2008) expect laws enacted at times of high policy conflict to be less stable. These laws are more prone to include extensive compromises between legislative actors, which can take the form of vague or internally inconsistent provisions or result in broader, more general provisions. While these compromises are necessary to get the bill passed they should entirely satisfy only a portion of legislative actors. Consequently, those who made most concessions at the negotiating table may be more willing to revise the enacted compromise whenever it is possible. Since both arguments are convincing, we simply expect conflict at the enactment stage to have a significant effect on the likelihood of a major revision.

Secondly, we consider whether the parent act was part of an EU general or action program. These programs are drafted by the EU Commission and normally define long-term goals to be achieved in a specified policy area. They usually consists of several legislative proposals considered necessary for the attainment of these goals. For instance, the Fifth Action Program on the Environment for the time period between 1992 and 2000 set out to transform the patterns of growth in the Community through the promotion of sustainable development. It established long-term objectives, set performance targets to be met by the year 2000, and prescribed a set of actions to achieve the specified objectives. Remarkably, the time approach is different with respect to measures requiring periodic re-authorizations. Legislation enacted within these programs is designed with the view to address policy problems that require a long time horizon. Hence, the assessment of their effectiveness is forcibly moved to the future. Consequently, we expect that the likelihood

of revision for acts which are part of general or action programs is lower than for normal EU acts.

Thirdly, we control for the inclusion of so called sunset provisions within parent acts. These provisions (used also in domestic legislation) prescribe that the act or a part of it expire at a given date, unless they are explicitly prolonged by the legislator through a law revision. Their main rationale is to promote the regular review of existing legislation as a result of changes in the original circumstances or of lessons learned about their effectiveness in the course of the implementation phase. Controlling for the effect of sunset provisions is important, because regardless of variation at the level of institutional or political factors, the requirement to repeal or revise an act might be set by previously determined calendars, either making revisions more frequent or scheduling them far in the future (Adler and Wilkerson 2013). Consequently, we merely expect that the inclusion of sunset provisions will affect the likelihood of statutory change.

Fourthly, in line with Maltzman and Shipan (2008) and Ragusa (2010), we analyze whether or not the complexity of the parent act is related to its legislative stability. We assume that since complex legislation usually contains a larger number of major provisions and is likely to affect a greater range of policy areas, it is more prone to receive amendments compared to legislation with a more defined focus.

Finally, we controlled for the type of parent act, which can be either a regulation or a directive. Although important regulatory initiatives can take the form of regulations (König 2008), directives are generally considered the main legislative acts of the EU (Golub 2008; Toshkov 2011). In comparison with self-executing regulations, they are used to lay down the broad policy principles, while leaving Commission measures or domestic acts to specify the details or adapt them to changing circumstances. Their more “flexible” nature should make them less subject to change due to exogenous shocks which alter their original conditions.

## Data

### *Dependent variable*

To empirically test our theoretical arguments about the stability of EU laws we need to select a set of legal acts and then determine whether these parent acts have been revised. In order to do this, we collected information on the characteristics and revision history of a sample of major EU laws.<sup>8</sup> To separate significant from minor EU legislation, we relied on the selection procedure carried out by Franchino (2007:79-84), which led to the identification of 158 major EU acts adopted in the time period between 1958 and 1993.<sup>9</sup>

Data on whether and when these laws were significantly revised were extracted from EUR-Lex, i.e. the comprehensive legislative database of the European Union. A major challenge for the construction of the post-enactment history of the acts is the identification of significant law revisions. Since the analysis of the content of each amendment is not feasible in a large-N research design, we relied on formal selection criteria. Firstly, we only included legislative revisions, which EUR-Lex reported as amending (heading “amended by”) or repealing (heading “repealed by”) the parent act. Thus we ignored those cases which were branded as mere corrections, implementations and adaptations due to the entry of new member states. In cases of multiple revisions, we selected those revision acts which include a specific reference to the parent act within their titles (when available). Secondly, we excluded all tertiary amending acts enacted only by the Commission, which are mostly implementing acts. Thirdly, we excluded Decisions from our sample of amending acts, since they are generally used to rule individual cases and are addressed to particular member states or private parties. Fourthly, as a further germaneness criterion, we only included revision acts whose major issue area (checked by looking at the directory code assigned by EURlex) matches with that of the parent act.



The unit of analysis is the law-year, one for each year from enactment to the occurrence of the first major revision. The first observation for each parent act is the year of enactment, where the dependent variable is coded as a 0. It holds the value of 0 until the year in which the act is significantly revised, when it takes the value of 1. After the year of its first revision all observations for the respective parent act are dropped from the dataset. For non-revised parent acts, our dependent variable is equal to 0 for the entire time period of study, i.e. from the year of its enactment until it is repealed, or in cases where no repealing act occurred until the end of our observation period (the 31st December 2002, date of the entry into force of the Nice Treaty).

To provide an example, our dependent variable for Council Directive 83/189/EEC of 28 March 1983 laying down a procedure for the provision of information in the field of technical standards and regulations is initially coded as a 0 in 1983, the year of its enactment, and continues to hold the value of 0 in the following years since no revision occurred. In 1988, the year of the act's first revision, our dependent variable receives the value of 1. In contrast, Council Regulation (EEC) No 3795/81 related to self-employed persons has never been revised, thus the dependent variable for this act was coded constantly as 0 in the dataset, from its initial enactment in 1981 until 2002, the end of our observation period.

The data collected on the revision histories of our set of 158 selected parent acts revealed that the large majority of our major EU laws have been revised within the time period of our study: 108 experienced a major law revision. Thus, in total, our final dataset includes 2072 law-year observations. Among the revised parent acts the average time period between their enactment and the first revision act is almost 7 years.

### *Independent variables*

Our main independent variable is the relative overlap between the gridlock intervals at the year of enactment ( $t_0$ ) and the following years ( $t_n$ ). To calculate the width and position of the gridlock interval at each act-year, we locate the position of the pivotal legislative actors on two policy dimensions, i.e. a general left/right and a national/supranational policy dimensions.<sup>10</sup> As already noted above, the gridlock interval is a function of the decision-making rules in force (legislative procedure and voting rule) and of the contingent configuration of preferences of the relevant legislative actors. Information on the decision making rules was inferred from the legal basis of the parent act. While almost half of our parent acts (74) already prescribed a qualified majority vote at the time of their enactment, the voting rule of 31 parent acts switched from unanimity to QMV during their legislative history. A similar development in our sample can be observed for the prescribed legislative procedure. Whereas our entire sample of 158 parent acts was subject to the consultation procedure at the time of their enactment, the legislative procedure prescribed in the legal basis of 36 acts changed to the co-decision procedure within the time period under study.

To identify the position of the relevant legislative actors, we relied on the classification scheme of the Comparative Manifesto Project (CMP) (Budge, Klingemann and Volkens 2001; Volkens, McDonald and Klingemann 2006). We follow König and Luig (2012) and assign standard CMP categories to 13 individual left/right ideological issues and 3 national/supranational issues (Table 1 in the paper of König and Luig (2012) provides a detailed overview.). To calculate the ideological position on the individual issues the length and composition of party manifestos, using the absolute number of quasisentences per CMP category, are taken into account. The individual issues are then transformed to a logit scale following a recommendation by Lowe et al. (2011). To apply the logit scale a constant term of 0.5 is added to each pole of the underlying left/right

(national/supranational) dimension. Finally, the left/right (national/supranational) dimension is created by aggregating the issue-specific positions and summing across all issues and dividing by the respective number of issues. The estimated party positions are then used to create government ideological positions, which average the position of the parties in government, weighted by their share of parliamentary seats. Using the manifesto-based measure of party ideology we also calculated the position of the European Parliament and the Commission. Following Crombez and Hix (2012) we assumed that each member of the EP and each Commissioner has the same left/right (national/supranational) position as the national party to which he or she belongs. Similar to preference measure of the Council members we use CMP categories from the national election manifestos to identify the left/right (national/supranational) position of EP and Commission members. Using this information we identified the median Commission for the entire time period under study, i.e. 1958 to 2003, and the median party in the EP for the time period between 1979 and 2003.

The information on decision-making rules allows us to identify the pivotal legislative actors. The gridlock interval under consultation and unanimity voting is given by the absolute difference between the most left (national) and the most right (supranational) government in the Council. The gridlock interval under co-decision and unanimity results from the distance between the most left (national) and the most right (supranational) legislative actors, which may be either a government in the Council, the median party within the EP or the median commissioner. Under consultation and QMV one has to identify the two pivotal governments in the Council, one from the left(national) and one from the right(supranational) of the two preference continuums, and calculate their distance. Finally, the interval gridlock under co-decision and QMV is equal to the range of the most left (national) and the most right (supranational) pivotal legislative actors, once

again including all legislative actors.

Based on the width and the location of the gridlock interval at  $t_0$  and at each of the subsequent time points  $t_n$ , we calculated the gridlock change as the relative overlap between the two areas. In our statistical analysis we expect more policy stability, the larger the relative overlap between the gridlock interval at time period  $t_0$  and the observed time periods  $t_n$ .

*Figure 4 about here*

To provide an illustration of the measure of gridlock overlap, Figure 4 plots the time varying gridlock intervals for one of our parent acts on the left/right policy dimension. Council directive 83/189/EEC was enacted in 1983 and experienced its first major revision in 1988. The dark shaded area indicates the time varying gridlock interval of the parent act over the entire time period under observation, i.e. between 1983 and 1988. To ease a visual comparison, the width and the location of the gridlock interval at time period  $t_0$  is represented as two gray horizontal lines indicating the upper and lower boundaries for the entire observed legislative history. At each year one vertical line was drawn representing the overlap between the gridlock intervals at  $t_0$  and at the subsequent time periods  $t_n$  in absolute terms. The same information is conveyed by the dashed line (plotted on the secondary y-axis), which reports the percentage value of the gridlock overlap. Right after the enactment of the parent act the center of the gridlock interval slightly moved to the left side of the policy continuum as a result of changes in the preference configurations of Council members. This shift caused a minor decrease in the overlap of gridlock intervals, which is reflected both by the somehow shorter gray vertical lines and the decreasing trend in the dashed line. According to our theory, this development increased slightly the odds that the status quo of the act would lie somewhere outside of the new gridlock interval, thus creating the conditions for a revision of the respective act. In 1987 the width of the gridlock interval contracted considerably due to the

introduction of the QMV rule. This change in the prescribed voting rule also led to a considerable decrease in the overlap of gridlock intervals. In 1987 the relative overlap of the gridlock intervals dwindled to only 25% and further decreased to only 19% in 1988. The low values of the relative gridlock overlaps are expected to be associated with a higher probability of law revision, which indeed occurred in 1988.

In terms of control variables, to measure the policy conflict at the time of enactment of the parent acts we used the size of the gridlock interval at time  $t_0$  on both policy dimensions. This measure only varies across parent acts, while it remains constant over their respective legislative histories.

The complexity of a parent act is captured by the number of major provisions contained in the parent acts as calculated by Franchino (2007). The applied coding rule counted articles and paragraphs as separate provisions, while sub-paragraphs and indentations were counted only if they included substantive authority. Furthermore, a provision was counted twice if it delegates substantive different policy authority to the Commission and the member states. A provision is only counted once if it delegates policy authority on the same issue to the two executive authorities. The used indicator has the advantage that it allows to measure complexity as a continuous rather than as a dichotomous variable. The used measure for complexity varies considerably among our sample, ranging from only 3 major provisions up to 345 provisions. The average number of major provision included in the parent acts is 48.

In order to control for the effect of the type of legal act, we included a dummy variable coded as 1 if the parent act is a regulation and 0 if it is a directive. Among the 158 included parent acts, 66 are regulations and 92 are directives.

Detecting the presence of sunset provisions required us to check individually the content of

each parent act. To empirically test its effect, we adopted Maltzman and Shipan’s (2008) solution, i.e. the variable is set equal to 1 in the year in which the sunset provision is supposed to have an effect on the parent act revision and set equal to 0 in all other years of the legislative history of the parent acts. For those parent acts without any sunset provisions the variable is a constant 0.<sup>11</sup> To provide an example, Council Directive 72/159/EEC of 17th April 1972 on the modernization of farms includes a sunset provision prescribing that in “[f]ive years after this Directive takes effect, the common measures shall be re-examined by the Council upon a proposal from the Commission” (Council Directive 72/159/EEC, Article 16(2)). The included sunset variable for this parent act is set equal to 0 in the years between 1973 and 1976. In the year 1977 the variable changes to 1, while it switches back to 0 in the subsequent years until the end of our observation period in 2003.

Finally, we included a dummy variable capturing whether the respective parent act was part of a broader EU legislation action program. Among our 158 parent act, only 32 were included in one of the EU action programs.

*Table 1 about here*

Table 1 presents the descriptive statistics on the variables used in the analysis.

## Method and results

We analyze the time until a parent act experiences the event of a first major revision, which justifies the recourse to event history analysis techniques. In line with the recommendations of Box-Steffensmeier and Bradford (2011) we decided to apply a Cox’s semiparametric proportional hazards model since it leaves the baseline hazard function unspecified, while allowing the estimation of the relationship between the hazard rate and the selected explanatory variables.

Since not all of our major EU laws were revised or repealed by the end of our observation period, these observations were included as right-censored cases. For the specification of our models we followed Keele (2010). First, we controlled for the presence of any relevant interaction effects between covariates. Since none was detected, we included smoothing spline fits for checking the correct functional form of our continuous covariates. The likelihood ratio tests did not indicate any improvement by the spline models, which confirms that the correct functional form of our continuous covariates is linear. Finally, we applied the Therneau-Grambsch test for non-proportionality (Grambsch and Therneau, 1994). The test revealed non-significant results for all our included independent variables (see the appendix).

*Table 2 about here*

Table 2 displays the results of our analysis. A positive coefficient implies that the underlying effect is an increase in the instantaneous hazard of a major law revision (thus, parent acts are less durable); vice versa for negative coefficients. The three models differ in terms of included co-variables.

Model 1 reveals a significant effect for our relative gridlock overlap covariate measured on the left-right dimension. In line with our expectations, the effect is negative, which indicates a decreasing likelihood of law revision the larger the gridlock overlap. The decrease in the likelihood of law revision is also significant in substantial terms: the hazard rate of a parent act being revised decreases by more than 7% for each 10% increase in the overlap of the gridlock intervals. Conversely, the effect of the initial gridlock size at the time of the enactment is described by a negative but insignificant coefficient. This finding supports the view that a better predictor of the timing of legislative revisions is the over time in/stability of the enacting coalition rather than its characteristics at the adoption stage. That said, another result is that the dimension

of conflict matters. In Model 2, we measured the relative gridlock overlap and the size of the initial gridlock interval on a national/supranational policy dimension. The analysis reveals that there is no statistical significant relationship between the risk of law revision and legislative actors' preferences on the national/supranational policy dimension. Following Gabel and Hix (2002), Hix et al. (2005), Tsebelis and Garrett (2000) one might argue that the left-right has been historically the main dimension of conflict in the EU. Additionally, as shown by Warntjen (2008), this might result from the lower degree of variation along the national/supranational dimension. In addition, Model 3 - which includes both operationalizations of our gridlock covariates - confirms the results of the previous models. The effect of the relative gridlock overlap remains negative and statistically significant when measured on the left/right policy dimension. This effect is graphically displayed in Figure 5. The figure shows the percentage change in the hazard rate for increasing values of the relative gridlock overlap (Box-Steffensmeier and Jones, 2004: 60). Accordingly, the hazard rate of significant law revision decreases substantially the higher the overlap of the gridlock interval at  $t_0$  and the subsequent time points  $t_n$ . For instance, an increase of the gridlock overlap from 0% to 50% leads to a decrease of the hazard rate of more than 40%.<sup>12</sup> The included control variables yield consistently similar results across the three model specifications. As expected, parent acts enacted within a broad EU legislative action program are far less likely to be revised than ordinary EU laws. Substantively, they experience a 67% lower risk of being revised (Model 1). Conversely, the effect of sunset provisions is positive but insignificant. Additionally, complex parent acts have a higher probability of law revisions: the more major provisions they include, the higher the risk of revision. In substantial terms this effect can be translated into a 5% increase of the hazard rate for an increase of 10 major provisions (Model 1). The finding is justified by the fact that less complex laws include fewer provisions and touch on fewer policy issues, thus they offer fewer



opportunities and incentives for future law revision. Finally, we find positive effect for regulations, but it is statistically significant at 0.1% only in model 3.

*Figure 5 about here*

## Conclusion

The present article departs from the apparently simple observation that some EU laws are more enduring than others. According to our view, the durability of EU legal acts is associated with the over-time stability of legislative actors' preferences. The so-called "legislative drift" is a function of two factors at the European level: inter-temporal changes in the preference configuration of legislative actors and changes in the decision-making rules. While the former draws attention to the effects of the periodic turnover in the composition of EU main legislative bodies, the latter underscores the effect of treaty amendments to the voting and legislative procedures in use, which - on its turn - affects how legislative coalitions are formed. In order to study their simultaneous effect, we introduced a spatial model of EU law revision and test it on a new, unique dataset including information on the revision history of 158 major EU laws selected by Franchino (2007). The findings of our event history analysis reveal that there is evidence of a significant impact of legislative drift on the pace of EU policy revision, but only when actors' preferences are measured on the left-right dimension. The effect holds even after controlling for other law-specific factors, such as its complexity, its type (directive or regulation), the inclusion of sunset provisions and its strategic value (whether it was included in a general or action program). Our hazard model shows also that legislative durability is better explained by changes in the enacting coalitions than by political conditions at the moment of its adoption.

All in all, the present study contributes to existing research on the processes of policy change

in the EU, by focusing on the role of actors and institutions. While those works emphasizing the supranational component of the EU political system have mostly tended to attribute a general status quo bias to its law-making system, we provide evidence in favor of a more complex understanding of change and stability in EU policies. Firstly, EU legislative acts are not cast in stone but undergo a sometimes conspicuous number of changes in the course of their post-enactment life. Secondly, analyzing who sits around Brussels negotiating tables and how decisions are taken is consequential to understanding the processes of revisions and eventual repeal. More importantly, it is shown that additional actors are relevant only insofar as they affect the size of the gridlock interval.<sup>13</sup>

It is hoped that this study will stimulate further research on the topic of legislative and programmatic revision in the EU. For instance, our empirical large-N analysis is susceptible of modifications and extensions. To give but a few examples, our dichotomous distinction between major and minor policy revisions based on formal selection criteria may be too rough and hide relevant nuances. What is more, we did not distinguish between revisions aiming at consolidating a policy and those adopted with the purpose of changing its course. Future contributions should explore different operationalizations of our dependent variable. Another area which warrants further study is the concomitant role of the judiciary and the bureaucracy in changing legislation. Finally, this work could be replicated on a much larger set of acts, thereby improving the generalizability of the results.

Understanding the dynamics of legislative revision is by and large an unexplored theme in current EU legislative studies. Significant research efforts have been devoted to understanding why a legislative proposal wins enactment and the factors accounting for the duration of legislative processes. On the other hand little is known on the dynamics unfolding after a policy is enacted.

This work aims to fill this gap, arguing that the risk is that of reducing what is fundamentally a game conducted in different rounds to a one-shot game. It addresses a rather intuitive proposition, which nonetheless has never undergone empirical scrutiny in EU studies: legislative measures are more likely to be amended and/or repealed when the composition of the enacting and current legislative coalition differs markedly. The evidence in support of this hypothesis is an interesting discovery, especially for the political setting of the EU, which has many traits of a non-majoritarian institution. Political differences among legislative actors affect not only the likelihood of adoption for a new law, but also its durability after enactment.

## Notes

<sup>1</sup>According to Article 288 of the Treaty on the Functioning of the EU, secondary legislation comprises binding (regulations, directives and decisions) and non binding acts (recommendations and opinions). In the following, we will concentrate only on regulations and directives, which beyond having a legally binding effect, are also general in their application.

<sup>2</sup>Throughout the article, the terms “legislative revision” and “policy revision” will be used interchangeably. It must be noted that the object of the analysis is the timing of revisions or repeals of legislative texts. This is clearly a reductionist understanding of “policy revision”. Firstly, it is well known that even substantial alterations at the level of legislative output do not automatically translate into corresponding policy outcomes. Secondly, it is worth remembering that policy revision may result also from the European Court of Justice’s interpretation of the law, without its formal revision.

<sup>3</sup>The durability of legislation has implications also for compliance with EU policies. National implementers would not commit resources to comply if they expect a policy to be liable of modifications in the short/medium period

<sup>4</sup>Every time the debate has been fierce, since it has been strictly interrelated with the vertical distribution of competences within the EU, namely the decision between a Union of states leaving most political competences at the national level and more proactive EU supranational institutions.

<sup>5</sup>The post-decisional stage is the focus of scholars studying EU policy implementation. Even so, for the most part they take the legislative framework as fixed.

<sup>6</sup>In general the legislative gridlock interval under the consultation procedure with a unanimity vote is defined as the set  $[\min\{m_L, p_C\}, \max\{m_R, p_C\}]$ , i.e. the distance between the leftmost Council member or the Commission and the rightmost Council member or the Commission.

<sup>7</sup>This reasoning is probabilistic and holds true only if applied to a large number of cases, namely in situations when the status quo can be assumed to be randomly distributed across the policy space.

<sup>8</sup>Considering also technical legislation, admittedly a large section of EU legislative output, would not be justified given our interest in testing a political account of legislative revision.

<sup>9</sup>Franchino proceeded in three steps. Firstly, he collected a sample of fifty-eight books on EU law published between 1958 and 1999 and available from the Library of the London School of Economics and Political Science. On the second stage, he created a database which lists all Council directives and regulations cited within these books and the number of books citing each law. Finally, he selected all EU laws having at least ten citations. The final

dataset of major EU laws includes 158 major laws from 14 broad issue areas.

<sup>10</sup>Although the debate on which of the two dimensions is prevalent is still ongoing, academic works using the concept of EU political space generally agree that these are the two major dimensions of conflict in the EU (Gabel and Hix 2002; Hix, Noury and Roland 2005; Tsebelis and Garrett 2000).

<sup>11</sup>The model was also tested using two alternative operationalizations of this covariate (see the appendix). Firstly, we employed a simple dummy variable, set equal to 1 if the respective parent act includes a sunset provisions and 0 otherwise. Secondly, if a parent act includes a sunset provision, we created a dummy variable set equal to 1 for those years going from the enactment until the sunset provision expires, 0 otherwise. The estimated statistical models showed essentially identical results for our main covariates, despite the different operationalizations employed.

<sup>12</sup>Further tests of robustness of our findings are presented in the appendix. There, we estimated several additional models including different operationalizations of the sunset provision variable as well as additional control variables such as policy area dummies or variation in the number of EU member states due to the EU enlargements. These tests report essentially identical results, confirming the significant negative effect of our main explanatory variable, i.e the relative gridlock overlap, measured on the left/right policy dimension.

<sup>13</sup>Although it was not the focus of the article, it can be shown that the impact of an extension of QMV to new policy areas had a greater impact on the likelihood of legislative revision than the introduction of the co-decision procedure. This results from the fact that in the latter case, the position of the EU parliament has always fallen between the ideal points of other pivotal actors, either member state governments or the Commission.

## References

- Adler, E. Scott and John D. Wilkerson. 2013. *Congress and the Politics of Problem Solving*. Cambridge, MA: Cambridge University Press.
- Berry, Christopher R, Barry C Burden and William G Howell. 2009. "After Enactment: The Lives and Deaths of Federal Programs." *American Journal of Political Science* 54(1):1–17.
- Box-Steffensmeier, Janet M. and Bradford S. Jones. 2011. *Event history modeling: a guide for social scientists*. Cambridge ua: Cambridge University Press.
- Budge, Ian, Hans-Dieter Klingemann and Andrea Volkens. 2001. *Mapping Policy Preferences: Estimates for Parties, Electors, and Governments 1945-1998*. Pap/Cdr ed. Oxford University Press, USA.
- Crombez, Christophe. 1996. "Legislative Procedures in the European Community." *British Journal of Political Science* 26(2):199–228.
- Crombez, Christophe and Simon Hix. 2012. "Legislative Activity and Gridlock in the European Union." Working Paper.
- Franchino, Fabio. 2007. *The Powers of the Union: Delegation in the EU*. 1 ed. Cambridge: Cambridge University Press.
- Gabel, Matt and Simon Hix. 2002. "Defining the EU Political Space: An Empirical Study of the European Elections Manifestos, 1979-1999." *Comparative Political Studies* 35(8):934–964.
- Golub, Jonathan. 1999. "In the Shadow of the Vote? Decision Making in the European Community." *International Organization* 53(04):733–764.

- Golub, Jonathan. 2007. "Survival Analysis and European Union Decision-Making." *European Union Politics* 8(2):155–179.
- Golub, Jonathan. 2008. "The Study of Decision-Making Speed in the European Union Methods, Data and Theory." *European Union Politics* 9(1):167–179.
- Golub, Jonathan and Bernard Steunenberg. 2007. "How Time Affects EU Decision-Making." *European Union Politics* 8(4):555–566.
- Grambsch, Patricia M and Terry M Therneau. 1994. "Proportional Hazards Tests and Diagnostics Based on Weighted Residuals." *Biometrika* 81(3):515–526.
- Hix, Simon, Abdul Noury and Gérard Roland. 2005. "Power to the Parties: Cohesion and competition in the European Parliament, 1979-2001." *British Journal of Political Science* 35(2):209–234.
- Horn, Murray J. and Kenneth A. Shepsle. 1989. "Administrative Process and Organizational Form as Legislative Responses to Agency Costs." *Virginia Law Review* 75:499–509.
- Keele, Luke. 2010. "Proportionally Difficult: Testing for Nonproportional Hazards in Cox Models." *Political Analysis* 18(2):189–205.
- Klüver, Heike and Iñaki Sagarzazu. 2013. "Ideological congruency and decision-making speed: The effect of partisanship across European Union institutions." *European Union* .
- König, Thomas. 2007. "Divergence or convergence? From ever-growing to ever-slowng European legislative decision making." *European Journal of Political Research* 46(3):417–444.
- König, Thomas. 2008. "Analysing the Process of EU Legislative Decision-Making To Make a Long Story Short..." *European Union Politics* 9(1):145–165.

- König, Thomas and Bernd Luig. 2012. "Party ideology and legislative agendas: Estimating contextual policy positions for the study of EU decision-making." *European Union* 13(4):604–625.  
**URL:** <http://eup.sagepub.com/content/13/4/604>
- König, Thomas and Thomas Bräuninger. 2004. "Accession and Reform of the European Union: A Game-Theoretical Analysis of Eastern Enlargement and the Constitutional Reform." *European Union Politics* 5(4):419–439.
- Krehbiel, Keith. 1998. *Pivotal Politics: A Theory of U.S. Lawmaking*. University of Chicago Press.
- Lewis, David E. 2002. "The Politics of Agency Termination: Confronting the Myth of Agency Immortality." *The Journal of Politics* 64(1):89–107.
- Lowe, Will, Kenneth Benoit, Slava Mikhaylov and Michael Laver. 2011. "Scaling Policy Preferences from Coded Political Texts." *Legislative Studies Quarterly* 36(1):123–155.  
**URL:** <http://onlinelibrary.wiley.com/doi/10.1111/j.1939-9162.2010.00006.x/abstract>
- Maltzman, Forrest and Charles R. Shipan. 2008. "Change, Continuity, and the Evolution of the Law." *American Journal of Political Science* 52(2):252–267.
- Moe, Terry M. 1990. "Political Institutions: The Neglected Side of the Story." *Journal of Law, Economics and Organisation* 6:213–253.
- Moravcsik, Andrew. 1998. *The Choice for Europe: Social Purpose and State Power from Messina to Maastricht*. illustrated edition ed. Cornell Univ Pr.
- Nugent, Neill. 2006. *The Government and Politics of the European Union*. 6 ed. Duke University Press Books.



- Posner, Richard A. and William M. Landes. 1975. "The Independent Judiciary in an Interest Group Perspective." *Journal of Law and Economics* 18(3):875–901.
- Ragusa, Jordan Michael. 2010. "The Lifecycle of Public Policy: An Event History Analysis of Repeals to Landmark Legislative Enactments, 1951-2006." *American Politics Research* 38(6):1015–1051.
- Riker, William H. 1980. "Implications from the Disequilibrium of Majority Rule for the Study of Institutions." *The American Political Science Review* 74(2):432–446.
- Schulz, Heiner and Thomas König. 2000. "Institutional Reform and Decision-Making Efficiency in the European Union." *American Journal of Political Science* 44(4):653–666.
- Selck, Torsten J. 2006. *Preferences and Procedures: European Union Legislative Decision-Making*. 1 ed. Springer.
- Shepsle, Kenneth A. 1979. "Institutional Arrangements and Equilibrium in Multidimensional Voting Models." *American Journal of Political Science* 23(1):27–59.
- Steunenberg, Bernard and Torsten J. Selck. 2006. Testing procedural models of EU legislative decision-making. In *The European Union Decides*, ed. Robert Thomson, Frans N. Stokman, Christopher H. Achen and Thomas König. Cambridge: Cambridge University Press pp. 25–53.
- Toshkov, Dimitar. 2011. "Public Opinion and Policy Output in the European Union: A Lost Relationship." *European Union Politics* 12(2):169–191.
- Tsebelis, George and Geoffrey Garrett. 2000. "Legislative Politics in the European Union." *European Union Politics* 1(1):9–36.

- Tsebelis, George and Geoffrey Garrett. 2001. "The Institutional Foundations of Intergovernmentalism and Supranationalism in the European Union." *International Organization* 55(02):357–390.
- Tsebelis, George and Xenophon Yataganas. 2002. "Veto Players and Decision-making in the EU After Nice." *JCMS: Journal of Common Market Studies* 40(2):283–307.
- Volkens, Andrea, Michael D. McDonald and Hans-Dieter Klingemann. 2006. *Mapping policy preferences. 2. Estimates for parties, electors, and governments in Eastern Europe, European Union, and OECD 1990 - 2003*. Oxford: Oxford University Press.
- Warntjen, Andreas, Simon Hix and Christophe Crombez. 2008. "The party political make-up of EU legislative bodies." *Journal of European Public Policy* 15(8):1243–1253.
- Weiler, J. H. H. 1991. "The Transformation of Europe." *The Yale Law Journal* 100(8):2403–2483.

Table 1: Summary statistics

Variable	Mean	Std. Dev.	Min.	Max.
Relative gridlock overlap (left/right)	0.717	0.290	0	1
Relative gridlock overlap (national/supranational)	0.805	0.205	0.311	1
Gridlock at $t_0$ (left/right)	1.346	0.788	0.191	3.262
Gridlock at $t_0$ (national/supranational)	2.172	0.883	0.627	3.678
Action program (1=part of an action program)	0.339	0.473	0	1
Sunset provision (1=sunset provision)	0.029	0.169	0	1
Major provisions	35.959	37.279	3	345
Type of parent act (1=regulation)	0.307	0.462	0	1

Table 2: Regression table

	Model 1	Model 2	Model 3
Relative gridlock overlap (left/right)	-0.740** (0.363)		-1.213*** (0.455)
Gridlock at $t_0$ (left/right)	-0.142 (0.118)		-0.336 (0.216)
Relative gridlock overlap (national/supranational)		0.025 (0.528)	1.008 (0.638)
Gridlock at $t_0$ (national/supranational)		-0.073 (0.116)	0.243 (0.215)
Action program (1=part of an action program)	-1.121*** (0.337)	-1.089*** (0.337)	-1.169*** (0.340)
Sunset provision (1=sunset provision)	0.444 (0.378)	0.467 (0.376)	0.438 (0.379)
Major provisions	0.006*** (0.002)	0.005*** (0.002)	0.006*** (0.002)
Type of parent act (1=regulation)	0.340 (0.221)	0.361 (0.221)	0.369* (0.220)
Observations	2072	2072	2072
Parent acts	158	158	158
Revision acts	108	108	108
Log likelihood	-464.2	-466.5	-462.6
PH test	0.307	0.239	0.393

Standard errors in parentheses

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

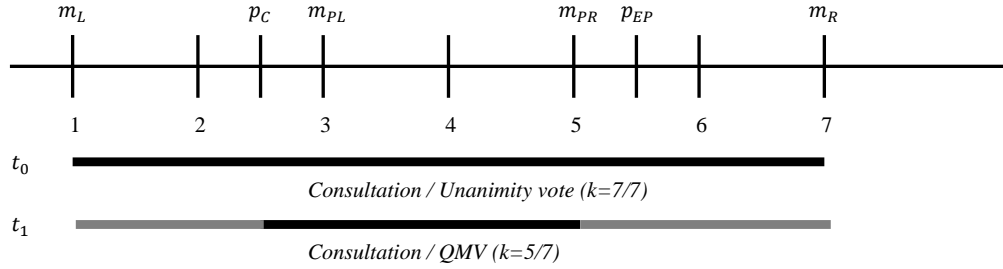


Figure 1: While  $m_L$  represents the most left government position in the Council,  $m_R$  represents the most right government position;  $m_{PL}$  and  $m_{PR}$  represent the pivotal actors under QMV; the position of the median voter in the European Parliament and the Commission is represented by  $p_{EP}$  and respectively  $p_C$ ; The black lines indicate the size and location of the related legislative gridlock interval at time  $t_0$  and  $t_1$  respectively while the gray lines indicated the change in the location of the gridlock interval at time  $t_0$  compared to  $t_1$ .

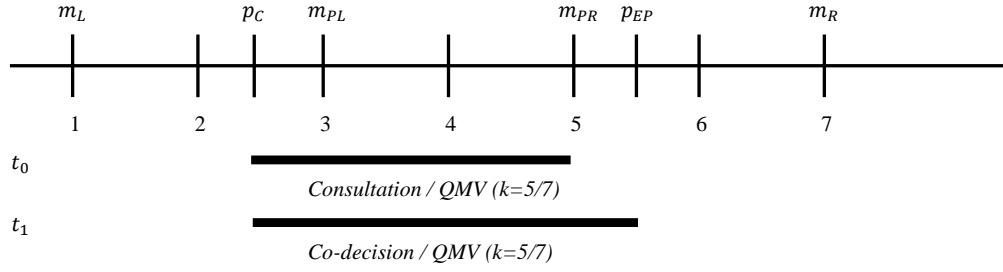


Figure 2: while  $m_L$  represents the most left government position in the Council,  $m_R$  represents the most right government position;  $m_{PL}$  and  $m_{PR}$  represent the pivotal actors under QMV; the position of the median voter in the European Parliament and the Commission is represented by  $p_{EP}$  and respectively  $p_C$ ; The black lines indicate the size and location of the related legislative gridlock interval at time  $t_0$  and  $t_1$ .

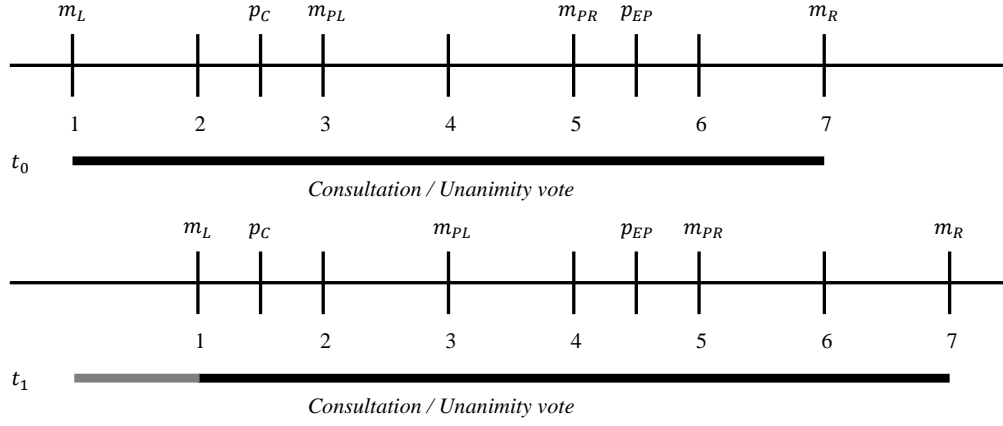


Figure 3: While  $m_L$  represents the most left government position in the Council,  $m_R$  represents the most right government position;  $m_{PL}$  and  $m_{PR}$  represent the pivotal actors under QMV; the position of the median voter in the European Parliament and the Commission is represented by  $p_{EP}$  and respectively  $p_C$ ; The black lines indicate the size and location of the related legislative gridlock interval at time  $t_0$  and  $t_1$  while the gray lines indicated the change in the location of the gridlock interval at time  $t_0$  compared to  $t_1$ .

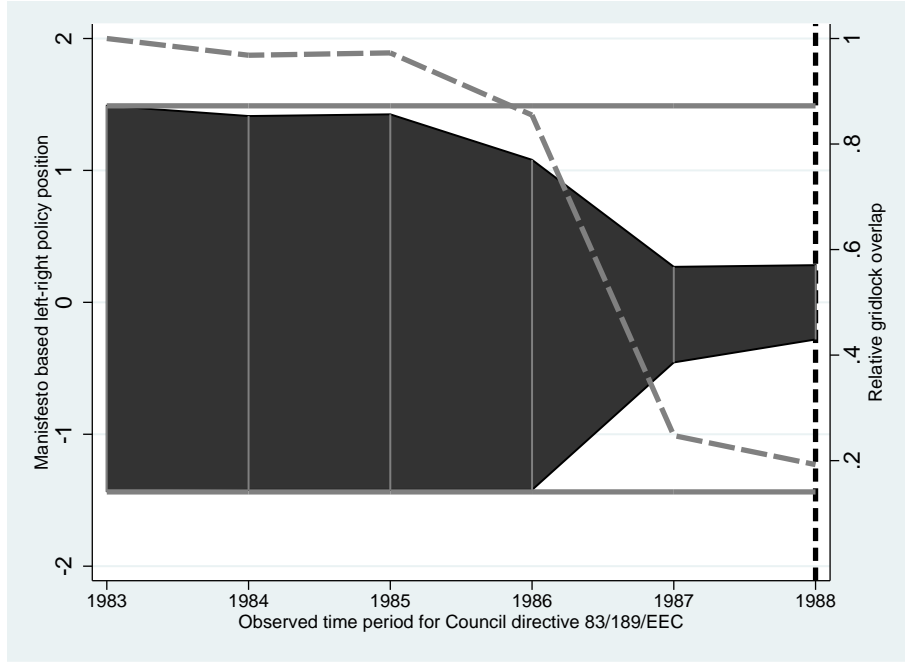


Figure 4: The black shaded area indicated the time varying legislative gridlock interval for the Council directive 83/189/EEC. While the two gray horizontal lines indicate the upper and lower boundaries of the gridlock interval at the time of enactment of the parent act, the gray vertical lines show the absolute overlap between the gridlock intervals at  $t_0$  and the observed time periods  $t_n$ . While the dashed line shows the relative overlap of the gridlock intervals the black, vertical, dashed line indicate the timing of the revision act.



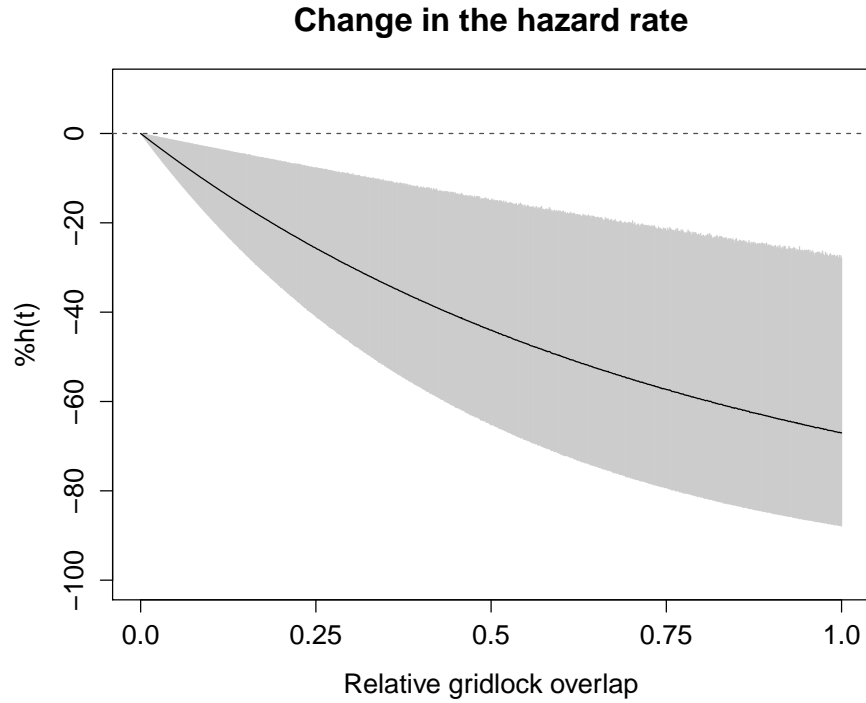


Figure 5: Effect of the relative gridlock overlap.

*Note:* The solid lines show the mean percentage change in hazard rate resulting from a change of the respective independent variable holding the other independent variables at their mean (continuous), respectively their median (categorical) values. The grey shaded areas indicate 95% confidence intervals based on 100,000 draws from the estimated parameters of the Cox model.

## Appendix

This appendix provides additional information in support of our empirical analysis. In section 1 we illustrate the time varying gridlock intervals on the two analyzed policy dimensions (left/right and national/supranational) for one arbitrarily chosen parent act of our sample, i.e. Council directive 64/222/EEC. In section 2 we provide detailed test statistic for the Therneau and Grambsch non-proportionality test (they apply to Model 3 in our paper). In sections 3 to 5, we tested alternative specifications of the main model presented in Table 2. The aim is to check for the robustness of our main model results. The data set and the Stata do file to replicate the analysis are available on the authors' websites.

## A Gridlock intervals for Council directive 64/222/EEC

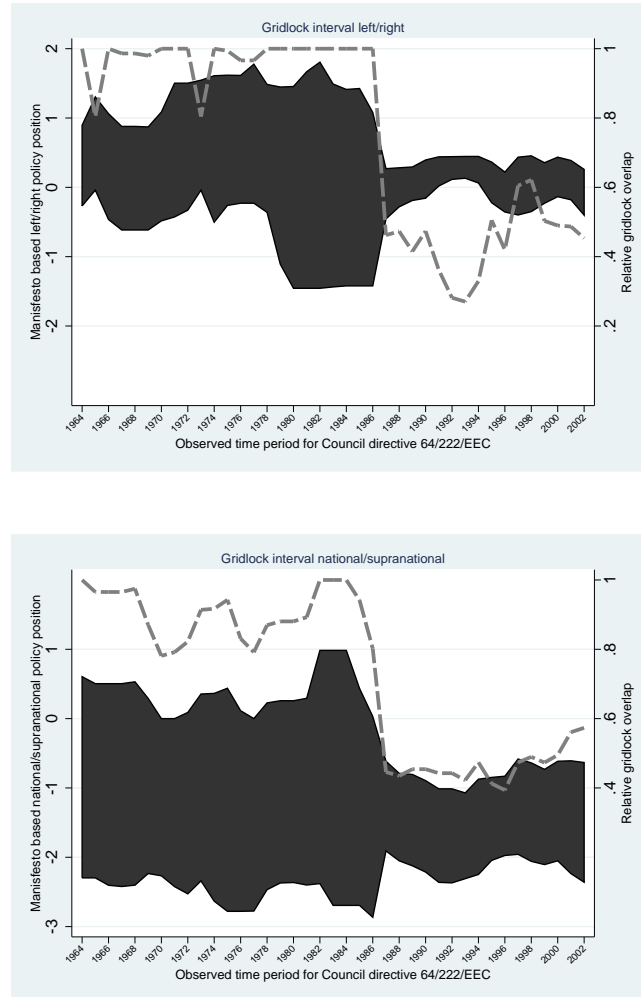


Figure 6: The black shaded area indicated the time varying legislative gridlock interval for the Council directive 64/222/EEC, while the dashed line shows the relative overlap of the gridlock intervals.

## B Test of the proportional-hazards assumption (Model 3)

Table 3 provides the test statistics for the applied test on the proportional hazard assumption for Model 3 of our paper. As indicated by the insignificant  $Prob > chi2$  values, none of our covariates violates the proportional hazard assumption.

Table 3: Test of the proportional hazard assumption (Model 3)

Variable	rho	chi2	df	$Prob > chi2$
Relative gridlock overlap (left/right)	-0.102	0.97	1	0.326
Relative gridlock overlap (national/supranational)	-0.011	0.01	1	0.918
Gridlock at $t_0$ (left/right)	0.025	0.06	1	0.814
Gridlock at $t_0$ (national/supranational)	0.047	0.23	1	0.633
Action program (1=part of an action program)	0.063	0.43	1	0.511
Sunset provision	0.082	0.79	1	0.374
Major provisions	-0.034	0.13	1	0.716
Type of parent act (1=regulation)	-0.126	1.71	1	0.191
Global test		9.27	8	0.393

## C Robustness check for sunset provisions

Table 4 displays the results of 3 three alternative specifications of model 3 in the article. In order to check for the robustness of our results, Model 1 excludes the sunset provision variable from our analysis, while Model 2 and 3 use alternative operationalizations of this variable. In contrast to the version presented in our main model, the sunset variable in Model 2 is simply coded as a dummy variable, set equal to a constant 1 if the parent act includes any sunset provisions. The sunset variable in Model 3 is coded as a time varying dummy covariate. Initially set equal to 1 if the respective parent act includes a sunset provision, the variable changes to 0 in the years following the expiring of the included sunset provision. Results of Table 4 are essentially identical to the results of the article.

Table 4: Robustness check for sunset provisions

	Model 4	Model 5	Model 6
Relative gridlock overlap (left/right)	-1.213*** (0.456)	-1.179*** (0.457)	-1.252*** (0.458)
Relative gridlock overlap (national/supranational)	1.000 (0.636)	1.020 (0.641)	1.001 (0.634)
Gridlock at $t_0$ (left/right)	-0.355* (0.214)	-0.320 (0.219)	-0.364* (0.213)
Gridlock at $t_0$ (national/supranational)	0.250 (0.214)	0.245 (0.216)	0.248 (0.214)
Action program (1=part of an action program)	-1.187*** (0.339)	-1.125*** (0.343)	-1.203*** (0.339)
Sunset provision (dummy variable)		0.312 (0.224)	
Sunset provision (time varying dummy)			-0.254 (0.335)
Major provisions	0.006*** (0.002)	0.006*** (0.002)	0.007*** (0.002)
Type of parent act (1=regulation)	0.355 (0.220)	0.385* (0.220)	0.333 (0.223)
Observations	2072	2072	2072
Parent acts	158	158	158
Revision act	108	108	108
Log likelihood	-463.2	-462.3	-462.9
PH test	0.351	0.086	0.428

Standard errors in parentheses

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ 

## D Robustness check for additional control variables

To provide a further test of robustness of our findings we re-estimated our original model (Model 3 in Table 2 of our paper) using two alternative control variables. In order to check whether the longevity of our parent acts affects the timing of their revision we tested the effect of the enactment year of each parent act (Model 7). In Model 8 we controlled for the increasing number of member states (due to EU enlargements) using 4 dummy variables (the reference category is EU6 applied to the time period between 1958 and 1973). Both models show essentially identical results compared to our original model, while the newly added control variables have no significant effect on the risk of law revision.

## **E Robustness check for policy areas**

Finally, we also included policy area dummies in order to control for policy area specific effects. We classified our 158 parent acts into 6 broad policy areas, namely Agriculture/Fishing (29), Environment (3), Economic affairs (35), Welfare (20), Financial affairs (20), Internal Market (51). Table 6 displays the results of our analysis using Internal Market as the reference category.

The results of Model 9 are essentially identical to those of our paper. In addition, we only find a significant positive effect for the Agriculture policy area. Compared to Internal Market-related acts, EU laws on Agriculture have a higher risk of major law revision.

Table 5: Robustness check for additional control variables (Year of enactment/EU members)

	Model 7	Model 8
Relative gridlock overlap (left/right)	-1.259*** (0.458)	-1.416*** (0.468)
Relative gridlock overlap (national/supranational)	0.979 (0.634)	1.030 (0.657)
Gridlock at $t_0$ (left/right)	-0.260 (0.241)	-0.210 (0.241)
Gridlock at $t_0$ (national/supranational)	0.186 (0.227)	0.149 (0.223)
Action program (1=part of an action program)	-1.184*** (0.341)	-1.199*** (0.340)
Sunset provision (1=sunset provision)	0.482 (0.384)	0.486 (0.385)
Major provisions	0.006*** (0.002)	0.006*** (0.002)
Type of parent act (1=regulation)	0.322 (0.231)	0.277 (0.233)
Year of enactment of parent act	-0.010 (0.014)	
EU 9		-0.416 (0.322)
EU 10		-0.247 (0.388)
EU 12		-0.559 (0.384)
EU 15		-0.514 (0.481)
Observations	2072	2072
Parent acts	158	158
Revision acts	108	108
Log likelihood	-462.4	-461.2
PH test	0.393	0.761

Standard errors in parentheses

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

Table 6: Robustness check for policy areas

	Model 9
Relative gridlock overlap (left/right)	-1.216*** (0.470)
Relative gridlock overlap (national/supranational)	0.980 (0.659)
Gridlock at $t_0$ (left/right)	-0.326 (0.237)
Gridlock at $t_0$ (national/supranational)	0.307 (0.228)
Action program (1=part of an action program)	-1.166*** (0.382)
Sunset provision (1=sunset provision)	0.409 (0.385)
Major provisions	0.008*** (0.002)
Type of parent act (1=regulation)	0.128 (0.267)
Agriculture/Fishing	1.132*** (0.339)
Environment	1.218 (0.805)
Economic affairs	0.233 (0.327)
Welfare	0.170 (0.394)
Financial affairs	0.401 (0.340)
Observations	2072
Parent acts	158
Revisions acts	108
Log likelihood	-455.0
PH test	0.588

Standard errors in parentheses

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$