

ANALYZING SCIENTIFIC KNOWLEDGE IN DOCUMENTS: THE CASE OF REGULATORY IMPACT ASSESSMENT

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Abstract: Regulatory impact assessment (RIA) is seen as a tool for increasing evidence-based policy making and as such it is being integrated into decision-making procedures on a wide range of issues. Based on systematic consultation, clear criteria for policy choice, and economic analysis of how costs and benefits impact on a wide range of affected parties, this tool operates by using scientific knowledge and technical analysis rather than political considerations. Scientific knowledge can be used to achieve instrumental learning (Radaelli, 2009, OECD), policy change (Sabatier, 1999), to impact on decision making (Caplan, 1979; C.H.Weiss, 1999) but also to seek legitimacy from the policy environment (Edelman, 1985; Schrefler, 2010). This article suggests an analytical framework for analysing RIA documents with insight from knowledge utilization theories. We argue that in order to better understand the RIA itself, we need to look at institutional factors as well. The combination of institutional context variables and variables for RIA document content analysis which make up worldviews in this framework provide the basis for the document analysis and exploration of RIA in its context.

Key words: evidence-based policy making; regulatory impact assessment; institutionalization; document analysis; scientific knowledge.

Introduction

In recent decades, scientific and political rationality has increasingly been used in policy making, particularly in OECD countries. This trend is manifest in the introduction of the regulatory impact assessment (RIA) tool that is increasingly being used in OECD countries as a way of strengthening evidence-based policy making. Keynes, a key proponent of knowledge in policy making, argued that policy makers should make rational decisions based on knowledge and evidence. Most past studies assume that the availability and use of data and information from RIA leads to changes in the outcome of policy making, notably better law making and regulatory quality (Hahn & Litan, 1997; OECD, 1997b, 2005; Mandelkern Group Report, 2001; European Commission, 2002a). It should also improve the accountability and legitimacy of any policy and law making system due to the factual efficiency provided by adequate information (Hahn & Litan, 2003). Increasingly, politicians and other actors in public policy making are asking for “scientific expertise”, “usable knowledge”, information and guidance to deal with complex and often controversial issues. Successful promotion of

“public policy analysis” hence makes the process of public policy-making more professional. Thanks to economists, psychologists, sociologists and public policy makers, knowledge has become a tool which has strengthened not only the way public policy and decision making is used, but has also enhanced the transparency and accountability of the process.

Scientific knowledge and rationality require a systematic methodological approach and ideal procedures which bring knowledge closer to the general truth. This, however, leads to a paradox—in the world of political struggle, both information and knowledge become an instrument of power in the hands of politicians as well as in the so-called “holders” of knowledge and expertise (officials or interest groups). On one hand, knowledge is an instrument of power politics used for evidence-based policy making. Existing information and knowledge can be adapted to the needs of politicians, either by ignoring some types of information or by selecting information to “fit” to an ideological stance or a “symbolic” act (i.e. “symbolic public policy”, Edelman, 1967).

This article deals with the methodological considerations involved in analysing the type and quality of scientific knowledge and information contained in the output of the regulatory impact assessments process—formal RIA documents—using insight from knowledge utilization theories. More specifically, it seeks a more straightforward dichotomy between the use and non-use of scientific knowledge by adding additional categories, particularly ones related to the institutional set-up.

Scientific knowledge, evidence-based policy making and regulatory impact assessment

It has long been acknowledged that in order to promote better or “smart” policies, evidence-based policy making or more knowledge and information should be brought to the decision makers. “Evidence-based policy making” is thus a well known and widely accepted aspiration held by many decision makers in developed democracies. One of the responses to the desire for evidence-based policy making is institutionalizing policy analysis procedures to support and inform decision making. Regulatory impact assessment (RIA) is seen as a tool for increasing evidence-based policy making and as such it is being integrated into decision-making procedures on a wide range of issues. Based on systematic consultation, clear criteria for policy choice, and economic analysis of how costs and benefits impact on a wide range of affected parties, this tool operates by using scientific knowledge and technical analysis rather than political considerations. There is now research suggesting that regulatory impact assessment is beginning to be seen not just as a tool for informing and influencing decision-makers, but as a process which changes the views and attitudes of stakeholders who engage with the process such that their own attitudes and practices change outside of the immediate decision-making context (Bond & Pope, 2012). By using the insights gained from the policy assessment processes, in particular from regulatory impact assessment, it is claimed that policy makers will improve the evidence base and decision making, and consequently make better or smarter policies. Nevertheless, scientific knowledge can be used not only to achieve instrumental learning (Radaelli, 2009, OECD), but also policy change (Sabatier, 1999). It can have an impact on decision making (Caplan, 1979; Weiss, 1999) and it can also be sued to seek legitimacy from the policy environment (Edelman, 1985; Schrefler, 2010).

Various EU documents and regulations¹ encourage member states to introduce RIA systems into their national jurisdictions. Although, there is no obligation to do so, a considerable number of countries have introduced, strengthened, or formalized their existing impact assessment procedures (OECD, 2009). While discussions on RIA at the international level are relatively coherent in terms of the nature and purpose of the tool (rational, evidence-based, participatory, open, transparent, looking at options and alternatives to regulation, bringing justification for action and stakeholder views), implementation on the national level shows a large degree of variance (Radaelli, 2005, 2010; Staroňová, 2010; De Francesco, 2012). In fact, the reality of individual countries is far messier than the OECD's technical-instrumental view of RIA, particularly in CEE countries.

Consequently, a stream of literature has recently focused on the contextual parameters (political, economic and institutional) that shape the actual implementation and performance of RIA. Various authors have tried to identify important factors influencing the implementation of RIA, such as differing bureaucratic contexts, governmental capacities and policy processes (Radaelli & De Francesco, 2007), strength of institutional oversight and coordination and their support activities (Staroňová, 2010). Radaelli (2005) also stresses the importance of the interaction between the key actors. Depending on the key actors, different objectives maybe pursued. The establishment of institutional oversight has gained a lot of interest not only in the academic literature (Staroňová, 2010; Wiener & Alemanno, 2010), but also in practice. Staroňová (2014, accepted) observes that one of the reasons many CEE countries have reformed their RIA processes in the past five years is so they can introduce some kind of a supervisory body.

In terms of the basic elements of RIA, the EC suggests the following issues be assessed by impact assessment:

Purpose	Identification and analysis of the issue(s) or problem(s) in one or more policy areas
Objectives	Policy objectives will be expressed in terms of expected results in a given timeframe (i.e. in terms of “ends” not “means”).
Options	Alternative policy options to achieve the objective(s) will be considered at an early stage in the preparation of policy proposals. This includes the option of “no policy change”, which will always be used as the point of reference against which the other options are assessed
Impacts	All relevant positive and negative impacts will be examined and reported on with a specific emphasis on their environmental, economic and social dimensions.
Comparison of Options Consultancy	Following the assessment of the most relevant options, the results will be presented in a clear and transparent way in the Impact Assessment report. The way affected parties have been identified and involved in the consultation process as well as how the results of the consultation process are presented in the explanatory memoranda
Monitoring and evaluation	Once the preferred option has been identified, the arrangements for monitoring and evaluation will be broadly analyzed and described

¹ See the Smart Regulation website of the European Commission for an indicative list: http://ec.europa.eu/smart-regulation/better_regulation/key_docs_en.htm (accessed on 9 September 2013).

Consultations and the involvement of affected parties are important parts of the IA process. The European Commission places great importance on consultation mechanisms throughout the entire legislative process, from policy-shaping prior to the proposal, to final adoption of a measure by the legislature and implementation. “Those affected by European or national regulation have the right to be able to access it and understand it” (Mandelkern Group Report, 2001, p. ii). Depending on the issues at stake, consultation is intended to provide opportunities for input from representatives of regional and local authorities, civil society organizations, undertakings and associations of undertakings, the individual citizens concerned, academics and technical experts and interested parties. To this end, the European Commission established a new Consultation Framework outlined in *Towards a reinforced culture of consultation and dialogue* (European Commission, 2002).

RIA should be based on scientific analysis derived from analytical tools (EC SEC, 2009). There exist a wide variety of different analytical tools that can be utilized with RIA, ranging from simple checklists, questionnaires, impact tables to more formal analytical tools, such as cost benefit analysis, multi-criteria analysis, or even complex economic tools, such as computer-based econometric modeling, simulations and optimizations. In fact, Nilsson et al. (2008) examined techniques and analytical tools utilized in RIA by studying cases in four jurisdictions (UK, Germany, Sweden and the EC) and on the basis of these suggested the three kinds of tools mentioned above. Document analysis and coding also differentiates the type of data utilized: generating primary research and scientific evidence or utilizing the existing evidence from available studies and sources.

Academics and institutions, such as the European Commission and the OECD, are currently debating what the dimensions of RIA quality are, and how to measure them. Radaelli (2005) distinguishes between two approaches to measuring quality: indicators and tests². In both approaches, the main aim is to introduce quality assurance mechanisms that would increase the validity, reliability and other properties of quality. Hahn et al. (2000), on the other hand, has developed a scorecard where he questions key assumptions and assesses the appropriateness and application of models used in particular analyses.

This paper follows up on the knowledge utilization and RIA literature from a different perspective. It aims to discuss the methodological possibilities of analyzing the output of RIA process—RIA document—from the point of view of the variables taken into account in the various RIAs and their respective weight in the analysis.

Conceptual framework for RIA documents analysis

Documents seem to be indispensable if modern forms of government are to function. Documents disaggregate communication over space and time (Freeman & Maybin 2011, p. 155); they are detachable from local contexts (Callon et al., 1986, p. 223). It would therefore seem that due to their detachability and stability, documents enable the form of government to “reproduce its order in the same way in an infinite variety of actual local contexts” (Smith,

² The construction of indicators follows the IA dimensions of ‘process’, ‘activities and output’ and ‘real world outcome’, whereas the tests look at ‘contents’, ‘outcome’ and ‘function’. These approaches are not necessarily mutually exclusive (Radaelli, 2005).

1990, p. 2). Documents are therefore a key element which allows policy makers to govern: a document “translates” heterogeneous entities (various indicators, laws, procedures, actors, etc.) into a very specific context, recorded on a sheet of paper, which is then distributed to locations outside of buildings to places where the political process takes place and where the document performs a specifically assigned function.

We are also aware of the fact that different actors apply different criteria of legitimacy, credibility and saliency (Cash et al., 2003) to one and the same document. Documents are becoming important components of established social practice. This practice shows a certain inertia based mainly on the durability of infrastructure (other artefacts) and on knowledge, which these artefacts materialize; a great deal of resources are spent on the production, circulation and utilization of documents. Examples of these resources include archives, buildings, computers, databases, manuals and internal regulations and they cannot be restructured overnight.

Since the RIA procedures and policy making contexts vary across individual countries, in this article we focus on both the RIA process and the RIA document by creating a common analytical framework—a template—for data collection that can be used in a comparative way for a multiple number of countries. The analytical framework is not derived simply by studying the RIA documents in isolation, but by looking at them in their context by studying the policy making and legislative background, RIA history and reforms from another type of RIA document—a formal document that adopted RIA into the official legislative/policy making process. The first step provides a broader basis for contextual issues and consists of desk research and document analysis (draft and final legal texts, explanatory memoranda to RIA introduction, strategic documents and assessments of RIA performance, policy documents by ministries and supervisory bodies, and publications by external stakeholders). Thus, this type of analytical framework enables us to understand the wider political context that shapes the preparation of RIA documents since this influences the design of RIAs and their effective implementation.

The individual variables shaped in the following dimensions and sub dimensions of the documents studied will allow us to develop a robust typology of RIA documents across individual countries by examining individual characteristics and the broader knowledge—evidence—data system they are integrated in. This therefore constitutes the institutional base and level of incorporation and inclination towards evidence-based policy making:

- a) the *formal and informal RIA rules* that guide decision-making, as well as rules that integrate (and guide) the treatment and use of knowledge into policy-making—the extent to which RIA has become part of traditional legislative process (e.g. timing of RIA)
 - adoption: what was the motivation for adopting/reforming the RIA instrument (external pressure from the international community, part of better regulation movement or an indigenous push either by political concerns about costs or bureaucratic learning from previous RIA endeavors)
 - RIA process vis-à-vis decision making process: Is RIA a one-off activity or is it a continuous process? How inter-connected is it with the legislative process? When does RIA start—there planning of tasks related to RIA and the legislative process?
 - Output of RIA process: What type of formal document does RIA appear in? Is there a fixed format in terms of core requirements? Is there a template with closed/open questions? Is it a self-standing report?

- Transparency: How transparent is the decision-making and RIA process to the public?
- b) *The core requirements* for preparing RIAs and how RIA is being conceptualized. RIA
 - Justification of Action: how inter-connected are the problems and objectives in the analysis? What data are used for the justification of the action?
 - Options: How are options treated? Is there a demand to investigate multiple options?
 - Assessments: How is knowledge/data/evidence used in assessments?
 - Consultation: What channels for external and internal consultations are utilized and which stakeholders are being reached?
- c) *Scientific analytical methods utilized and data sources*
 - Analytical methods: does RIA identify the actual analytical methods used? Is it more quantitative or qualitative in nature?
 - Data sources: does RIA identify data sources?
- d) *The political support and institutional oversight*: commitment of appointed leaders for RIA, including oversight structures and their powers, methodological support.
 - Political leadership: how was RIA introduction/reform supported?
 - Oversight mechanism: what kind of oversight exists and how does it contribute to the respective model functioning properly?
 - Support: what type of support is being provided to civil servants to increase RIA capacity?

Thus, we employed a single coding template to cover a) institutional and context variables b) each RIA document as an output which covers 120 variables organized around variable groups:

- Background variables
- Basic RIA elements variables (goal, justification, options, assessments, comparison of options)
- Stakeholders and consultation
- Presentation of the RIA document (number of words, organization, transparency)
- Phasing of RIA (preliminary, full)
- Oversight body (planning, support, opinions, monitoring, veto)
- Methodology (analytical instruments, depth, data)
- Special topics – fiscal impacts
- Special topics – economic impacts
- Special topics – social impacts
- Special topics – environmental impacts
- Special topics – e-government impacts
- Further specific topics

Each RIA document is coded manually following the template. By collating and systematizing the findings in the above-mentioned categories, the analytical framework will enable us to go beyond a descriptive presentation and assessment of the quality of the content of the RIA document towards a more analytic understanding of key variables. Once all the manual codes are compiled, statistically reliable inferences can be drawn. This process enables us to create a database that can be utilized for multiple countries and comparative quality assessment of RIA documents can be performed.

Conclusions

In this paper we present an analytical framework for analyzing scientific knowledge in RIA documents. The aim is to develop a conceptual scheme which broadens the economic understanding of RIA as an assessment of the potential costs and benefits of future effects. We argue that to gain a better understanding of the RIA itself, we need to look into institutional factors as well. The combination of institutional context variables and variables for RIA document content analysis which make up worldviews in this framework provide the basis for the document analysis and exploration of RIA in its context. In our view, these are the preconditions for adequately dealing with the RIA reforms that are taking place in various countries and which enable a comparative approach.³

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