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Can impact assessments tame legislative drift? Event history analysis of modifications of laws across Europe

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Abstract

Laws should endure and change only if assumed benefits don't materialize over time. Yet frequent modifications of laws shortly after their enactment distort this compromise between stability and change. While, Impact Assessments (IAs) are designed to improve the quality of legislation, we know little about IAs' impact on legal stability post-enactment. We fill this gap by analysing whether the ex-ante application of IAs influences the incidence and frequency of legal modifications. The analysis is based on a complete dataset of more than 2500 laws in France, Hungary, Italy, and the UK between 2006 and 2012. We apply a comparative event history analysis to account for both first and subsequent modifications. We find across-the-board that IAs are associated with legal stability. IAs are predicted to have the largest effect when political power changes both in terms of seat shares and party ideology, suggesting that IAs can, to some degree, tame legislative drift.

1 | INTRODUCTION

Legal stability is a value sought after; the longer a law is in effect in its original form, the greater predictability it confers on society (Maltzman & Shipan, 2008). Evidence-based policy-making should assist law-making, constrain politicization and ensure higher quality legislation that endures. Impact assessments (IAs) - the systematic, evidence-based appraisal of the effects of a proposed law on pre-defined stakeholders and policy areas – should thereby provide the technical means to increase legal stability.

While, the context-specific political and administrative factors surrounding the design, diffusion, and implementation of IAs received ample attention, little is known about the effects of IAs on legal modifications post enactment. Given that the ultimate test of IA effectiveness rests on the quality of laws passed, of which legal stability is a key component, this gap in the literature is worthy of further study. Hence, this article seeks to answer the question: Do IAs influence the incidence and frequency of the modifications of enacted laws? In other words, do IAs impact of on legislative stability.

To respond to this research question, we situate IAs and their effects on legal stability within the broader political and economic environment. Since any enacting coalition has an interest in the endurance of its legislative legacy, governments need to account for future political uncertainty both in terms of seat share changes in parliament and swings in ideology. We argue that IAs can serve as a lock-in strategy for current governments to secure their legislative legacy. By signaling de-politicized policymaking, IAs should serve as yet another mean for enacting coalitions to tie the hands of future governments and reduce the likelihood that enacted laws are repeatedly modified over time (De Figueiredo Jr, 2002; McCubbins et al., 1987). IAs should thus lead to legislative endurance, especially when ideology shifts and political power changes.

Our analysis is based on a complete dataset of primary legislation enacted in France, Hungary, Italy, and the United Kingdom from 2006 to 2012, consisting of over 2500 laws. Our unique, large-scale dataset allows for an in-depth analysis of the factors driving modifications of enacted laws. The selected countries have all embarked on New Public Management-type reforms to different degrees and implemented IAs in different scope and quality while, being part of the broader EU regulatory framework (Lianos et al., 2016). The diversity of countries in terms of administrative tradition and income levels is beneficial for our research design in as much as it supports broader conclusions likely valid across many contexts; while, it also presents challenges for averaging across apples and oranges. Hence, we will look at both average cross-country and country-wise effects (for the latter see the Appendices). In the cross-country analysis we include country fixed effects; in essence removing cross-country differences from the equation and concentrating on within country changes over time.

To study modification of laws over time, we employ comparative event history analysis (or survival analysis). While, this advanced quantitative method fits our research goals well, our claim for causality remains limited. We interpret our findings largely as associations between variables of interest, even if the time lag between independent and dependent variables do meet the basic criteria for Granger causality (Aalen et al., 2008, ch. 9).

We find that IAs are associated with legal stability across-the-board. However, the strength of this effect varies by country, calling for further research. IAs are predicted to have the largest effect when political power changes, both in terms of seat shares and party ideology. This suggests that the technical and consultative practices engrained in IAs can, to some degree, lock in political choices in the face of a shifting political landscape.

These findings contribute to the theoretical literature on IAs by shifting the locus of interest from IAs' ex-ante role to their ex-post impact on enacted laws. This shift sheds new light on prior literature on bureaucratic and political control mechanisms by allowing to study the effect of IAs in diverse contexts, including when they merely signal rational-technical efficiency of the law-making process. Empirically, we demonstrate the importance of studying the full universe of laws and IAs in addition to the rich prior literature relying on carefully selected case studies. As for our contribution to policy debates, we document the moderating effect of IAs on legislative drift which can support the extended use of IA-type tools especially in times of political instability and change.

2 | THEORY

2.1 | Impact assessments and legislative drift

Political delegation and the rise of evidence-based policy making were designed as a solution to the time inconsistency of politicians, signal credible commitment, increase public sector efficiency and improve decision-making quality (Boruvka & Perry, 2020; Cingolani & Fazekas, 2020; Majone, 1996, 1997). Ex-ante IAs, ex-post evaluations, and the consultation of experts and stakeholders are expected to work in conjunction to determine the risks, benefits and costs of policy options (Baldwin, 2010; OECD, 2019; Radaelli & Meuwese, 2009). Ideally, IAs should achieve legislative goals in an efficient way at the lowest cost with an inclusive stakeholder consultation process and a quantifiable assessment of the expected costs and benefits of proposed primary (or secondary) legislation (Listorti et al., 2020; Wegrich, 2011).

Hence, IAs should represent the primacy of rationality over biased political choices, while, keeping agency loss at bay (Radaelli, 2010). Yet, in practice, context-specific political and administrative factors continue to shape the implementation, design, and quality of national IAs (De Francesco, 2012; Dunlop et al., 2012; Staronova, 2010). Such cross-country variation is wide across the globe and reflected in our four-country sample (Lianos & Fazekas, 2014). All four countries under study, have implemented a systematic approach to IAs with government guidelines setting out and dedicated institutions safeguarding quality. However, in practice, the quality and scope of IAs differ considerably in our sample. The United Kingdom implemented one of the most comprehensive IA regimes worldwide. IAs are designed to strengthen economic competition and increase productivity through a reduction of regulatory "overburden" on the economy (OECD, 2010a, 2019). Italy and France, in contrast, apply IAs to reduce regulatory inflation, modernize an over-regulating state, tackle regulatory complexity, simplify policy making and reduce legal instability. Nonetheless, the overall content of IAs still varies significantly in both countries (, 2010b; OECD, 2013). Hungary is a negative outlier in most aspects with the quality review of IAs being conducted by a political body rather than an independent authority (OECD, 2014).

While, our sample shows considerable variation in IA quality and scope, IAs might nonetheless contribute to legal stability. Faced with electoral uncertainty, politicians, and bureaucrats are exposed to varying time horizons which increases the risk that bureaucrats shift loyalties once politicians leave office and implement legislation in the interest of a future government (McCubbins et al., 1987). Administrative procedures are thereby utilized by sitting governments to narrow the of scope of bureaucratic action and "tie the hands" of future governments (Baum et al., 2016; De Figueiredo Jr, 2002). Introducing administrative procedures that limit the future

politicization of laws also affects the legislative choices of current governments and, ideally, supports de-politicized law-making. IAs could therefore be seen as yet another lock-in strategy in the administrative toolbox of governments.

Even though IAs seem well suited to foster evidence-based law-making while, securing a government's legislative legacy, previous studies raise doubts about the ability of IAs to serve as a bureaucratic and political control mechanism (Caroll, 2010; Radaelli, 2010; Wegrich, 2011). Bureaucrats can strategically utilize the increasing complexity of these processes to achieve their own policy goals (Carrigan & Shapiro, 2017). While, politicians may perceive IAs as a necessary formality and ignore, or "mute", evidence-based outcomes for legislative proposals (Caroll, 2010; Dunlop et al., 2012). Even if politicians take the outcome of IAs seriously, they may do so to justify rather than inform policy choices, especially if IAs are utilized as means of communication between politicians, parliaments and major stakeholders (Carrigan & Shapiro, 2017; Dunlop et al., 2012; Hertin et al., 2009; Radaelli, 2005). One might be inclined to conclude that IAs seem ill-suited to control bureaucrats and de-politicize law-making.

And yet, even if IAs differ in the degree to which they can reduce agency loss, little is known about the effect of IAs on the stability of primary laws post-enactment. After all, Horn and Shepsle (1989) argued that there is a trade-off between bureaucratic and legislative drift. Existing evidence on the lack of bureaucratic control before enactment does therefore not necessarily imply a lack of control on future legislative drift. Even if IAs merely *signal* de-politicized law-making, they might still restrain post-enactment coalitions from (repeated) tinkering with enacted laws.

2.2 | Legal stability and change

Legal stability displays positive economic and political traits. Ample evidence suggests a negative effect of a volatile legal environment on economic growth (Aizenman & Marion, 1993; Brunetti, 1998; Fatás & Mihov, 2013). Simultaneously, the political influence of laws depends on their endurance since it represents stakeholder preferences at the time of enactment (Maltzman & Shipan, 2008). For governments to leave a lasting legacy, laws need to endure.

Despite these benefits, laws have to be open to change; either to keep up with technical innovation or to account for societal changes. Laws require modifications if they are found to be inefficient, increase societal costs or deviate from the intended goals of the enacting coalition. Any legal framework is therefore based on a compromise between stability and change.

Yet legal amendments shortly after enactment as well as frequent modifications of the same law over time undermine this compromise between stability and change. Rather than being corrective, frequent, and short-term changes increase legal uncertainty, reduce societal welfare, and undermine the original preferences of stakeholders at the time of enactment. While, existing research focuses predominantly on legislative creation, output, and termination, evidence about the duration of laws still remains scarce and heavily US-centred.

Several studies from the US have shown that the presence of a powerful government leads to fewer legal modifications (Ragusa, 2010; Ragusa & Birkhead, 2015). Focusing purely on the time of enactment, a unified government will be able to draft more coherent laws with more flexibility for the executive and thus allow a law to adjust to changing circumstances which, in turn, should lead to legal stability (Maltzman & Shipan, 2008). Yet this effect is likely time-dependent and holds only for the first few years after enactment (Berry et al., 2010; Corder, 2004). Afterwards, this effect reverses and the long-term chances of a law being

modified increases if the law was passed under a unified rather than a divided government (Ragusa, 2010).

Other studies have emphasized the importance of ideological swings. Berry et al. (2010) showed that changes in government (partisan) ideology, rather than government power, increases the risk of modifications. Borghetto and Mäder (2014) confirmed the effect of ideological changes on legal modifications at the EU level. Taken together, the modification of laws seems contingent upon changes in government ideology and power.

Since an enacting coalition cannot lock-in laws indefinitely, legal instability becomes a function of legislative drift; that is, time-varying ideological swings and changes in political power (Horn & Shepsle, 1989). We argue that IAs have a particular function in the context of legislative drift; their broad, transparent and technical design should limit the influence of special interest politics either by effectively rationalizing lawmaking or by merely *signaling* a depoliticized and technical process. Either way, IAs are expected to decrease the probability that a new political majority will change already enacted laws.

Hypothesis 1. *The presence of Impact Assessment is expected to reduce the likelihood of modifying already enacted laws.*

Moreover, as Thom and An (2017) argue, the durability of laws generally depend on their ultimate success. This argument seems also plausible in the context of IAs. While, the technical nature of IAs should lead to fewer legal modifications, laws might still be changed if the expected effect of a law does not materialize post-enactment. The prescription of ex-post evaluations in many IAs can serve as a "backstop" that signals to policy makers if the outcome of a law deviates too much from initial expectations. However, multiple modifications of the same law over time contradict the "backstop" logic and point at legislative drift. By implication, IAs should diminish the likelihood of multiple modifications post enactment.

Hypothesis 2. *The presence of Impact Assessment is expected to reduce the likelihood of modifying laws multiple times.*

2.3 | Impact assessments and political uncertainty

Law-making in parliamentary democracies remains highly discriminatory against legislative minorities. As long as governments control a (stable) legislative majority, they can dictate the legislative agenda and opposition bills rarely succeed (Bräuninger et al., 2016). All four countries in our sample consist of a parliamentary system in which the executive has strong agenda-setting powers. These governments have procedural tools at their disposal that can limit parliamentary deliberation and the possibility for the opposition to amend legislative proposals before their enactment (Rasch & Tsebelis, 2011; Tsebelis, 2000). Parliamentary committees, that are designed as a legislative control mechanism to scrutinize and amend bills, tend to be a policing mechanism for intra-governmental conflict rather than an opportunity for opposition parties to influence legislation (Bräuninger et al., 2016; Laver, 2006; Martin & Vanberg, 2004, 2005).

Such procedures provide governments the means to establish a legislative legacy. Yet its endurance rests on maintaining a (stable) parliamentary majority over time and such a majority cannot be taken for granted. All the countries in our sample experienced government changes

between 2006 and 2012. The discriminatory legislative procedures that allow governments to pass laws, therefore simultaneously threaten the endurance of their legislative legacy.

While, any government "inherits" a legislative past, ideological changes result in different distributional interests. Retaining electoral rewards often requires a break with this "inherited" past (Berry et al., 2010; Schnose, 2017). Modifications of laws should thereby be more likely when ideology swings. Since left-wing parties tend to display higher policy activism, this should also hold for amendments to already enacted laws (Jakobsen & Mortensen, 2015).

Political uncertainty in terms of seat share changes and ideological swings should ultimately motivate governments to limit their current *maneuver space* in order to the tie the hands of future governments (Baum et al., 2016; Berliner & Erlich, 2015; De Figueiredo Jr, 2002; McCubbins et al., 1987). IAs can thereby be utilized as an administrative tool to protect a government's legislative legacy in the context of future political uncertainty. In other words, IAs serve as lock-in mechanism against legislative drift and safeguard laws from changes in government ideology and power, which makes subsequent legal changes more costly.

> **Hypothesis 3.** *The presence of Impact Assessment is expected to reduce the likelihood of repeatedly modifying already enacted laws especially when political power shifts in terms of seat share changes and ideology.*

2.4 | Further determinants of legal modifications

As we argued before, IAs operate in a wider political and economic context. We discuss such additional factors in detail to motivate their inclusion in the regression models.

First, ideological conflict within governments at the time of enactment might influence legal modifications. Since the complexity of law-making requires the delegation to ministers, (coalition) governments are continuously exposed to the possibility that individual ministers will undermine a coalition compromise in favor of their party's preferences. Such *ministerial drift* is a continuous threat given the need for parties to distinguish themselves from their coalition partners to capture electoral rewards. A variety of legislative control mechanism exists – ranging from inner cabinets and junior ministers to parliamentary committees – that should "keep tabs" on individual ministers and correct ministerial drift before a law is passed (Martin & Vanberg, 2005; Thies, 2001). With higher levels of government (ideological) conflict, fewer bills pass; yet, if they pass, they should have received stronger committee scrutiny (Bräuninger et al., 2016). If legislative control mechanisms are strong enough, then increased parliamentary scrutiny before enactment should lead to fewer modifications post-enactment (Martin & Vanberg, 2020).

Second, we look at the process of passing the law through parliament. We argue that the timing of discussing and enacting a law should play a role. The longer a law is in parliament before enactment the higher the level of deliberation among diverse stakeholders. This suggests that the longer a law is in parliament before enactment the lower the likelihood of future modifications. However, a lengthy parliamentary procedure may also signal that the law itself is contested hence increasing the likelihood of modification post enactment.

Third, laws vary in their complexity which should influence the likelihood of amendments. The longer a law is, the more provisions it entails. This reduces discretion post-enactment and makes it more likely that a law will be amended to account for time-varying policy preferences (Huber & Shipan, 2002; Jakobsen & Mortensen, 2015). Moreover, longer laws may tackle more

policy areas which exposes larger sections of the law to such time-varying policy preferences (Maltzman & Shipan, 2008).

Lastly, we consider economic conditions, especially since our analysis spans through the 2008 financial crisis. The literature suggests a positive effect of growth on legislative durability. Focusing on federal programs, Berry et al. (2010) finds that good economic performance increases tax revenues and spending abilities which should lead to durability rather than modifications or termination. Frendreis et al. (2001) argue that economic crises trigger ad-hoc policy activism, with limited policy deliberation, to improve economic performance. This, in turn, should increase the likelihood of post-enactment modifications either because not all measures achieved their intended goals or because many measures target short-term goals with reduced relevance once economic performance improves.

3 | METHODOLOGY AND DATA

3.1 | Data

The data on legislative procedures, laws and modifications in the four countries has been directly obtained from official parliamentary websites (Table 1). For France, Hungary, and the UK, we directly scraped the parliamentary websites, which is collecting the text appearing on those websites in structured as well as unstructured forms with the help of computer algorithms. The downloaded data was parsed into a single structured database combining information from all sources making unified variables on where it was warranted by the similarities in the source information.[1] In the case of Italy, this laborious task of mapping, scraping and structuring legislative data was done by the Italian Law-Making Archive project from which we could simply download the structured data in a single file (Borghetto et al., 2012).[2] Cilmaollecting data on IA publication has followed a similar procedure, as in most cases linked IAs can be found on the page of the published laws or draft bills. Our data collection was also aided by data mapping done by Lianos et al. (2016).

3.2 | Methods and variables

Rather than looking for the factors that influence the general probability of law modifications, we are interested in the drivers that effect the hazard of modification which a law faces throughout its lifecycle. We therefore use Cox proportional hazards models (Aalen et al., 2008). These models incorporate a range of control variables whose coefficients shall be interpreted as

TABLE 1 Sources of legislative data by country, as of 2015

Country	Sources
France	http://www.legifrance.gouv.fr/initRechTexte.do
Hungary	http://www.parlament.hu/iromanyok-lekerdezese, http://www.parlament.hu/iromanyok-elozo-ciklusbeli-adatai
Italy	https://www.normattiva.it/
UK	http://www.legislation.gov.uk/, http://services.parliament.uk/bills/

TABLE 2 Overview of variables used in the analysis, month-law level dataset (N = 230,412)

Variable name	Variable role	Values	Mean
Modifications of laws, first modifications	Dependent var.	0 = no modification, 1 = modification	0.08
Modifications of laws, multiple modifications	Dependent var.	0 = no modification, 1 = modification	0.24
Impact Assessment (IA)	Main independent var. of interest	0 = no IA, 1 = IA	0.19
Share of largest governing party in parliament at enactment	Independent var.	% share of seats	51.21
Government power change	Independent var.	% share of seats change	−0.45
Government ideology change	Independent var.	Abs. left–right score change	0.37
Government ideology change: To left	Independent var.	0 = otherwise, 1 = government ideology change to left (score diff. < 0)	0.41
Government ideology change: To right	Independent var.	0 = otherwise, 1 = government ideology change to right (score diff. > 0)	0.31
Partisanship change	Independent var.	0 = no change, 1 = change	0.38
Government ideology conflict	Independent var.	Abs. left–right score difference within gov't	0.89
Coalition government	Independent var.	0 = no coalition, 1 = coalition	0.83
Log time in parliament	Independent var.	Log(number of days)	4.37
Word count of the law (1000s)	Independent var.	Number of words	9.27
Real quarterly GDP growth	Independent var.	% change compared to same quarter in previous year	0.19

the average change of law modification hazards compared to the baseline average time-dependent hazard (for overview of variables used see Table 2). In line with our hypotheses, the analysis starts by looking at the first modification, then it examines factors influencing the hazard of modification when all amendments are considered.

For the first purpose of the analysis the data is organized the following way: Each law is observed for a series of months beginning in the month it was published and ending in December 2012 when our observation period ends. To analyze both first and multiple modifications we created two dependent variables. The first one is initially set to zero and stays zero until the law is first modified. At the time of transition, the law takes on a value of 1 and is dropped from the sample thereafter. This is used in Table 3 and Table B1 as well as in Figure 1. The second formulation of the dependent variable equals 1 every month the law is changed, otherwise it is 0. This variant is used in Table C1 and Figure 2. In this setup all the laws are censored from the right, they are only dropped from the sample in December 2012, when they were last observed. We run models both on the pooled sample including country fixed effects and models by country in order to both explore the average effect across the whole sample and to highlight the heterogeneous effects by country.

The main independent variable of interest is whether the enacted law was subject to a prior IA or not. As the exact meaning of what an IA is depends to a large degree on the country, while, it can also differ case by case (Lianos & Fazekas, 2014); our simple yes-no formulation of

TABLE 3 Event history analysis of first modifications of laws, 2006–2012, pooled analysis

Variables/model	Model 1	Model 2	Model 3	Model 4	Model 5
Impact Assessment (IA)	0.581***	0.638***	0.683**	0.662***	0.648***
	(0.0770)	(0.0930)	(0.102)	(0.0988)	(0.0960)
Share of largest gov. party in parl. at publication		1.041***	1.053***	1.058***	1.015
		(0.0121)	(0.0124)	(0.0128)	(0.0194)
Government power change		1.021**	1.022**	1.030***	0.990
		(0.0105)	(0.0106)	(0.0111)	(0.0170)
Government ideology change(cat.)					
BASELINE: no change					
To the left		1.127	1.207	1.126	
		(0.195)	(0.217)	(0.205)	
To the right		1.511*	1.374	1.238	
		(0.333)	(0.309)	(0.287)	
Government ideology change(cont.)					1.157**
					(0.0834)
Government ideology change (cont., squared)					1.041***
					(0.0155)
Government ideological conflict (abs.)		0.957	1.020	1.091	0.999
		(0.088)	(0.094)	(0.108)	(0.095)
Coalition government					
BASELINE: No					
Yes		0.830	0.774*	0.779*	0.768*
		(0.119)	(0.113)	(0.114)	(0.114)
Log time in parl.			1.094	1.096*	1.096*
			(0.0610)	(0.0606)	(0.0602)
Word count of the law (1000s)			1.008***	1.008***	1.008***
			(0.0015)	(0.0014)	(0.0014)
Real quarterly GDP growth				0.956**	0.954***
				(0.0168)	(0.0168)
Country					
BASELINE: UK					
France	0.230***	0.181***	0.367***	0.349***	0.659
	(0.0295)	(0.0535)	(0.113)	(0.110)	(0.218)
Hungary	0.321***	0.150***	0.183***	0.164***	0.246***
	(0.0362)	(0.0387)	(0.0516)	(0.0470)	(0.0672)
Italy	0.304***	0.260***	0.386***	0.385***	0.506***
	(0.0403)	(0.0647)	(0.103)	(0.104)	(0.118)
Number of observations	90,780	85,325	69,991	69,991	69,991

(Continues)

TABLE 3 (Continued)

Variables/model	Model 1	Model 2	Model 3	Model 4	Model 5
Number of laws	2660	2565	2185	2185	2185
Number of modifications	591	571	543	543	543
Pseudo R^2	0.0137	0.0207	0.0297	0.0304	0.0309

Note: Coefficients reported as hazard ratios; Robust standard errors in parentheses; All models were estimated with the stcox routine in STATA 12 using the Breslow method for ties.

[***]$p < .01$,

[**]$p < .05$,

[*]$p < .1$.

IA treatment averages over different qualities of IA. Hence, all our findings should be interpreted in this frame, pooling together very simple as well as advanced IAs to estimate an average effect. The rate of IA use, at least according to public records, also differs per country, ranging from 2.5% in Hungary to 48.1% in the UK. This difference across countries and the generally low level of IA publication is surprising on its own considering that IA is mandatory or at least recommended for most laws in the four countries (OECD, 2010a, 2010b, 2013, 2014, 2019).

While, we consider the full universe of enacted and modified laws underpinning generalizability of our findings, we cannot claim to have identified causal effects because the assignment of IAs to laws is non-random. Instead, we identify conditional probabilities while, controlling for a host of crucial factors for determining the hazard of modifications. We draw on theoretical arguments as well as prior empirical research in interpreting the effects identified in the models and argue for the plausibility of the impact mechanisms. Nevertheless, the time lag between independent and dependent variables do meet the basic criteria for Granger causality (Aalen et al., 2008, ch. 9).

Regarding the set of independent variables characterizing political conditions, first, we look at government power which is measured by the share of seats occupied by the largest government party in the parliament. A higher proportion of the seats should make it easier for a government to pass new legislation and change existing ones. Second, to account for the change in government power, we add a variable that captures how the share of seats in the parliament changed each month compared to the time the law was enacted. Third, we capture government ideology and its change using a range of variables. Our main measure of the change in government ideology (considering the largest governing party in coalitions) is based on the ParlGov database left–right scale for the cabinet (Döring & Manow, 2021). This variable is calculated as the absolute difference between the left–right scale value of the government at the time of enacting the law compared to the current month (positive values mean movements from left to right). We also consider this variable as a categorical variable (to the left, no change, to the right) with any shifts in ideology considered a change. We also use a simpler measure of government ideology change (only for H3): government partisanship change which lacks directionality, that is, it only marks (=1) if the government of the current month has a different left–right leaning compared to the government of the month of enacting the law. Fourth, we measure government ideological conflict as a continuous variable that takes the distance between the ideological score of the largest government party and the mean ideology values of all other remaining coalition partners based again on the ParlGov Database. Lastly, we code whether the government at the time of passing the law is a coalition government or not as a binary variable that takes on the value of 0 if a coalition government is absent and 1 if it is present.

Regarding the set of legislative variables, we capture the complexity of laws by the number of words the legislation contains (in thousands) and the length of legislative work through the natural logarithm of the number of days a bill is the parliament for debate, before its enactment. We control for the broader macroeconomic environment via quarterly per capita real GDP growth suggesting that economic volatility, especially economic decline might make it easier to revise laws to adapt the legal framework to unwanted circumstances.

4 | RESULTS

4.1 | IA and the first modification (H1)

Several studies have shown that laws face the highest risk of modification in the first 10 years after enactment (Berry et al., 2010; Borghetto & Mäder, 2014; Corder, 2004; Ragusa, 2010). Yet, to the best of our knowledge, no studies have tested this claim in Europe on the country-level for first and repeated modifications. Thus, to gain insight into the variability for the first modification of laws in each of our four countries, we start with a simple bivariate set-up: plotting hazards by month. Figure 1 depicts the smoothed Kaplan–Meier estimates of hazard by country. The functions can be interpreted as the probability that a law will be modified in a given month, provided that it has not been modified yet.

First, modification hazard is largely downward sloping in all four countries albeit at varying rates. It appears that laws face the highest hazard of modification within the initial 20–30 months of their publication in every country, then hazards decline steeply to flatten out at
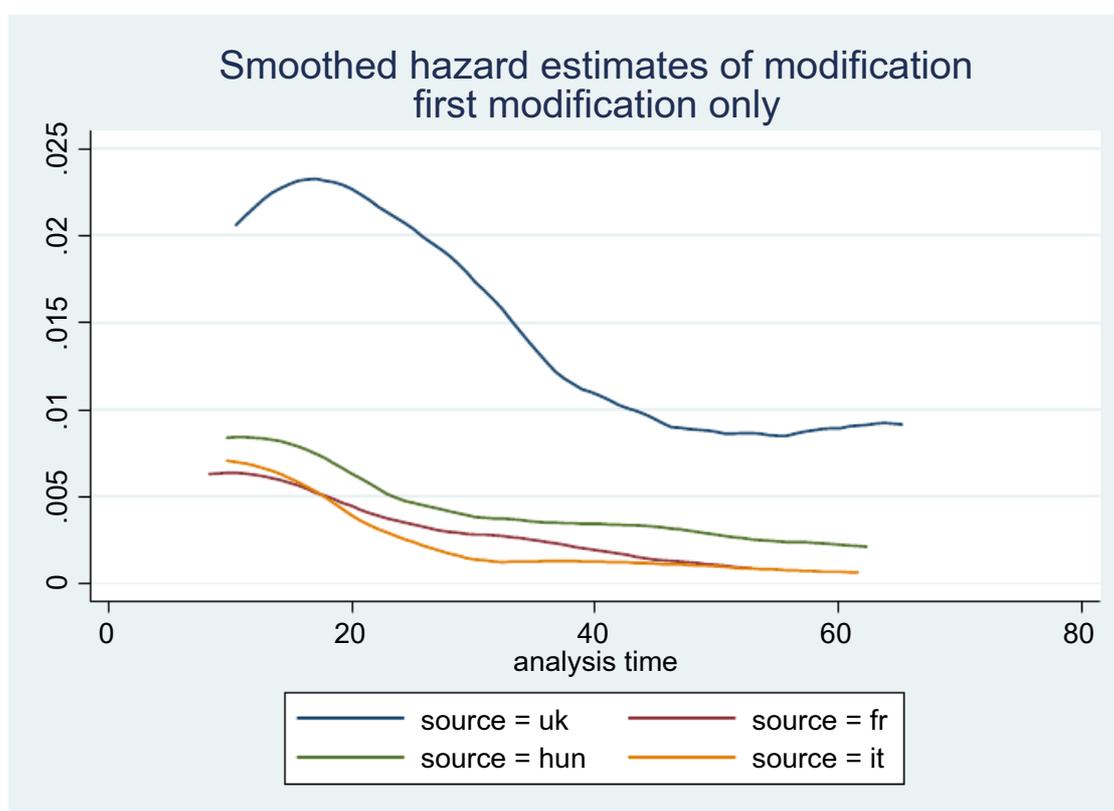

FIGURE 1 Smoothed hazard estimates of modification: First modification, 2006–2012, France, Hungary, Italy, and the UK

the right end of the scale. Second, the acts produced in the UK face over twice as high risk of first modification in any given month as in the other countries (Moran, 2003). Less pronounced, but still noticeable, the hazard estimates are also slightly higher for Hungary than France or Italy. Such similarities and differences imply that our country-wise regressions are comparable as long as the different country average hazards are taken into account which his warranted by the regressions run either including a country fixed effect or separately country by country. Third, compared to existing research on legal modifications in the US, laws in our four countries seem to enter the "institutionalised" stage sooner than in the US. After roughly 30 months, modifications are becoming less likely, compared to 10 years in the US.

We investigate the impact of IAs on the pooled sample of all four countries; including country fixed effects (i.e. allowing different intercepts) but assuming the same coefficient across the whole sample (Appendix A shows disaggregate findings by country, allowing for regression coefficients to differ by country). Table 3 shows the results of our regression models across all countries for IA while, controlling for political, legislative as well as economic factors. The model parameters are reported as hazard ratios which implies that coefficients with hazard ratios lower than one can be interpreted a decrease in the likelihood of subsequent modifications while, coefficients greater than one correspond to an increase. The successive models include additional control variables on top of country fixed effects.

In all our pooled models, we find an unequivocal, substantial and statistically significant impact of IA on legal stability, whereby the presence of an ex-ante IA lowers the risk of the first modification subsequently. Largely independent of the set of control variables, the hazard ratio effect size ranges between 0.58 and 0.68, that is having conducted a IA decreases the rate of modification by 42%–32% (1–0.58 and 1–0.68) compared to the baseline. These results lend strong support for H1. Nevertheless, there is substantial cross-country variation in the effect suggesting that not all IAs are equally impactful. Interestingly IAs in both Italy and France have a coefficient which is significant and close to the average cross-country effect. Both countries have medium intensity of IA use (about 25%–35% of observations) and moderately developed IA institutional framework (Lianos et al., 2016) which may explain their results.

Regarding control variables, country FE effects reflect what has been shown by Figure 1, namely that the UK has a far higher modification risk than the three other countries. While, Hungary displays a somewhat higher risk than France and Italy. Political power distribution appears to play an important role in determining the endurance of laws, both at the outset of a law and throughout its life-cycle. In the pooled analysis, stronger majorities tend to make less durable laws, albeit this effect seems to be largely driven by Italy and the UK. While, changing the share of the governing party increase the likelihood of modification (i.e. increase in the government's seat share is associated with higher modification hazard). When the, arguably, simple left–right leaning of the government and the change thereof is considered, we find that in particular the left to right shift in government is associated with a higher hazard ratio. Although, it must be noted that the effect is particularly pronounced in Hungary (Dávid-Barrett & Fazekas, 2019) and we observed no such shift in France in 2006–2012. Within government ideological conflict was found to have little to no effect on modifications, that is its coefficient falls very close to 1 and it is always insignificant. Regarding the coalition government dummy, we found that lowers the likelihood of modification, however it is only significant at the 10% level.

Characteristics of the law itself are also strong predictors of modification hazard. The amount of time spent in parliament has a positive effect on modification risk albeit country-wise effects vary. Similarly, the complexity of the legal text (i.e. its word count) contributes to
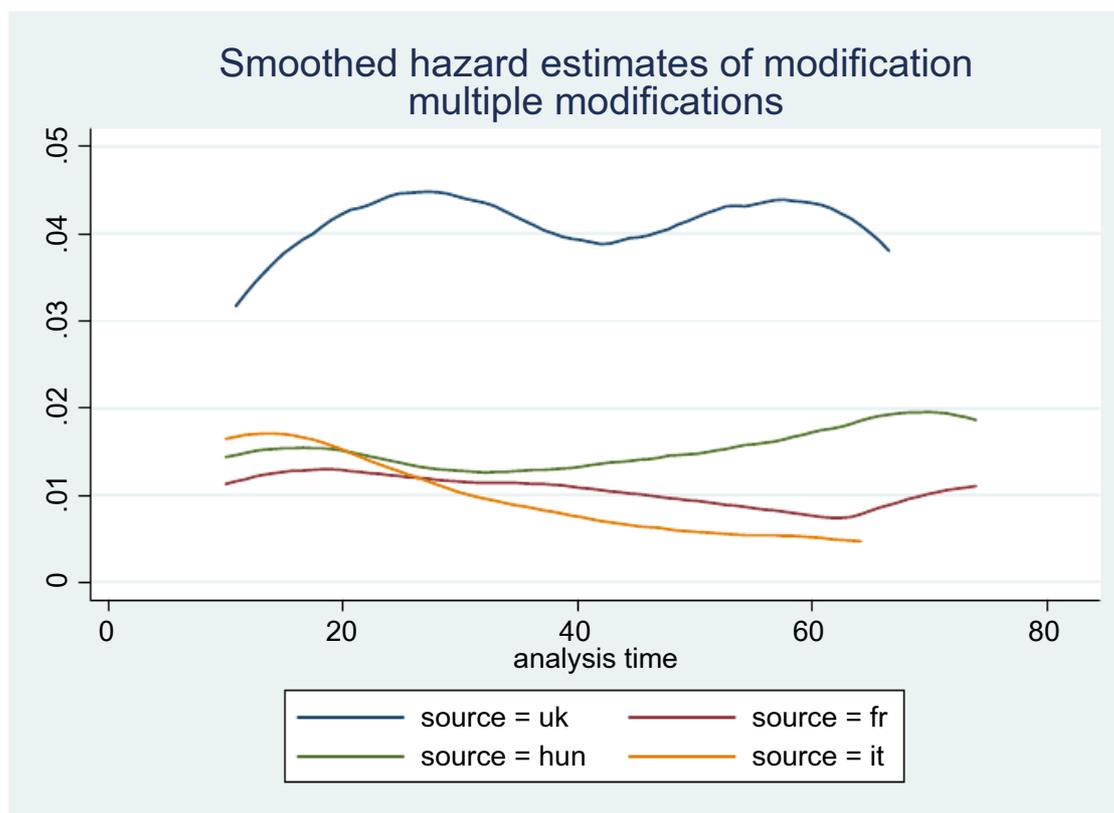
FIGURE 2 Smoothed hazard estimates of modification: Repeated modifications, 2006–2012, France, Hungary, Italy, and the UK

higher hazard ratios both in the pooled analysis and in each country. When it comes to economic environment, we find a largely negative relationship, that is when quarterly GDP growth is high the risk of modification drops, even though the relationship is not always significant on the country-wise samples (Appendix B).

4.2 | IA and repeated modifications (H2)

To gain an insight into the variability in repeated modifications of laws in each country, we first have a look at it in a simple bivariate set-up: plotting hazards by month. Figure 2 depicts the smoothed Kaplan–Meier estimates of hazard by country. The functions can be interpreted as the probability that a law will be modified in a given month.

First, the acts produced in the UK face over twice as high risk of modification in any given month as in the other countries (Moran, 2003). Less pronounced, but still noticeable, the hazard estimates are also slightly higher for Hungary, especially towards the end of the period, than France or Italy (note, Hungary had a change of government in 2010 which lead to a flurry of legislative changes). Second, modification hazards are largely flat in all four countries albeit at varying rates. Such similarities and differences imply again that our country-wise as well as pooled country-fixed effects regressions are comparable.

Table 4 shows the results of our regression models on repeated modifications across all countries for IA while, controlling for political, legislative as well as economic factors. The model parameters are again reported as hazard ratios and successive models include additional control variables on top of country fixed effects like in the preceding section.

TABLE 4 Event history analysis of modifications of laws, multiple modifications, 2006–2012, pooled analysis

Variables/model	Model 1	Model 2	Model 3	Model 4	Model 5
Impact Assessment (IA)	0.505***	0.578***	0.722**	0.713**	0.697**
	(0.0811)	(0.0963)	(0.115)	(0.113)	(0.110)
Share of largest gov. party in parl. at publication		1.062***	1.072***	1.076***	1.028
		(0.0134)	(0.0134)	(0.0137)	(0.0223)
Government power change		1.024***	1.030***	1.035***	0.992
		(0.0086)	(0.0087)	(0.0089)	(0.0177)
Government ideology change(cat.)					
BASELINE: no change					
To the left		1.237	1.304*	1.247	
		(0.183)	(0.191)	(0.188)	
To the right		1.521*	1.452*	1.366	
		(0.328)	(0.297)	(0.286)	
Government ideology change(cont.)					1.179**
					(0.0976)
Government ideology change (cont., squared)					1.040***
					(0.0123)
Government ideological conflict (abs.)		0.965	0.948	1.005	0.938
		(0.0645)	(0.0606)	(0.0675)	(0.0723)
Coalition government					
BASELINE: No					
Yes		0.925	0.892	0.884	0.885
		(0.148)	(0.153)	(0.150)	(0.151)
Log time in parl.			1.080	1.079	1.080
			(0.0659)	(0.0656)	(0.0653)
Word count of the law (1000s)			1.009***	1.009***	1.009***
			(0.0011)	(0.0011)	(0.0011)
Real quarterly GDP growth				0.958***	0.957***
				(0.0110)	(0.0112)
Country					
BASELINE: UK					
France	0.266***	0.144***	0.336***	0.340***	0.695
	(0.0400)	(0.0440)	(0.106)	(0.109)	(0.258)
Hungary	0.332***	0.109***	0.162***	0.152***	0.250***
	(0.0430)	(0.0279)	(0.0443)	(0.0419)	(0.0714)
Italy	0.343***	0.267***	0.457***	0.467**	0.659
	(0.0655)	(0.0772)	(0.139)	(0.143)	(0.185)

TABLE 4 (Continued)

Variables/model	Model 1	Model 2	Model 3	Model 4	Model 5
Number of observations	108,657	102,042	85,680	85,680	85,680
Number of laws	2670	2575	2192	2192	2192
Number of modifications	1763	1683	1578	1578	1578
Pseudo R^2	0.0144	0.0228	0.0419	0.0425	0.0429

Note: Coefficients reported as hazard ratios; Robust standard errors in parentheses; All models were estimated with the stcox routine in STATA 12 using the Breslow method for ties.

***$p < .01$,

**$p < .05$, *$p < .1$.

In all our pooled models, we find - again - an unequivocal, substantial and statistically significant impact of IA on legal stability: the presence of an ex-ante IA lowers the risk of the modifications subsequently. Largely independent of the set of control variables, the hazard ratio effect size ranges between 0.51 and 0.72, that is having conducted an IA decreases the rate of modifications by 38%–49% (1–0.72 and 1–0.51) compared to the baseline. This suggests that H2 is supported by empirical data, IA lowers the likelihood of repeated modifications. Nevertheless, the cross-country variation in the size and direction of this effect is again considerable suggesting that IA quality and design are likely to mediate the identified longer term impact. Crucially, the IA framework should incorporate a well-defined ex-post evaluation process that can in fact serve as a "backstop" to adopted regulations that do not serve their initial aims. But most countries do not have an effective way to monitor regulations post-enactment (OECD, 2019).

4.3 | IA and swings in political power (H3)

Finally, we look at the impact of IA on legislative stability in conjunction with swings in political power. We focus only at repeated modifications on the pooled sample because politicization is expected to have a lasting impact on legal stability, that is *repeated* redrafting of enacted laws. In line with our expectations, Table 5 shows that IA has the largest impact on legal stability in the wake of swings in political power. Model 2 focuses on the interaction between IA and changes in government power. As mentioned before, we account for these changes by capturing how the share of seats in the parliament changed each month compared to the time the law was enacted. We can see that a change in government power has largely no effect on the risk of first modification when the law was subject to an ex-ante IA, while, the impact is large and positive without an IA (increasing hazard ratio by 1.032). In other words, without the actual or signaling power of IAs as depoliticized law-making, political power swings and the associated changes in political preferences take precedent.

In a similar vein, Table 5, Model 4 considers the association between IA and the change in government partisanship after the law is enacted. The results are thereby even more pronounced. If a law did not go through an IA prior to enactment, a change in partisanship leads to a hazard ratio of 1.30. To put it differently, in the absence of IAs, the risk of modifications is one-and-a-third times higher if there is a change in government partisanship. But if IA was

TABLE 5 Event history analysis of modifications of laws, multiple modifications, 2006–2012, pooled analysis, IA-politics interactions

Variables/model	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Impact Assessment (IA)		0.648***		0.948		1.096
		(0.108)		(0.181)		(0.247)
Share of largest gov. party in parl. at publication	1.081***	1.078***	1.057***	1.059***	1.046***	1.043***
	(0.0091)	(0.0092)	(0.0077)	(0.0078)	(0.0090)	(0.0090)
Government power change	1.036***	1.042***				
	(0.0063)	(0.0062)				
Government power change*IA		0.906***				
		(0.0211)				
Change in government partisanship						
BASELINE: No change						
Change			1.127	1.302**		
			(0.131)	(0.170)		
Change in government partisanship * IA						
BASELINE: NO change*NO IA						
Change *IA				0.560***		
				(0.114)		
Government ideology change(cat.)						
BASELINE: No change						
To the left					0.961	1.022
					(0.125)	(0.142)
To the right					1.664***	1.868***
					(0.272)	(0.314)
Government ideology change(cat.)*IA						
BASELINE: No change*No IA						
To the left*IA						0.771
						(0.339)
To the right*IA						0.556**
						(0.143)
Government ideological conflict (abs.)	1.071	1.069	1.010	1.030	0.880**	0.902*
	(0.0454)	(0.0472)	(0.0448)	(0.0468)	(0.0453)	(0.0479)
Coalition government						
BASELINE: No						
Yes	0.827	0.915	0.790	0.847	0.805	0.862
	(0.142)	(0.158)	(0.148)	(0.157)	(0.138)	(0.149)
Log time in parl.	1.065	1.074	1.068	1.090	1.068	1.085
	(0.0661)	(0.0652)	(0.0669)	(0.0671)	(0.0663)	(0.0655)

TABLE 5 (Continued)

Variables/model	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Word count of the law (1000s)	1.009***	1.009***	1.009***	1.009***	1.009***	1.009***
	(0.0011)	(0.0011)	(0.0011)	(0.0011)	(0.0011)	(0.0011)
Real quarterly GDP growth	0.958***	0.954***	0.976**	0.972**	0.969***	0.968***
	(0.0111)	(0.0110)	(0.0114)	(0.0115)	(0.0113)	(0.0114)
Country						
BASELINE: UK						
France	0.400***	0.368***	0.533***	0.458***	0.746	0.664
	(0.0906)	(0.0870)	(0.124)	(0.108)	(0.197)	(0.177)
Hungary	0.190***	0.169***	0.392***	0.338***	0.346***	0.310***
	(0.0427)	(0.0390)	(0.0766)	(0.0668)	(0.0699)	(0.0658)
Italy	0.600*	0.615*	0.744	0.687	0.533**	0.508**
	(0.172)	(0.171)	(0.217)	(0.194)	(0.170)	(0.161)
Number of observations	85,680	85,680	84,532	84,532	85,680	85,680
Number of laws	2192	2192	2192	2192	2192	2192
Number of modifications	1578	1578	1574	1574	1578	1578
Pseudo R^2	0.0418	0.0437	0.0393	0.0405	0.0409	0.0419

Note: Coefficients reported as hazard ratios; Robust standard errors in parentheses; All models were estimated with the stcox routine in STATA 12 using the Breslow method for ties.
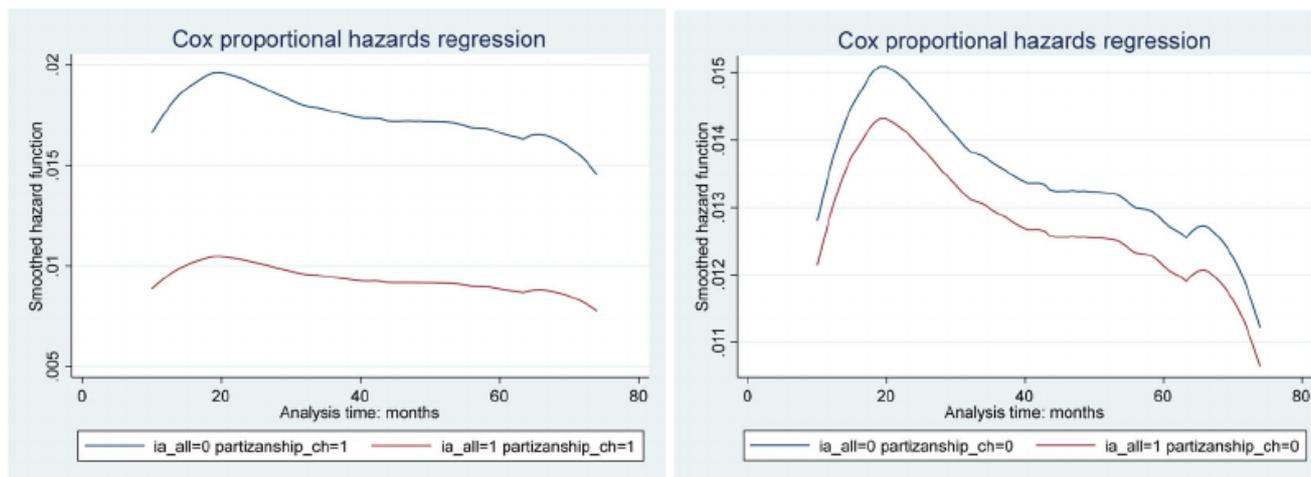
*** $p < .01$,

** $p < .05$, * $p < .1$.

FIGURE 3 Predicted hazard ratios over time, multiple modifications, 2006–2012, pooled sample, Model 4 in Table 5. Left-hand panel is with partisanship change, right-hand panel without partisanship change

conducted before a law passed, the results change significantly. The association between the presence of an IA and changes in government power leads to a decrease in the hazard ratio by 0.56. In this context, IAs decrease the risk of legal instability by more than 44%.

Finally, considering the direction of ideological change of the government (Table 5, Model 6), we find that ideological shifts increase the risk of modifications, albeit the effect is only significant for shifts to the right. However, this increasing risk is moderated by the presence of an ex-ante IA, largely negating the effect of ideological change. For the interaction terms, once again only the IA*shift to the right coefficient is statistically significant.

This notable difference in the impact of IA on legal stability in conjunction with political power swings is also visually represented in Figure 3. It depicts the smoothed Kaplan–Meier estimates of hazard by IA application and partisanship. We can interpret it as the probability that a law will be modified in a given month. The left side considers law-months with partisanship change, where the blue line is associated with having no IA and the red one indicating a lawing passing through an IA. The right side considers law-months without partisanship change and its associated with the absence (blue) and the presence (red) of an IA. In both left and right-hand side figures, blue lines, representing the absence of an IA, run above the red lines (with IA) which means that once an IA is present, the modification hazard is lower. Crucially for H3, the gap between the 2 lines is the largest on the left-hand side, that is when government partisan ideology changes. Taken together, these support our hypothesis that IAs reduce legal instability, especially when political power and ideology shifts.

5 | CONCLUSIONS

IAs, as a central feature of evidence-based policy making, are designed to limit the politicization of law-making and deliver higher quality laws that endure. While, existing research shows that IAs can neither serve as a political nor bureaucratic control mechanism before a law is enacted, we extended the focus to the role of IAs on the durability of laws post-enactment. After all, even if IAs merely signal de-politicized law-making, they might still contribute to legislative stability and allow enacting coalitions to secure their legislative legacy over time.

In the context of future political uncertainty, governments tend to implement and utilize a variety of administrative processes and instruments to tie the hands of future governments. Since evidence from the US suggests that changes in government ideology and power affects the probability of legal modifications, we focused more explicitly on the effects of IAs on legal stability in the context of changing political power. We argue that enacting coalitions can implement IAs as a signaling tool for de-politicized law-making which, in turn, should make it less likely that changes in political power and ideology lead to modifications of laws.

Our extensive data collection and analysis contribute to the growing body of literature performing quantitative analysis of legislative outputs and processes. Making use of a unique, large-scale dataset of all laws enacted in France, Hungary, Italy, and the UK throughout 2006–2012, we analyze the impact of IAs on legal stability, holding major political, legislative, and economic factors constant. While, our analysis could only unearth conditional correlations among key variables of interest rather than identify causal impacts, we gathered valuable evidence in support of the postulated theories. At any rate, our new empirical focus demonstrates the importance of studying the full universe of laws and IAs in addition to the rich prior literature relying on carefully selected case studies.

Our findings show that IAs can contribute to stabilizing primary laws. First, IAs seem across-the-board to contribute to legal stability both first and subsequent modifications.

However, the strength of this effect varies by country in ways calling for further research. Second, IAs are predicted to have the largest effect when political power swings both in terms of seats and government ideology, suggesting that the technical and consultative practices engrained in IAs can to some degree tame legislative drift.

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DATA AVAILABILITY STATEMENT

The data that support the findings of this study derive from public sources. Full replication material are made available at Harvard dataverse: https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/JNLZUK

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ENDNOTES

[1] The only notable deviation between these national datasets is the high missing rate for time spent in parliament in the French dataset. Hence, we run 2 models with and without this variable for France to test comparability of results.

[2] Please note that the original data download link which we used (http://www.socpol.unimi.it/) is no longer live, instead the data archive can be found at: http://159.149.130.120/ilma/sito/#3

[3] Not all laws need to go through ex-ante impact assessments. There can be exceptions, among other, for low impact laws, emergency measures, transposition of international law, and questions of national security (OECD, 2019, p.76).

REFERENCES

Aalen, O. O., Borgan, Ø., & Gjessing, H. K. (2008). *Survival and event history analysis. A process point of view.* Springer.

Aizenman, J., & Marion, N. (1993). Policy uncertainty, persistence and growth. *Review of International Economics*, *1*(2), 145–163.

Baldwin, R. (2010). Better regulation. The search and the struggle. In R. Baldwin, M. Cave, & M. Lodge (Eds.), *The Oxford handbook of regulation.* Oxford University Press.

Baum, J. R., Jensen, C. B., & McGrath, R. J. (2016). Constraining a shadowy future: Enacting APAs in parliamentary systems. *Legislative Studies Quarterly*, *41*(2), 471–499.

Berliner, D., & Erlich, A. (2015). Competing for transparency: Political competition and institutional reform in Mexican states. *American Political Science Review*, *109*(1), 110–128.

Berry, C. R., Burden, B. C., & Howell, W. G. (2010). After enactment: The lives and deaths of federal programs. *American Journal of Political Science*, *54*(1), 1–17.

Borghetto, E., Curini, L., Giuliani, M., Pellegata, A., & Zucchini, F. (2012). Italian law-making archive (ILMA): A new tool for analysis of the Italian legislative process. *Rivista Italiana di Scienza Politica*, *42*(3), 481–502.

Borghetto, E., & Mäder, L. (2014). EU law revisions and legislative drift. *European Union Politics*, *15*(2), 171–191.

Boruvka, E., & Perry, J. (2020). Understanding evolving public motivational practices: An institutional analysis. *Governance*, *33*(3), 565–584.

Bräuninger, T., Debus, M., & Wüst, F. (2016). Governments, parliaments and legislative activity. *Political Science Research and Methods*, *5*(3), 529–554.

Brunetti, A. (1998). Policy volatility and economic growth: A comparative empirical analysis. *European Journal of Political Economy*, *14*(1), 35–52.

Caroll, P. (2010). Does regulatory impact assessment Lead to better policy? *Policy and Society*, *29*(2), 113–122.

Carrigan, C., & Shapiro, S. (2017). What's wrong with the back of the envelope? A call for simple (and timely) benefit-cost analysis. *Regulation & Governance*, *11*(2), 203–212.

Cingolani, L., & Fazekas, M. (2020). The role of Agencification in achieving value-for-money in public spending. *Governance*, *33*(3), 545–563.

Corder, J. (2004). Are Federal Programs Immortal? Estimating the Hazard of program termination. *American Politics Research*, *32*(1), 3–25.

Dávid-Barrett, E., & Fazekas, M. (2019). Grand corruption and government change: An analysis of partisan favoritism in public procurement. *European Journal on Criminal Policy and Research*, *26*(4), 411–430.

De Figueiredo Jr, R. J. P. (2002). Electoral competition, political uncertainty, and policy insulation. *American Political Science Review*, *96*(2), 321–333.

De Francesco, F. (2012). Diffusion of regulatory impact analysis among OECD and EU member states. *Comparative Political Studies*, *45*(10), 1277–1305.

Döring, H., & Manow, P. (2021). *Parliaments and governments database (ParlGov): Information on parties*. Elections and Cabinets in Modern Democracies. Development Version.

Dunlop, C. A., Maggetti, M., & Radaelli, C. M. (2012). The many uses of regulatory impact assessment: A meta-analysis of EU and UKcases. *Regulation & Governance*, *6*(1), 23–46.

Fatás, A., & Mihov, I. (2013). Policy volatility, institutions, and economic growth. *The Review of Economics and Statistics*, *95*(2), 362–376.

Frendreis, J., Tatalovich, R., & Schaff, J. (2001). Predicting legislative output in the first one-hundred days, 1897-1995. *Political Research Quarterly*, *54*(4), 853–870.

Hertin, J., Turnpenny, J., Jordan, A., Nilsson, M., Russel, D., & Nykvist, B. (2009). Rationalising the policy mess? Ex ante policy assessment and the utilisation of knowledge in the policy process. *Environment and Planning A*, *41*(5), 1185–1200.

Horn, M., & Shepsle, K. (1989). Commentary on "administrative arrangements and the political control of agencies": Administrative process and organizational form as legislative responses to agency costs. *Virginia Law Review*, *75*(2), 499–508.

Huber, J., & Shipan, C. (2002). *Deliberate discretion? The institutional foundations of bureaucratic autonomy*. Cambridge University Press.

Jakobsen, M., & Mortensen, P. (2015). How politics shapes the growth of rules. *Governance*, *28*(4), 497–515.

Laver, M. (2006). Legislatures and parliaments in comparative context. In B. R. Weingast & D. A. Wittman (Eds.), *The Oxford handbook of political economy*. Oxford University Press.

Lianos, I., & Fazekas, M. (2014). A coat of many Colours: Buliding a taxonomy of impact assessment practices in Europe. *Revue Francaise d'Administration Publique*, *149*(1), 29–59 [in French].

Lianos, I., Fazekas, M., & Karliuk, M. (2016). Cross-National Diffusion in Europe. In C. A. Dunlop & C. M. Radaelli (Eds.), *Handbook of regulatory impact assessment*. Edwards Elgar Publishing.

Listorti, G., Basyte-Ferrari, E., Acs, S., & Smits, P. (2020). Towards an evidence-based and integrated policy cycle in the EU: A review of the debate on the better regulation agenda. *Journal of Common Market Studies*, *58*(6), 1558–1577.

Majone, G. (1996). *Regulating Europe*. Routledge.

Majone, G. (1997). From the positive to the regulatory state. Causes and consequences of changes in the mode of governance. *Journal of Public Policy*, *17*(2), 139–167.

Maltzman, F., & Shipan, C. R. (2008). Change, continuity, and the evolution of the law. *American Journal of Political Science*, *52*(2), 252–267.

Martin, L. W., & Vanberg, G. (2004). Policing the bargain: Coalition government and parliamentary scrutiny. *American Journal of Political Science*, *48*(1), 13–27.

Martin, L. W., & Vanberg, G. (2005). Coalition policymaking and legislative review. *American Political Science Review*, *99*(1), 93–106.

Martin, L. W., & Vanberg, G. (2020). Coalition government, legislative institutions, and public policy in parliamentary democracies. *American Journal of Political Science*, *64*(2), 325–340.

McCubbins, M. D., Noll, R. G., & Weingast, B. R. (1987). Administrative procedures as instruments of political control. *Journal of Law, Economics, and Organization*, *3*(2), 243–277.

Moran, M. (2003). *The British regulatory state: High modernism and hyper innovation*. Oxford University Press.

OECD. (2010a). *Better regulation in Europe: United Kingdom 2010*. OECD Publishing.

OECD. (2010b). *Better regulation in Europe: France 2010*. OECD Publishing.

OECD. (2013, 2012. Revised Edition 2013). *Better regulation in Europe: Italy*. OECD Publishing.

OECD. (2014). *OECD economic surveys: Hungary 2014*. OECD Publishing.

OECD. (2019). *Better regulation practices across the European Union*. OECD Publishing.

Radaelli, C. M. (2005). Diffusion without convergence: How political context shapes the adoption of regulatory impact assessment. *Journal of European Public Policy*, *12*(5), 924–943.

Radaelli, C. M. (2010). Regulating rule-making via impact assessment. *Governance*, *23*(1), 89–108.

Radaelli, C. M., & Meuwese, A. C. M. (2009). Better regulation in Europe: Between public management and regulatory reform. *Public Administration*, *87*(3), 639–654.

Ragusa, J. (2010). The lifecycle of public policy. An event history analysis of repeals to landmark legislative enactments, 1951-2006. *American Politics Research*, *38*(6), 1–37.

Ragusa, J., & Birkhead, N. (2015). Parties, preferences, and congressional organization: Explaining repeals in congress from 1877 to 2012. *Political Research Quarterly*, *68*(4), 745–759.

Rasch, B., & Tsebelis, G. (2011). *The role of governments in legislative agenda setting*. Routledge.

Schnose, V. (2017). Who is in charge here? Legislators, bureaucrats and the policy making process. *Party Politics*, *23*(4), 342–363.

Staronova, K. (2010). Regulatory impact assessment: Formal institutionalization and practice. *Journal of Public Policy*, *30*(1), 117–136.

Thies, M. F. (2001). Keeping tabs on partners: The logic of delegation in coalition governments. *American Journal of Political Science*, *45*(3), 580–598.

Thom, M., & An, B. (2017). Fade to black? Exploring policy enactment and termination through the rise and fall of state tax incentives for the motion picture industry. *American Politics Research*, *45*(1), 85–108.

Tsebelis, G. (2000). Veto players and institutional analysis. *Governance*, *13*(4), 441–474.

Wegrich, K. (2011). Regulatory impact assessment: Ambition, design and politics. In D. Levi-Faur (Ed.), *Handbook on the politics of regulation*. Edwards Elgar Publishing.

APPENDIX A. NATIONAL VARIATION IN THE SCOPE OF IA

All four countries updated aspects of their IA framework over time, but the relative quality differences remained over time. Table A1 summarizes the scope of IAs in France, Hungary, Italy, and the United Kingdom for primary laws.[3] While, the UK assesses the impact on every dimension for almost all laws with a IA, IAs in France and Italy tends to vary in scope, while, Hungary tends to excludes a wide range of dimensions, including gender equality, income inequality, innovation, and poverty.

TABLE A1 Scope of IA. The table refers to all laws with a IA (Source: OECD indicators of regulatory policy and governance [IREG])

Impact assessment on	France	Hungary	Italy	United Kingdom
Macroeconomic costs	For some IAs	Never	Never	For all IAs
Financial costs	Never	Never	Never	For some IAs
Budget	For all IAs	For all IAs	For major laws with IA	For all IAs
Public sector	For all IAs	Never	For major laws with IA	For all IAs
Competition	For some IAs	For all IAs	For major laws with IA	For all IAs
Distributional Effects	For all IAs	Never	For major laws with IA	For all IAs
Environmental	For all IAs	For all IAs	For major laws with IA	For all IAs
Trade	For some IAs	Never	For some IAs	For all IAs
Market Openness	For some IAs	Never	For some IAs	For all IAs
Small Businesses	For all IAs	For all IAs	For major laws with IA	For all IAs
Specific regional areas	For all IAs	Never	For major laws with IA	For all IAs
Non-Profit Sector (incl. charities)	For some IAs	Never	For some IAs	For all IAs
Foreign jurisdiction	Never	Never	For some IAs	For all IAs
Sustainable development	For all IAs	For all IAs	For some IAs	For all IAs
Innovation	For some IAs	Never	For some IAs	For all IAs
Specific Social Groups	For all IAs	Never	For some IAs	For all IAs
Gender equality	For all IAs	Never	For some IAs	For all IAs
Poverty	For all IAs	Never	For some IAs	For all IAs
Social goals	For all IAs	For all IAs	For major IAs	For all IAs
Income inequality	For all IAs	Never	For some IAs	For all IAs

The UK is an exception on almost all dimensions, and we therefore use it as the baseline to which the other three countries are compared to. France and Italy take a middle position with relatively well establish systems of impact assessment, while Hungary, due to the lack of transparency combined with low levels of IA oversight, displays the least developed IA framework (Lianos & Fazekas, 2014; OECD, 2019).

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TABLE B1 Event history analysis of first modifications of laws, 2006–2012, country-wise analysis

Variables/model	France (full)	France (restr)	Hungary	Italy	United Kingdom
Impact Assessment (IA)	0.504*	0.327***	4.403***	0.279***	1.302
	(0.196)	(0.130)	(1.256)	(0.0921)	(0.338)
Share of largest gov. party in parl. at publication	0.777***	0.714***	0.821***	3.358**	2.322
	(0.0562)	(0.0551)	(0.0164)	(2.002)	(2.085)
Government power change	0.827**	0.721***	0.832***	3.440**	1.414
	(0.0779)	(0.0726)	(0.0163)	(2.041)	(1.004)
Government ideology change (cat.)					
BASELINE: no change					
To the left	0.195***	0.111***	1.507	1.102e +08***	
	(0.121)	(0.0708)	(0.477)	(0.000)	
To the right	0	0	197.0***	0.0000	3.120
	(0)	(0)	(107.4)	(0.000)	(11.20)
Government ideology conflict (abs.)	3.531***	4.777***			
	(1.503)	(2.225)			
Coalition government					
BASELINE: No					
Yes			1.822**		7.548
			(0.508)		(19.50)
Log time in parl.	0.946		1.954***	0.606***	0.954
	(0.0974)		(0.194)	(0.0755)	(0.0868)
Word count of the law (1000s)	1.035***	1.043***	1.008***	1.029***	1.008***
	(0.0071)	(0.0069)	(0.0021)	(0.0039)	(0.0022)
Real quarterly GDP growth	0.915*	0.927	0.958	0.986	1.058
	(0.0434)	(0.0436)	(0.0322)	(0.0340)	(0.0426)
Number of observations	11,739	25,493	37,217	15,070	5965
Number of laws	369	692	1140	454	222
Number of modifications	106	106	241	80	116
Pseudo R^2	0.0669	0.0948	0.0486	0.0896	0.0396

Note: Coefficients reported as hazard ratios; Robust standard errors in parentheses; All models were estimated with the stcox routine in STATA 12 using the Breslow method for ties.

[***]$p < .01$,
[**]$p < .05$,
[*]$p < .1$.

APPENDIX B. COUNTRY-WISE REGRESSION FOR FIRST MODIFICATION (H1)

Table B1 shows the results of our regression models in Table 3 in the manuscript broken down by country while, controlling for political, legislative as well as economic factors. Regressions for France are included in two variants because the "Time in parliament" variable was missing for a relatively high number of laws. Considerably modifying the picture revealed by the pooled analysis, we can identify a heterogeneous impact of IA on legal stability in each of the four countries. Our models for France and Italy show a statistically significant coefficient in line with our expectations and the findings of the pooled analysis, IA decreases the subsequent hazard ratios by 0.28–0.50, that is the risk of modification decreases by 50%–72%. However, in the UK, IA has no significant impact on first modifications; while in Hungary, IA has a statistically significant positive effect. The similarity between France and Italy, in line with our main expectations, lends empirical support to our theory. However, the lack of clear relationship in the UK – which is a frontrunner in implementing high quality IA across a wide set of laws – seems counter-intuitive. Moreover, the fact that in Hungary IA increase the likelihood of first modification is similarly counter-intuitive, even though there are only 31 identified IAs for a total of 1140 law.

There are 2 inter-related interpretations for these findings which nevertheless are only tentative and are in need of further investigation: IAs are not assigned randomly to laws but rather a complex political and technical process leads to the decision whether a IA is conducted or not. This may mean that laws with wide ranging impacts and many impacted stakeholders are selected for IA which imply that a subsequent modification is more likely. On the other hand, IA can become part of political games in which it may be used to neutralize opposition in politically controversial cases; however, political conflict surrounding the process of passing a law may also imply that as the balance of power shifts, modifications are more likely.

APPENDIX C. COUNTRY-WISE REGRESSION FOR REPEATED MODIFICATION (H2)

Table C1. displays the results of our regression models in Table 4 in the main text broken down by country, while, controlling for political, legislative as well as economic factors. Regressions for France are again included in two variants.

As in the case of the first modification, the country-wise regressions modify the picture considerably compared to the pooled analysis and we can identify a heterogeneous impact of IA on legal stability in each of the four countries. The models for France and Italy show a statistically significant coefficient in line with our expectations and the findings of the pooled analysis, IA decreases the subsequent hazard ratios by 0.19–0.57, that is the risk of modification decreases by 43%–81%. However, in the UK, IA has no significant impact on subsequent modifications; while in Hungary, IA has a statistically significant positive effect. In terms of political, legislative and economic control variables, we find a largely similar picture to the previous analysis. These cross-country differences are largely the same as for the first modification.

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TABLE C1 Event history analysis of modifications of laws, multiple modifications, 2006–2012, country-wise analysis

Variables/model	France (full)	France (restr)	Hungary	Italy	United Kingdom
Impact Assessment (IA)	0.569**	0.531**	3.342***	0.193***	1.160
	(0.154)	(0.163)	(0.844)	(0.0702)	(0.203)
Share of largest gov. party in parl. at publication	0.778***	0.761***	0.810***	4.154***	7.038***
	(0.0452)	(0.0544)	(0.196)	(8.232)	(0.565)
Government power change	0.797***	0.772***	0.781***	4.007***	3.890**
	(0.0471)	(0.0502)	(0.0138)	(1.667)	(2.259)
Government ideology change (cat.) BASELINE: no change					
To the left	0.231***	0.189***	1.344	4.31e+07***	
	(0.0936)	(0.0811)	(0.330)	(3.37e+07)	
To the right	0	0	396.5***	0.0000	484.3**
	(0)	(0)	(191.5)	(0.000)	(1427)
Government ideological conflict (abs.)	4.231***	4.579***			
	(0.903)	(1.021)			
Coalition government BASELINE: No					
Yes			1.206		13.07
			(0.344)		(24.81)
Log time in parl.	0.793**		1.942***	0.507***	1.228***
	(0.0720)		(0.236)	(0.0696)	(0.0856)
Word count of the law (1000s)	1.036***	1.042***	1.010***	1.022***	1.008***
	(0.0049)	(0.0047)	(0.0024)	(0.0021)	(0.001)
Real quarterly GDP growth	0.952	0.950	0.957	0.963*	1.078***
	(0.0334)	(0.0355)	(0.0264)	(0.0203)	(0.0217)
Number of observations	15,476	29,230	42,294	17,441	10,469
Number of laws	371	694	1141	455	225
Number of modifications	304	304	635	228	411
Pseudo R^2	0.0946	0.124	0.0520	0.156	0.0574

Note: Coefficients reported as hazard ratios; Robust standard errors in parentheses; All models were estimated with the stcox routine in STATA 12 using the Breslow method for ties.

***p < .01,

**p < .05,

*p < .1.