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Implementing regulatory innovations in Europe: the case of impact assessment

Fabrizio De Francesco†, Claudio M. Radaelli† and Vera E. Troeger†

ABSTRACT Regulatory Impact Assessment (RIA) has become a major tool on the agenda of regulatory reform across Europe. Although the literature on RIA is burgeoning, the comparative analysis of implementation has been neglected. This article draws on implementation theory to formulate expectations about the political costs and benefits of different degrees of implementation. Implementation ranges from political endorsement to the creation of central units in charge of regulatory quality and the production and publication of RIA results and methods. Our findings show that economic integration, the characteristics of the political system, economic resources, bureaucratic efficiency and pressure group activities play different roles in the various stages of implementation. We discuss the policy implications of these findings in terms of priorities given to different processes of regulatory reform and the demands that innovations like RIA pose on administrative capacity and stakeholders' participation.

KEY WORDS Better regulation; European Union; governance; implementation; regulation; Regulatory Impact Assessment.

INTRODUCTION

Over the last decade, regulatory reform across European countries has become considerably more complex. The process through which regulations and laws are produced has undergone extensive reforms. This new reform agenda has embedded a myriad of governmental programmes, often called 'better regulation' or 'smart regulation' (European Commission, 2010), targeting 'horizontal' governance functions of the regulatory state, through consultation, policy formulation, pre-legislative scrutiny of proposals, simplification, *ex-post* evaluation of regulatory tools and institutions, access to legislation, reduction of administrative burdens and transparency (OECD, 2002). New rules have been formulated on how primary and secondary legislations should be appraised at an early stage, produced, evaluated and simplified. In a sense, this is an ambitious meta-regulatory approach (Black, 2007). Within 'better regulation' efforts, Regulatory Impact Assessment (RIA) has

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become the major innovation (Renda, 2006; Turnpenny *et al.*, 2009). RIA is an administrative obligation to follow a set of rules for the definition of policy problems, the appraisal of the *status quo*, the identification of regulatory options (including alternatives to traditional command and control regulation), consultation of stakeholders and the economic analysis of feasible options.

RIA is new to some European countries, but not all. Countries such as Germany, the Netherlands, Sweden and the UK have set the agenda for this regulatory innovation since the 1980s with some forms of compliance cost assessment, in synchrony with other extra-European Anglo-Saxon countries (De Francesco, 2006; Renda, 2006). Surveys evidence that for the majority of European Union member states the move towards RIA has accelerated in recent years (OECD, 2002; Radaelli and De Francesco, 2007).

Although there is an emerging literature on policy appraisal in Europe (Turnpenny *et al.*, 2009), the majority of research projects have looked either at the outcomes of RIA by using scorecards or process-tracing methods (Renda, 2006) or at the conditions for adoption (De Francesco, 2008). Less is known about the politics of implementation and its variation across Europe (Radaelli, 2005; Staranova, 2010): Why do some countries implement RIA as a powerful control mechanism and others fail to do so?

The literature on policy outcomes tends to consider samples of RIAs in relation to standards of economic analysis (Harrington and Morgenstern, 2004). Performance is often measured, but rarely explained. When there is an attempt to explain, the explanatory variables usually measure the characteristics of regulatory oversight in a given country, overlooking the broader characteristics of the political, administrative and economic systems. Alternatively, the literature takes RIA as an independent variable, assessing its institutional impact without addressing the question of RIA variability across countries (Baldwin, 2005; McGarity, 1991).

We first derive hypotheses about the political costs and benefits along the continuum from political endorsement to deep implementation. We are not concerned with the patterns or probability of RIA adoption (through the enactment of a specific legislation) across time and space (De Francesco, 2008). For the purposes of this article 'adoption' is simply the early step in the implementation chain. By splitting up the implementation process into different stages, we are able to discern the different political and economic incentives driving the regulatory actors at each stage. We, thus, can derive predictions about why the degree of RIA implementation varies across countries. Second, in contrast to much of the literature, we move outside the RIA box for the selection of explanatory variables. We control for different political variables as well as economic variables at each stage according to the theoretical propositions. Third, we relate our findings to the theoretical expectations about implementation, discerning the predictability of policy outcomes. Finally, we present further discussion and conclusions.

THEORETICAL PROPOSITIONS

From a theoretical point of view, we first generate conjectures about the costs and the benefits of implementation (Moynihan, 2005). In contrast to the first and second generations of policy implementation studies (O'Toole, 2004; Schofield, 2001), this framework has several advantages. Firstly, the assumption that elected officials and bureaucratic agencies develop a rough cost–benefit analysis in deciding whether to endorse and proceed in the implementation of a horizontal regulatory reform is parsimonious thanks to the formal and deductive approach (O'Toole, 2004). Secondly, by depicting institutional interactions, the framework concerns multiple actors and approximates the strategic decision-making of elected officials and bureaucratic agencies. Thirdly, the stages of implementation provide a dynamic analysis in order to take the process of decision-making seriously and to delineate the policy–action continuum (Schofield, 2001: 245). Finally, the variance of implementation is explained through a set of political and economic determinants, following the more recent recommendations to take into account the 'external circumstances' (O'Toole, 2004: 326).

Rational politicians look at RIA mainly as a control tool. For rent-seeking firms, administrative requirements to 'give reasons' and perform economic analysis of proposed regulations are essential mechanisms to control the exercise of regulatory power delegated to bureaucracies (Balla, 1998). Delegation of rule-making power to bureaucracies triggers problems of bureaucratic and coalitional drifts. The former implies that political principals have to develop rules to make sure that agencies will act in the interest of the principal (McCubbins *et al.*, 1989). The latter arises because bureaucracies may, over time, produce rules that do not reflect the original deal made by political principals and their constituencies for support, that is, the pressure groups that entered the original deal (Horn & Shepsle, 1989; Macey, 1992).

By requiring agencies to provide information on costs and benefits of proposed regulation, RIA provides the political principal and the core pressure groups with an effective tool to check on adverse regulatory impacts. The role played by RIA in the range of tools for political control of regulatory activities is unique. Instead of controlling agencies *ex-ante* (e.g. on the budget) or *ex-post* (e.g. by reviewing rules in Court), RIA produces control exactly when rules are being formulated. As a type of administrative procedure, it is effective in several ways. First, it allows well-organized interest groups to monitor the agency's decision-making process alerting the political principal and her regulatory oversight units, like the Office of Information and Regulatory Affairs (OIRA) in the USA, the Treasury Board Secretariat in Canada and the Better Regulation Executive and Regulatory Policy Committee in the UK. These bodies can question the quality and analytic validity of the RIAs produced by the regulators, and effectively hinder or delay the regulatory process. Second, RIA 'imposes delay, affording ample time for politicians to intervene before an agency can present them with a fait accompli' (McCubbins *et al.*, 1989: 481). Third, by 'stacking

the deck' to benefit the political interests represented in the coalition supporting the principal, RIA moves power from agencies towards the most powerful constituencies (McCubbins *et al.*, 1987: 273–4).

It is not entirely clear to what extent such arguments can be translated to the European context without modifications. In Europe, a substantial amount of rule-making power still lies with the government's departments, although agencies have proliferated over the last 30 years or so. And often a coalition government, rather than a unitary executive, is the political principle. Although we believe that the political economic logic of controlling bureaucracies still holds, there are different implications to take into consideration.

A possible (yet contested) qualification is that right-of-centre parties should be more interested than left-of-centre parties in using RIA to send signals to the business community that they care about providing a better regulatory environment. The argument is not about efficiency – this is a valence issue catered to by any party in Europe – but about who is sending signals to whom. This argument is in line with partisan arguments in the tax competition literature where more right-of-centre and economically liberal parties try to provide better conditions (e.g. lower taxes) for businesses and corporations (see Pluemper *et al.*, 2009).

Most European countries are RIA latecomers (Staranova, 2010). For some of them at least, the choice for RIA lies less in the rational decision to control and more in isomorphic processes of emulation (Radaelli, 2005) that can lead to poor implementation.

Bearing in mind these caveats and adaptations, we provide a theoretical framework that revolves around the politics of implementation. To adopt and endorse RIA creates benefits for elected politicians. They can show to international organizations that they are following the bandwagon of modernization. Domestically, they send a signal to the business community that they are catering to business groups by providing favourable conditions. The economic and political cost of saying YES to the OECD 1995 ministerial declaration on regulatory quality – to illustrate with an example – is negligible.

Once formally adopted, RIA goes through different degrees of implementation. The first step consists of producing written guidance on how to carry out the impact assessments and who should do what in the process of appraisal. This comes at a moderate administrative cost (the senior civil service has to coordinate views and describe impact assessment as a process with specific steps, such as problem definition, consultation, economic analysis, choice of options and monitoring). Politically, the core executive sends a signal to departments that their regulatory activity may be watched closely. In coalition and/or minority governments, this has political costs – some members of the coalition may object to this, especially if they have the regulating departments in their portfolios. Indeed, at the time of data collection (March 2008), several governments did not have any guidance. Slovakia only adopted such guidelines in 2008, and Slovenia and Hungary drafted guidelines on impact assessment (in 2006 and 2003–2004), but did not adopt them (Staranova, 2010). Furthermore, the

Austrian experience shows that without appropriate guidelines on qualitative and quantitative methods, the political endorsement contained in government legislative initiatives is a matter of paying lip service to the principle of better regulation (Biegelbauer and Mayer, 2008: 129). The scope and contents of the guidance also vary: in 12 EU member states (Belgium, Bulgaria, Czech Republic, Denmark, Estonia, France, Germany, Hungary, Latvia, Lithuania, Slovak Republic and Sweden), RIAs are conducted drawing on guidance that covers a 'fairly broad' range of typologies of impacts; six guidelines are broader (Finland, Ireland, Poland, Romania, the Netherlands and the UK); the Spanish government has drafted 'fairly narrow' scope guidance; and the Portuguese government has issued narrow guidance.

After having endorsed and issued formal guidance on RIA, governments need to put money into the enterprise. Guidelines do not work without proper investment. The core executive has to invest in resources, such as training, hiring specialists in the economic analysis of regulation, and staffing departments with economists. This has a clear economic cost. In departments calibrated around lawyers and generalists, the addition of economists can also create cultural friction and therefore some political costs. The benefits, of course, are all in terms of having more chances of controlling the regulatory activity from the centre. The most evident sign of financial commitment is the establishment of a central unit with its own staff and budget, like OIRA in the USA, ACTAL in the Netherlands and the Better Regulation Executive in the UK. These units review the assessments prepared by departments and agencies, issue opinions on their quality (in some cases their negative opinions are public) and check that written guidance (such as RIA handbooks and guidelines) are properly used by the regulators.

Across the EU, 12 governments have set up a central unit for RIA. For instance, there is no oversight body in Estonia, Slovakia and Slovenia (Staranova, 2010), as well as in Greece (Hatizis and Nalpantidou, 2007) and Portugal (Garoupa and Vasconcelos Vilaça, 2007). Furthermore, the number of people employed in the central oversight units varies greatly across countries. In four countries (Germany, Hungary, the Netherlands and Spain), the number is unknown notwithstanding the presence of a central unit. Ireland and Italy have very small central units with 1.5 employees each. In the middle range of commitment, there are the Czech Republic (9 employees), Poland (10), Sweden (12) and Belgium (20). Finally, only the UK has a high level of commitment with approximately 70 employees in the Better Regulation Executive and an independent body (the Regulatory Policy Committee) dedicated to the scrutiny of impact assessments produced by departments.

At a deeper level, implementation means actually carrying out impact assessments. This has high economic costs – major RIAs are quite sophisticated, they take time and require different forms of consultation and analysis. There is also a political cost – the core executive has to exercise pressure on regulators who feel that RIA creates hurdles to and delays in rule-making. The political benefit is that only if RIAs are systematically produced, the principal and the

pressure groups get the information necessary to rein in regulatory bureaucracies. Only a third of the European countries that have adopted RIA are capable of conducting assessments in a systematic way: Belgium, Finland, Ireland, the Netherlands, Portugal, Slovakia, Sweden and the UK. Other countries have not gone beyond pilot RIAs. Looking at a sample of 577 assessments in five Central Eastern European countries, Staranova (2010) found that only 9.7 per cent of RIAs address consultation in the Czech Republic. The percentage goes down to 4.3 per cent for Hungary and 0 per cent for Slovenia. Italy produces assessments of proposed legislation that are very limited in terms of economic analysis quality, although there are more comprehensive assessments at the level of independent regulatory agencies (Sarpi, 2010).

The final step consists in publishing the impact assessments widely. This increases transparency. This stage may not incur large economic costs – depending on outlet and numbers of the publication. But clearly it has a political cost, since all affected interests (not just the pressure groups that support the principal) can use the analysis contained in the RIA to challenge the rationale of the regulation. Full publication of the RIA results and the underlying analysis (including data, models used, etc.) gives diffuse interests a hook to mobilize their own elected policy-makers. For the principal, the cost lies in the overall uncertainty in terms of who will get what out of full publication. We found that only Finland, Ireland and the UK provide full information.

In conclusion, different implementation stages of RIA incur diverse political and administrative costs. In the next section, we operationalize this logic by looking at explanatory factors for each implementation stage more closely.

GIVING EMPIRICAL CONTENT TO THE THEORETICAL FRAMEWORK

The theoretical arguments put forward in the previous section provide a framework that has to be filled with empirical content. We try to achieve this goal by investigating the propositions with data on the implementation of RIA for 26 European countries.[1] The different stages of implementation of RIA describe our dependent variables. We thereby try to follow closely the multiple-stage process identified in the previous section. In particular, we focus on the three most important steps in the implementation process:

(1) political endorsement of RIA and publication of formal guidance (handbooks and official guidance on how to carry out impact assessment);
(2) creation of a specific budget and a central unit employing personnel to oversee the process and
(3) production of RIA and publication of its results, including information on process and methods used.

In the theoretical section, we sketched the various rationales that drive the different degrees of implementation. All these different stages can be empirically tested, but each stage needs careful operationalization of both the dependent

and explanatory variables. With respect to the dependent variables, we use two original data sources: (i) questions from a survey originally administered in 2004, repeated in 2006 and 2007, in the context of a project funded by DG Enterprise and Industry of the European Commission on Indicators of Regulatory Quality (IRQ; Radaelli and De Francesco, 2007); (ii) country fiches covering most of the EU member states created by the Evaluating Integrating Impact Assessment (EVIA) Consortium in 2007.[2] The latter includes information on the overall RIA process, oversight units, production of assessments and publication. The data were collected directly by the researchers participating in the consortium (drawing on primary documents and interviews with better regulation officers) and validated at EVIA meetings.

The first stage: endorsement and formal guidelines

In order to assess the first stage of implementation, we employ two dependent variables. The first endogenous variable is construed from the answer to the IRQ question of whether the importance of RIA has increased over the last 5 years. This variable is dichotomous, where 1 signifies yes and 0 no.

Since this more 'political' stage mainly serves as a signal to capital and business owners that the country provides a favourable regulatory environment, as well as to the EU that governments are committed to better regulation, we use economic variables on trade openness and foreign direct investment (FDI) (all gathered from the World Development Indicators, WDI; World Bank, 2007) and the duration of EU membership (measured in years since joining the EU) as main explanatory variables.

In addition, the colour of the party controlling the executive should play a role. We include this variable because of the party politics hypothesis brought forward by Hibbs (1977, 1992) and discussed by Garrett (1998) and Cusack (1997) among many others (see also Imbeau, 2003, for a meta-analysis). To operationalize this argument, we employ a variable drawn from the Keefer's World Bank Dataset on Political Institutions (Beck *et al.*, 2005) measuring whether the largest government party is rather left (1), centrist (2) or right-wing (3).

Governments also have to produce guidelines that discipline the process and state who is responsible for which task at what stage. The EVIA final report provides an indicator on whether formal guidance for RIA does exist. This variable is again dichotomous and measured as 1 – yes, guidance exists; or 0 – no, guidance does not exist.

This stage comes with moderate administrative costs, but may involve substantial political costs. Politically, the executive sends a signal that regulatory activity is watched closely. For governments which face institutional constraints or veto players with different preferences and constituencies, this might be costly since some veto players may object to the idea of monitoring departments and ministers of different parties, especially if some parties have regulating

departments in their portfolios, and others hold the core executive positions (Treasury, Industry and the Prime Minister).

Hence, in addition to party politics, the agreement upon publishing official guidance depends on the power of the executive. This power can be limited by different institutional constraints. The more opposition the executive faces, for example, from junior coalition partners, institutional or partisan veto players, the lower the probability that formal governmental guidance on RIA will be issued (Tsebelis, 1995, 1999). To operationalize this aspect of power of the executive, we use the measure for political constraints constructed by Henisz (2005). This measure comes very close to the usual operationalization of veto points. The variable ranges between 0 and 1, whereby more constraints are associated with higher values.

Another factor that adds to the political costs of RIA is a set of divergent preferences within the executive branch. This can be best operationalized by looking at the fractionalization of the government. This explanatory variable is also taken from the World Bank Dataset on Political Institutions (Beck *et al.*, 2005) and measures the probability that two members of parliament picked at random from among the government parties will be of different parties.

Electoral systems influence the number of parties represented in parliament, and thus the probability of coalition governments. Proportional electoral systems normally bring about a larger number of parties in parliament, and therefore often lead to coalition governments. Different parties in the executive branch might have largely diverging preferences which makes it harder to implement changes and induces a *status quo* bias (Lijphart, 1999; Lijphart and Crepaz, 1991). Further, since the median voter in most societies is a wage earner and crucially determines policy outcomes, policy-makers in majoritarian democracies should be more favourable to the interests of labour. The opposite holds true for coalition governments that usually over-represent the preferences of smaller coalition parties (Austen-Smith and Banks, 1988; Persson *et al.*, 2000) and, consequently, the majority is constrained in favour of the minority, capital owners and stronger interest groups (Meltzer and Richard, 1981). We therefore expect governments in countries with predominantly proportional systems to be more interested in publishing guidelines on RIA and implement RIAs to a greater extent. For the operationalization, we use the variable 'plurality' (Beck *et al.*, 2005) which takes on the value 1 if legislators are elected using a majority rule (winner takes all/first past the post) and 0 otherwise.[3]

The second stage: creating and funding oversight bodies

The second implementation stage goes beyond formal adoption and the issuing of guidelines. Policy-makers have to establish an oversight unit that in some countries assists the departments in carrying out the RIAs. These bodies may also preside over a dedicated budget for RIA training and pilot studies, reviews of consultation methods and economic assessment techniques.

Implementing a central unit allows the core executive to control the activities of agencies and governmental departments entrusted with the formulation and implementation of RIA and regulations.

This step differs greatly from the mere adoption stage as it creates budgetary implications which add to the political costs. In order to capture these dimensions, we employ three different dependent variables. First, the EVIA project provides information on whether a country has established a co-ordinating unit for RIA. This variable is binary with 1 standing for the existence of a central unit and 0, otherwise. Second, EVIA collected data on the number of full-time staff employed in the oversight unit. And thirdly, we use the IRQ question of whether the budget dedicated to RIA has increased over the last 5 years (with 1, yes; 0, no).

Since this second stage has real budget implications, we have to include measures that capture the state of the domestic economy. We therefore add the total unemployment rate to account for economic stress. Governments under economic pressure have less money to spend on administrative reforms with long-term and uncertain impact. In addition to the unemployment rate, the share of elderly people (measured as the percentage of people above 65 years old to the whole population) captures problems of the welfare state since the government has to finance the public pension system. Gross domestic product (GDP) per capita is added to operationalize the overall state of the domestic economy. Moreover, we include government final consumption expenditure as percentage of GDP to test whether governments which increase spending also provide a higher budget for the implementation of RIA. For the same reason, we include central government debt measured as percentage of GDP. All economic variables stem from the World Bank (2007) World Development Indicators. One may argue that the budget dedicated to RIA activities only accounts for a negligibly small part of the overall budget, and thus these variables should not have a 'real' effect. Yet, these variables can have a nominal or signalling effect. If the economy is not doing well and the pressure on the budget increases, governments either do not start investing or divert all resources from 'less important' items (such as RIA), however small the budget for these items might be.

In order to control for possible timing effects, we also include a variable measuring the years since RIA was first formally adopted. We expect that longer periods of time would put pressure on policy-makers to further implement RIA since otherwise governments lose credibility.[4]

The third stage: production of RIA and publication of results

The third and final stage of the implementation process covers the production of RIAs in the departments or agencies and the publication of the results. Timely and effective production of RIAs requires at a minimum an efficient public administration. Information produced via RIAs can be used directly by those who are affected (e.g. corporations) to intervene on the political principal

when the agent (the regulatory agencies or the departments) shirks. Interest groups that were not consulted or did not see the emerging regulation on their radar can use published RIAs to question the rationale of the rules and ask for changes.

We measure the dependent variables of this final stage by using the dichotomous EVIA indicator 'total number of RIAs carried out is known and 'publication of RIAs is systematic and includes the methods'. Systematic publication presents a hurdle for implementation. Very few countries go as far as to publish evidence on the process (who was consulted, when, at what stage was an alternative option abandoned, etc.) and methods. Only Finland, Ireland and the UK provide full information. Publishing information on the methods used for RIA is an important type of political control mechanism: once the methods are made clear, the analysis performed by the regulators can be replicated by different pressure groups, and the conclusions can be critically reviewed by experts.

The arguments with respect to transparency and lobbying hold that we can expect countries with strong and more politicized pressure groups/corporations to use published RIAs as a tool to influence the executive. Yet, this concept is very hard to operationalize. Specific data on pressure groups are not available for the countries in our sample. We, therefore, use a measure of the co-operativeness of interest groups provided by Hicks and Kenworthy (1998). If businesses and corporations are known to be well organized, we can be certain that the interest group measure used here includes these interests. The variable captures the degree of co-operation between the government and interest groups: 1 stands for relatively co-operative interaction between cohesive government agencies and co-ordinated business and labour organizations, 0.5 means moderate co-operation and 0 describes a relatively combative, conflictual relationship between fragmented state agencies and interest group organizations. We hypothesize RIAs to be produced and published if the relationship between governments and interest groups is more conflictual. If conflict exists, the RIAs become a source of information to dig deep into what the regulators have done and organize pressure in the policy process.

Finally, in order to operationalize bureaucratic efficiency, we rely on the measure provided by Mauro (1995) as a first approximation of how efficiently the domestic public administration works. The measure ranges between 0 and 10, whereby 0 indicates low efficiency of the public administration, and a very efficient bureaucracy is characterized by a 10. Unfortunately observations for this variable are only available for the old EU member states, and therefore results have to be interpreted with great caution since we cannot be confident that the findings are generalizable to newer EU members.

EMPIRICAL MODEL SPECIFICATION

In order to test the stated arguments, we pool all available data collected over 3 years (2004, 2006 and 2007) by the IRQ and EVIA projects for 26 countries.

Both data sources (IRQ, EVIA) suffer from missing entries. Sometimes countries answered the questions only once or twice. There are also missing data for some of the explanatory variables used. Thus depending on the model, we are only dealing with 41 to 74 observations. We nevertheless believe that by analysing all available information, we can offer insights that are general and systematic. These empirical results should be seen as a first attempt to shed light on the driving factors behind different choices of governments with respect to adoption and implementation of RIA.

Depending on the answering behaviour of countries, we sometimes only have one observation per country, which does not allow to either control for dynamic developments or unit-specific effects. Yet, from a theoretical perspective, we would expect that most of the variation in the adoption practices to be due to cross-sectoral rather than short-term varience. Moreover most political variables (e.g. electoral system, bureaucratic efficiency) do not change over time and we are thus very confident that our analyses do not suffer from unobserved country-specific heterogeneity (Pluemper and Troeger 2007; Pluemper *et al.*, 2005).

Since six out of our seven dependent variables are dichotomous (yes or no), we employ for these endogenous variables probit binary choice models.[5] The number of employees is a count variable which requires adequate modelling by a negative binomial estimation because the likelihood ratio test indicates over-dispersion of the dependent variable and the error term.

We include all explanatory and control variables with a 1-year lag since we expect to see a lagged impact of explanatory factors at the different implementation stages. Moreover, by lagging the explanatory variables, we attempt to avoid possible simultaneity or endogeneity bias.

Owing to the small number of observations and following Achen (2002), we try to specify all models as parsimoniously as possible by only including the theoretically important variables and keeping the number of control variables to a minimum. This approach makes our models certainly vulnerable to omitted variable bias. Yet, conventional tests for heteroskedasticity and omitted variable bias do not point to problems with these kinds of misspecification. A large battery of control variables could lead to problems of multicollinearity and make our estimation less efficient which would render our empirical results less reliable.

EMPIRICAL RESULTS

In a first step, we analyse political committment and the production of written guidance. Table 1 displays the binary regression results for these two decisions.

The main predictions of whether RIA is an important tool are mainly driven by economic factors and the degree to which a country is integrated into the world economy and open to trade. Both net FDI inflows and openness to trade increase the probability that a government endorses RIA. Thus, these economic variables induce governments to send signals to businesses and

Table 1 Empirical results for importance of RIA and publishing guidelines

Dependent variable	*Importance of RIA*				*RIA Guidelines*							
Explanatory variables	*Probit*				*Probit*							
Openness (trade per GDP)	0.016**	(0.008)	0.024**	(0.011)								
FDI net in mrd. of US$	0.020*	(0.011)	0.027*	(0.016)								
Partisanship of government (1, left; 2, centre; 3, right)	0.251	(0.227)	0.534*	(0.31)	0.406**	(0.169)	0.351**	(0.175)	−0.158	(0.241)	−0.159	(0.223)	−0.170	(0.227)
System (parl-2, ass_elected pres-1, presidential-0)					−0.598	(0.389)	−0.722*	(0.434)	−0.927**	(0.410)	−0.679*	(0.357)	−0.914**	(0.395)
Electoral system (1, majoritarian; 0, proportional)					−0.651*	(0.410)	−0.972**	(0.474)	−1.556***	(0.553)	−0.958**	(0.421)	−1.477***	(0.553)
Political constraints					−4.461*	(2.445)	−2.112	(2.870)	−6.953**	(3.389)				
Checks and balances							−0.022	(0.180)			−0.100	(0.189)		
Government fractionalization							−1.578	(1.165)					−2.052*	(1.181)
Years of EU membership			−0.018	(0.023)					0.044**	(0.019)	0.040**	(0.020)	0.045**	(0.019)
Years of OECD membership			0.083	(0.115)					0.019	(0.016)	0.018	(0.017)	0.008	(0.018)
Intercept	−0.789	(0.832)	1.323	(563.136)	3.422**	(1.554)	3.419**	(1.674)	5.286**	(2.087)	1.747*	(0.907)	2.884**	(1.125)
Pseudo-R^2	0.186		0.354		0.108		0.137		0.325		0.274		0.310	
Number of observations	44		44		72		72		72		72		72	
χ^2	8.28		15.76		9.37		11.95		28.21		23.85		26.85	
$p > \chi^2$	0.041		0.072		0.052		0.063		0.000		0.001		0.000	
Percentage of correct predictions	77.3		88.6		73.6		73.6		86.1		75.0		81.9	

Note: Standard errors in parenthesis.
*$p \leq 0.1$; **$p \leq 0.05$; ***$p \leq 0.01$.

corporations that they are willing to improve the regulatory environment for internationally mobile capital. Small open countries like Ireland therefore are prime candidates for adopting RIA and sending signals to foreign investors. But also countries that are highly dependent on their exporting sector like Germany are pioneering in the adoption of RIA. The partisanship of the government in power is marginally explanatory: conservative governments have a greater interest in using RIA as a signal to capital.

If we look at the production of written guidance documents, political factors seem to play a more pronounced role. Again, conservative and market liberal governments are more likely to produce RIA guidelines. This factor, however, loses its statistical significance if we also control for the time a country has been an EU member state. The EU Commission is the driving force behind activities related to better regulation. Therefore, it seems quite plausible that countries which have been EU members for a longer period of time are more willing to issue written guidance. Thus the core countries of the old EU, Germany, France, Belgium and the Netherlands but also Ireland have produced RIA guidance that covers a broad range of typologies of impact. As predicted, veto players and institutional constraints, however, generate hindrances to the adoption of official guidelines. In addition, if the government is highly fractionalized, it is harder for the core executive to co-ordinate with smaller coalition partners.

The coefficient of the political system variable which we use to operationalize the strength of the executive points into the right direction, which indicates that the stronger the executive branch, the higher the probability that guidelines are issued in order to control the activities of the bureaucracy. Finally, the electoral system shows the predicted effect. In line with our expectations regarding political costs, governments in majoritarian systems are more reluctant to publish guidance because they have a stronger incentive to implement the preferences of the median voter, who is a wage earner.

The second stage includes the establishment of the oversight unit, its staffing level and whether its budget has increased over the last 5 years. Table 2 displays the estimation results.

As discussed above, this stage has important financial implications, especially when actual personnel and a specific budget are allocated to the central unit, as well as political costs. Indeed, the empirical results support these predictions.

The more time has elapsed since adopting RIA, the greater the pressure on the government to let real action follow with the establishment of an oversight body. This might not just be a pure timing effect, but suggests that governments are asked to move from signals to concrete actions as time goes by. The probability that policy-makers forfeit their trustworthiness increases with the time since the adoption of RIA.

As observed for the publication of guidelines, partisanship of the government and the question whether median voter interests (majoritarian and mixed systems), or minority capital owners' interests (proportional system) exert greater influence on policy-makers have a significant impact. Since establishing

Table 2 Empirical results for financial implementation of RIA

	Budget: central unit, probit						*Budget: employees, negative binomial*						*Increase in dedicated budget, probit*					
Years since adoption	0.561***	(0.184)	0.415***	(0.131)	0.851**	(0.379)	0.374***	(0.131)	0.384***	(0.123)	0.489***	(0.093)	−0.050	(0.071)	−0.025	(0.059)	−0.022	(0.065)
System (parl-2, ass_el. pres-1, pres.-0)	−0.163	(0.805)	−0.626	(0.822)	−4.408	(2.949)	−1.116**	(1.020)	−1.036	(0.971)	−3.814***	(0.834)	−2.027**	(0.876)	−1.854**	(0.818)	−1.465	(1.019)
Electoral system (1, major; 0, proportional)	−4.222**	(1.690)	−1.886	(1.679)	−6.070**	(2.951)	−1.770	(1.631)	−1.720	(1.142)	−0.934	(0.996)	−1.962*	(1.113)	−1.387	(0.965)	−2.024**	(1.050)
Partisanship of government	1.340**	(0.535)	1.062**	(0.475)	0.801	(0.717)	−0.064	(0.607)	−0.067	(0.554)	−0.508	(0.537)	−0.588	(0.443)	−0.421	(0.365)	−0.660	(0.435)
Unemployment rate	0.216	(0.190)	0.161	(0.174)	−0.268	(0.390)	−0.413*	(0.229)	−0.407**	(0.204)	−1.037***	(0.195)	−0.217*	(0.119)	−0.213*	(0.119)	−0.231*	(0.140)
Share of elderly population	−0.149	(0.243)	−0.103	(0.198)			−0.865***	(0.321)	−0.869***	(0.286)	−2.353***	(0.444)	0.140	(0.197)	0.090	(0.176)	−0.029	(0.229)
Central government debt (per cent of GDP)					0.066*	(0.039)					0.147***	(0.036)					0.011	(0.016)
Government consumption	−0.120	(0.177)	−0.201	(0.158)	0.093	(0.219)	0.142	(0.139)	0.177	(0.140)	1.010***	(0.239)	−0.073	(0.099)	−0.072	(0.094)	−0.099	(0.110)
GDP per capita	−0.000	(0.000)	−0.000	(0.000)			−0.0002**	(0.0001)	−0.0003**	(0.0001)	−0.001*	(0.000)	0.000	(0.000)	0.000	(0.000)	0.000	(0.000)
Political constraints	−11.506**	(5.748)			−23.404*	(14.307)	−3.439	(6.220)			−5.681	(4.028)	−4.891	(4.027)			−3.271	(4.299)
Government fractionalization			−0.178	(2.287)					−1.604	(1.769)					−0.378	(1.538)		
Years of EU membership	0.051**	(0.024)	0.033*	(0.020)	0.083**	(0.041)	0.131***	(0.048)	0.132***	(0.041)	0.142***	(0.045)	0.055**	(0.025)	0.051**	(0.022)	0.050**	(0.025)
Intercept	2.328	(3.177)	0.099	(4.098)	7.581	(6.357)	18.937**	(7.775)	17.343***	(5.282)	29.340***	(5.371)	6.113	(3.777)	4.284	(3.081)	8.091*	(4.954)
Pseudo-R^2	0.702		0.647		0.793		0.121		0.123		0.276		0.338		0.313		0.292	
Number of observations	74		74		62		56		56		44		46		46		39	
χ^2 ($p > \chi^2$)	71.83	(0.00)	66.23	(0.00)	68.14	(0.00)	30.36	(0.00)	30.90	(0.00)	59.69	(0.00)	20.79	(0.02)	19.2	(0.04)	15.74	(0.15)
Per cent of correct prediction	86.5		87.8		91.9								80.4		76.1		69.2	
LR test: over-dispersion							192.04		192.49		76.88							

Note: Standard errors in parenthesis.
*$p \leq 0.1$; **$p \leq 0.05$; ***$p \leq 0.01$.

an oversight body for RIA incurs especially political costs, political and institutional constraints and veto points as well as government fractionalization reduce the probability that a central unit for RIA is established.

Given that the mere establishment of an oversight unit does not trigger considerable administrative costs, the effect of economic variables should be moderate, which is confirmed by the mostly insignificant empirical results.

Allocating staff and dedicating a specific budget to the central oversight body, in comparison, should still generate political costs, but at this stage budgetary implications become much stronger. This claim is supported by the estimation results for the number of employees and the allocation of a dedicated budget (Table 2, columns 5–10). Looking at the political variables, a stronger executive has a higher incentive to actually staff the central unit and allocate a specific budget to the oversight body. The 'system' variable – operationalizing strength of the core executive – exerts a positive and mostly significant effect. In addition, the electoral system variable exerts the predicted negative effect which remains statistically insignificant for the allocation of staff to the oversight body. Equally, the ideological colour of the government does not play a significant role anymore at this stage of implementation of RIA, supporting the claim that other factors like budgetary pressures become more prevalent. The insignificant results for institutional constraints and government fractionalization back this line of argument additionally.

Indeed, these weakening political determinants are accompanied by economic constraints. The state of the economy limits the options for governments to dedicate resources to the implementation of RIA, however small this budgetary item might be. Most likely this is a matter of signalling that savings have to be found outside core welfare activities, even if money is actually available. In the current economic climate, countries like Ireland have drastically reduced the provision of training on RIA by external consultants and have signalled that even money to print the RIA guidelines is scarce. In short, under poor economic conditions governments need to at least signal that all available resources are re-allocated to social security spending. Following this argument, the negative significant estimate for unemployment in the 'dedicated budget' model and for allocating staff to the central unit can be seen as supportive evidence. The share of elderly people has the expected negative (statistically significant) effect on the 'number of employees' specifications.

The overall results for the second stage appear to back our causal story. Both political factors and economic conditions shape the opportunity for policymakers to create a RIA budget. The political factors remain more important for the sheer establishment of a central oversight body – a powerful signal sent by the government. In comparison, budgetary pressures constrain investments.

The third stage examines production of RIAs and publication of the results. Here two other aspects seem to be of utmost importance: the efficiency of the bureaucracy and lobbying. Efficient administrations increase the probability that RIAs are carried out in a timely and efficient manner and that valid and

Table 3 Empirical results for production and publication of RIA

Dependent variable / *Explanatory variables*	*Production of RIA* Probit				*Publishing of RIA* Probit			
Years since adoption	0.009	(0.046)	0.049	(0.076)				
Electoral system (1, major; 0, proportional)			−4.468**	(1.814)			−1.176	(1.490)
Partisanship of Government (1, left; 2, centre; 3, right)	−0.090	(0.275)	−0.786	(0.481)	−0.292	(0.412)	−0.366	(0.432)
Bureaucratic efficiency (Mauro *Quarterly Journal of Economics*)	0.538**	(0.274)	−0.287	(0.488)	1.383***	(0.507)	1.263***	(0.477)
Co-operation between government and interest groups	−1.497*	(0.875)	−2.680	(1.246)	−3.440***	(1.266)	−3.847**	(1.625)
Years of EU membership			0.069**	(0.032)				
Intercept	−3.146*	(1.864)	5.395	(4.355)	−9.905***	(3.846)	−8.161**	(3.708)
Pseudo-R^2	0.146		0.453		0.567		0.585	
Number of observations	41		41		41		41	
χ^2	8.22		25.48		24.48		25.23	
$p > \chi^2$	0.084		0.000		0.000		0.000	
Per cent of correct predictions	68.3		75.6		90.2		90.2	

Note: Standard errors in parenthesis.
*$p \leq 0.1$; **$p \leq 0.05$; ***$p \leq 0.01$.

reliable results are published. Organized interests are expected to use RIA as a tool to lobby the executive and to monitor government agencies. Table 3 shows the empirical findings for this last stage of RIA implementation.

Once a system is established, production and publication depend on the quality and strength of the oversight unit and the overall administrative capacity. This argument is mirrored by the positive and highly significant estimate for bureaucratic efficiency. As predicted, the higher the conflict between policy-makers and interest groups, the higher the pressure to produce impact assessments and publish their results.

The three stages of adoption and implementation of RIA are driven by different factors: economic integration largely determines whether a country endorses RIA, political constraints and institutional factors influence the decision of governments to issue formal guidance for RIA and establish a central oversight body; domestic economic factors and budgetary pressures strongly determine whether the central unit is staffed sufficiently and a large-enough budget is allocated to oversee RIA activities of the bureaucracy; and finally, administrative efficiency and the influence of interest groups exerts a strong impact on the probability that RIA results are produced and made publicly available.

DISCUSSION AND CONCLUSIONS

The appeal of regulatory innovations and 'smart regulation' remains high in Europe (European Commission, 2010). Yet adoption has not been followed by equal implementation. Following Moynihan (2005), in this article we have modelled implementation as a three-stage process involving political and economic costs and benefits. We have then specified different models and operationalized the variables by using original data sets and theoretically justified independent variables. Our empirical findings are preliminary and based on a small sample. With this caveat, the analysis shows that economic and political variables play different roles in different stages.

The OECD official recommendations on regulatory quality list most of the variables we have used in our analysis, but without explaining when and how certain variables have to be prioritized for RIA to be implemented. The official recommendations seem to suggest that all variables matter at all times and therefore reformers have to reach threshold values on all of them, in the unrealistic effort to maximize everything. By contrast, our findings differentiate between one stage and the others and shed light on what is critical for implementation and when. In particular, attention to RIA and signals to the business community are products of deeper integration – ideology, commitment from the prime minister and party politics do not matter much in the explanation of why RIA is considered important nowadays. Political variables like ideology start to matter when governments set out to publish guidelines.

The second stage is clearly contingent on political factors and economic resources. Complex, compound democracies find it difficult to implement a tool that has originally been devised for simpler polities. This can also explain

why countries with veto players, coalition governments and other sources of political complexities have either implemented RIA in versions that differ from the template of political control – Denmark, Sweden and the Netherlands are good examples (Radaelli, 2010). Italy shows that when regulators enjoy more autonomy and reputation for independence, it is easier to proceed beyond signals and symbolic adoption – in fact, agencies do carry out proper impact assessments, but central government departments do not. As for economic resources, we find that they constrain implementation. These findings explain why over the recent recession European governments have emphasized the cost-cutting, 'anti-bureaucratic', efficiency-enhancing properties of regulatory reform – examples that come to mind are the reduction of administrative burdens, now a fundamental component of policy appraisal across Europe, and the various decrees to cut existing laws in countries like France and Italy. If resources are severely constrained, the only remaining appeal of regulatory reform is that it can save money and release resources for growth.

The findings for the third stage alter on two critical variables, pressure group activity and administrative capacity. The former tells us an important lesson. More often than not, new regulatory tools are introduced without real 'demand' coming from outside public administration and government (Hatzis and Nalpantidou, 2007). Yet the absence of a robust community of stakeholders that create demand for RIA is what seems to fuel implementation in the third stage. Stakeholders press for more economic analysis, better RIAs, information and transparency. The latter variable, administrative capacity, exposes a truth that is neglected in official rhetoric as Garoupa and Vasconcelos Vilaça (2007) show for the Portuguese case of the implementation of RIA. Advocates of regulatory innovations often make arguments about the quality, transparency, participation and openness of rule-making, but forget to consider that all these desirable aspects of governance are very demanding in terms of administrative capacity and bureaucratic efficiency – a point noted by Schout and Jordan (2008). In the future, reformers of rule-making should concentrate more on capacity building and creating demand for RIA from pressure groups, and less on descriptions of 'good governance'.

Thinking of further research, there are two obvious extensions. Data have to be improved, possibly in the direction of more comprehensive dynamic pooled cross-section time series data, so that the analysis of implementation across time and space can be made possible. In addition, our models should be tested on larger samples of countries, including, for example the USA and Canada, to establish whether the variables affecting implementation in Europe are peculiar to this set of highly developed countries or are more common features of RIA implementation.

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NOTES

[†]All the authors have contributed equally.

1 The 26 countries are Austria, Belgium, Bulgaria, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, and UK.
2 EVIA is a project funded by the European Commission under the aegis of the Framework Six Programme of the EU (http://web.fu-berlin.de/ffu/evia/).
3 We also include strength of the executive as a control variable, measured as the degree to which the president is directly elected (Beck et al., 2005): directly elected president (0), assembly elected president (1), and parliamentary system (2).
4 We control for political factors as in the first stage: power of the executive, electoral system and executive constraints as well as colour of the government. We do not include checks and balances and OECD membership since these variables turn out to be highly insignificant and therefore increase the inefficiency of models with a relatively small number of observations.
5 Note that a logit specification does not alter the results.

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