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Architecture and policymaking: comparing experimentalist and hierarchical governance in EU energy regulation

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ABSTRACT

This article contends that the same set of decision-making procedures can be used more or less experimentally or hierarchically, depending on strategic uncertainty and de facto polyarchy. It distinguishes architectures from policymaking, and offers widely applicable indicators to better distinguish more experimentalist or hierarchical institutional designs from how decision-making actually occurs. It argues that polyarchy can be understood in both de jure and de facto terms, and shows that neither is fixed; equally, it proposes an alternative operationalisation and shows that strategic uncertainty neither consistently rises nor gradually declines, but varies cyclically. It suggests that strategic uncertainty and de facto polyarchy might be jointly sufficient for experimentalist policymaking. Rather than a linear trend in which hierarchical governance re-emerges and experimentalist governance declines, it finds cyclical variation. More broadly, it extends claims that functional and political accounts are not mutually exclusive from questions of bureaucratic structures to their actual operation.

KEYWORDS EU energy regulation; EU policymaking; experimentalist governance; functional explanations; institutional architectures; political explanations
Introduction

In recent years, an important debate has emerged about the extent to which the creation and design of bureaucratic structures in the European Union (EU) has been driven by political considerations related to distributional conflict and the influence of supranational actors (Kelemen and Tarrant 2011; Tarrant and Kelemen 2017), or instead primarily by functional needs to fill a ‘regulatory gap’ between EU level rule-making competences and national implementation (Blauberger and Rittberger 2015, 2017). Meanwhile, an innovative, experimentalist interpretation has attracted considerable attention. Stimulated by strategic uncertainty and a polyarchic or multipolar distribution of power, a new architecture of experimentalist governance, defined in general terms as ‘a recursive process of provisional goal-setting and revision based on the comparison of alternative approaches to advancing them in different contexts’ (Sabel and Zeitlin 2012a: 170), has become extensively institutionalised across a broad range of policy domains in the EU (Sabel and Zeitlin 2008, 2010). However, since institutional architectures can be used in many different ways, the actual impact of such experimentalist architecture on EU policymaking remains largely unclear (De Burca 2010; Lavenex 2008; Radaelli 2008; Sabel and Zeitlin 2008; Zeitlin 2005).

This article therefore contributes to experimentalist governance and EU policymaking, by examining the important relationship between institutional architectures (i.e., the design of decision-making procedures) and policymaking processes (i.e., the way such decision-making procedures actually operate to produce policy outcomes). It contrasts experimentalist with more traditional hierarchical governance, distinguishes between architectures and policymaking, and develops clear indicators, derived from experimentalist theory, for categorising these two forms of policymaking. Then it uses these indicators to trace and compare the EU regulation of
electricity and natural gas in the last two decades, by focusing on a critical issue for the development of competition in network industries, namely congestion management. This is a particularly appropriate case study because the key policymaker, the European Commission, operates within the same institutional architecture. Finally, this article considers how scope conditions presented in the literature can account for the patterns identified.

This article begins by positioning experimentalist theory within the broader literature on public policymaking in the EU, focusing on the expansion of experimentalist architecture and identifying the gap regarding its actual operation. Thereafter, the analytical framework for studying experimentalist and hierarchical policymaking is presented, specifically for distinguishing between these forms of policymaking, examining scope conditions, and selecting cases, sources of evidence, and methods. Finally, this article considers how institutional architectures are used in EU energy regulation and how this can be explained, before drawing wider conclusions.

**The spread of experimentalist architecture in the EU**

Experimentalist governance theory may be positioned in the broader field of EU policymaking, and is usually presented as a rival to conventional hierarchical governance (Sabel and Zeitlin 2012a). It acknowledges previously identified distinctive features of EU policymaking such as deliberation (Joerges and Neyer 1997), informalism (Christiansen and Piattoni 2000), and multi-level decision-making (Kohler-Koch and Eising 1999), but claims that this list of distinctive features ‘crucially overlooks the underlying architecture of public rulemaking in the EU […] and the way this design transforms the distinct elements of EU governance by connecting them into a novel whole’ (Sabel and Zeitlin 2008: 273). In its most developed form, experimentalist architecture involves four key elements linked in an iterative multi-level
cycle. In this design, first, framework goals are jointly established by member states and EU institutions. Lower-level units such as regulatory authorities and regulated companies are then given discretion to implement different approaches to the same general goals. But, third, they must participate in peer reviews in which their own approaches are compared with those of others. Finally, the framework goals are periodically revised by a widening circle of actors (Sabel and Zeitlin 2008, 2010, 2012a).

Jointly fostered by strategic uncertainty and a multipolar or polyarchic distribution of power, experimentalist architecture has quickly and consistently found its way, especially in the EU. Through fora, networked agencies, councils of regulators, open method of coordination (OMC), or more generally processes it has expanded across a wide array of policy domains. These include the regulation of competition, energy, telecommunications, and finance; food, drugs, chemicals, and maritime safety; environmental protection; employment promotion and social inclusion; justice, security, and crisis management; and data privacy, anti-discrimination, and fundamental rights (Sabel and Zeitlin 2008, 2010).

However, not only it was argued that there is a tendency for hierarchical governance to re-emerge as experimentalist governance reduces strategic uncertainty and distributive conflicts reappear (Eberlein 2010). But also, experimentalist governance advocates recognize that ‘in the life of society and the law nothing works precisely as designed’ (Sabel and Zeitlin 2008: 280-1). Indeed, by reviewing evidence on implementation of the OMC, launched by the Lisbon European Council in 2000 and often presented as archetypal example of experimentalist architecture in the EU, some have highlighted that, in actuality, significant practical limitations have inhibited the realization of the OMC’s theoretical promise (Zeitlin 2005). Others have noted that as
OMCs have evolved, they have varied considerably in their modalities (Sabel and Zeitlin 2008). Still others have suggested that the relationship between these processes and policy change might break down at several points (Radaelli 2008). More generally, sceptical scholars have warned that, in fact, network governance might not be void of hierarchical traits (Lavenex 2008). Likewise, scholars more sympathetic to experimentalism have suggested that, ‘systems with all the elements of the new governance architecture in place will remain architectures only if they do not also operate in an experimentalist way’ (De Burca 2010: 235).

Hence, most of the literature to date has focused on tracing the emergence and diffusion across different contexts of institutional architectures with experimentalist design features, with much less attention paid to how such institutional architectures work in practice. Such primary focus on institutional structures is common practice, because it has obvious practical advantages relative to analyses of policy-level behaviour regarding both the generation and use of data. However, it also implies that the potential gap between institutional design and actual operation is overlooked. The issue is that policymakers can and indeed often favour distinct types of policymaking processes by using institutional structures differently. This means that, although the novel experimentalist interpretation has been influential in the broader study of EU public policymaking, the actual impact of experimentalist architecture on policymaking processes remains largely unclear. Without adequate analysis of experimentalist policymaking, our understanding is confined to the spread of experimentalist architecture in the EU, ultimately resulting in a poor understanding of its effects.

**Analysing experimentalist and hierarchical policymaking**

Rather than the diffusion of experimentalist architecture, this article examines its actual operation. To this end, it primarily focuses on a key actor in the EU, namely, the
Commission. In the course of regulatory policymaking, the Commission may opt for different forms of policymaking processes, as often happens in practice. This raises the important research question about the conditions under which the Commission engages in experimentalist policymaking.

**Distinguishing between experimentalist and hierarchical policymaking**

To address this research question, experimentalist governance was contrasted with the more traditional hierarchical governance. Decision-making procedures and institutional arrangements are categorised as more or less experimentalist or hierarchical, depending on the extent to which their design reflects the key elements of experimentalist architecture, as defined by its exponents (Sabel and Zeitlin 2008, 2010). The same key elements are also used to distinguish between experimentalist and hierarchical forms of policymaking, by developing a set of indicators based upon them, but which shifts the emphasis from intended design to actual operation. These criteria concern both the policymaking process, which is narrowly defined as to what extent comparisons of different local approaches are taken into account and how much non-governmental stakeholders are consulted; and the outcome, namely, the uniformity of the adopted solutions and to what extent monitoring focuses on comparative review rather than compliance enforcement. Table 1 offers a brief overview of the criteria.

By focusing on the fourth key element of experimentalist architecture, based on which goals and metrics should be revised in response to problems and solutions revealed by the review process, the first aspect was identified regarding how much, in actuality, reforms are developed on the basis of comparative implementation experience as evidenced, for example, by explicit references. The use of findings from comparisons of experiences in decision-making on reforms, crucial to experimentalist policymaking, departs from the conventional elaboration of reforms, typically less informed by such
comparisons. The second issue was defined by looking at both the first and fourth key elements of experimentalist architecture, according to which goals should be established jointly by central and local units in consultation with relevant civil society stakeholders and then revised by a widening circle of actors. It concerns how much non-governmental stakeholders are really involved in rulemaking and revision. Even though stakeholder participation does not necessarily imply that member states authorities and companies have the same influence on decision-making, it does mark a distinction between the typically more inclusive experimentalist processes and the less inclusive hierarchical methods.

By reflecting upon the second key element of experimentalist architecture, according to which local units should be given freedom to advance general goals in their own way, a third indicator concerns the extent to which member states and regulated companies are actually granted discretion to pursue common goals through different approaches. The scope for local discretion, which characterizes experimentalist policymaking, contrasts with the obligation of member states and companies to adopt more uniform solutions, typical of traditional hierarchical policymaking. By giving consideration to the third key element of the architecture, according to which local units must regularly report and participate in peer reviews wherein their results are compared with those of others pursuing different means to the same goals, a final indicator concerns the degree to which different approaches adopted by member states and companies are compared in practice. The periodic review of comparative implementation experiences to promote learning distinctive of experimentalist policymaking differs from the monitoring characteristic of hierarchical policymaking, which instead primarily focuses on compliance enforcement.
In summary, experimentalist policymaking is conceptually defined and empirically assessed as a process that combines a greater scope for local discretion with typically more inclusive rulemaking and revision based on the comparative review of different implementation experiences. It contrasts with traditional hierarchical policymaking, whereby member states and companies are obligated to adopt more uniform solutions that are conventionally developed less inclusively, with monitoring particularly focused on compliance enforcement.

**Examining scope conditions**

By building upon the scope conditions put forward in the literature, factors that might influence the employment of experimentalist policymaking are re-conceptualised and operationalised. In doing so, relative variations in these factors are allowed, which in turn, are key for gaining confidence or questioning arguments that emphasise their importance. As briefly anticipated, experimentalist theory suggests that there are two conditions that open up the possibility for experimentalist governance: strategic uncertainty and polyarchy (Sabel and Zeitlin 2008, 2010). The first jointly necessary but not sufficient condition, strategic uncertainty, conceptually means that neither the official decision-maker nor primary actors know what their precise goals should be and how to achieve them; hence, they conduct the joint exploration of problems and solutions. In the absence of strategic uncertainty, actors are convinced that they know how to pursue their ends, making the joint exploration of possibilities superfluous (Sabel and Zeitlin 2012b).

Empirically, proponents of experimentalist governance claim that strategic uncertainty has been rising (Sabel and Zeitlin 2012a: 176), whereas others suggest precisely the opposite, namely, that strategic uncertainty gradually declines as technically complex issues become better understood (Eberlein 2010). Yet, existing
operationalisations either risks conflating strategic uncertainty and experimentalist policymaking (Sabel and Zeitlin 2010: 9) or make assessment of strategic uncertainty largely arbitrary (De Burca 2010: 232). This article proposes an alternative approach whereby, by building upon the established study of preferences in political science and in line with the conceptual definition presented in the literature of strategic uncertainty as when policymakers ‘do not know how to achieve their declared goals’ (Sabel and Zeitlin 2008: 280), this concept is inversely assessed based on the specificity of key actors’ preferences about how to achieve policy goals. Thus, strategic uncertainty may be considered greater when the preferences of key actors, notably the Commission in this case, regarding how to achieve policy goals are more general. Conversely, it may be considered lower when these preferences are more specific.

The second jointly necessary but not sufficient condition for the emergence of experimentalist governance identified in experimentalist theory is a multipolar or polyarchic distribution of power, in which ‘no single actor has the capacity to impose her own preferred solution without taking into account the views of others’ (Sabel and Zeitlin 2008: 280). In the absence of polyarchy, one actor is dominant, thereby preferring to ‘impose outcomes rather than pursue them cooperatively with others’ (Sabel and Zeitlin 2012b: 412). Empirically, proponents of experimentalist governance stress the ‘firm polyarchic constraints’ characteristic of the EU (Sabel and Zeitlin 2012a: 176), whereas others have suggested that, in fact, the polyarchic distribution of power or level of centralisation may significantly vary across contexts within the EU (Borzel 2012). This article contends that polyarchy can be understood in both de jure and de facto terms. Hence, it will empirically assess formal or de jure polyarchy on the basis of the relative constraints provided by decision-making procedures on the exercise of hierarchical authority. In addition, effective or de facto polyarchy will be assessed by
examining how the relative concentration or dispersion of preferences among key policy actors, both public (e.g., Commission, European regulatory networks, national regulators) and private (e.g., incumbents and new entrants, system operators, traders) influence the actual capacity of some actors to impose their preferred solutions on others. By going beyond exclusively formalistic approaches to focus on actual distributions of power, this original re-conceptualisation and operationalisation of polyarchy also addresses common criticisms of experimentalist theory for being too ‘apolitical’ and claims that distributive conflicts represent an unfavourable scope condition for experimentalist governance (Eberlein 2010).¹

**Selecting cases, sources of evidence, and methods**

This article focuses on regulation, the EU’s core activity (Majone 1996), and in particular on energy, which is a vital sector for modern market economies and European market integration in which the experimentalist architecture has been ongoing for a significant period, and which accordingly, has been cited as a major example of experimentalist governance in the literature (Eberlein 2008, 2010; Sabel and Zeitlin 2008, 2010). Yet, in the energy sector, the literature to date has only analysed electricity, just focusing on one issue (i.e., ‘tarification’) until the early 2000s.

This article expands upon this empirical research by tracing and comparing electricity and natural gas, from the beginning of market liberalisation and integration in the late 1990s to the mid-2010s. It focuses on the regulation of a specific issue, namely the allocation and management of transport capacity for energy transmission and supply,² which is at the heart of liberalisation, itself at the core of EU regulation. Since energy, as other ‘network industries’, needs to be transported over networks that represent ‘natural monopolies’ that are not economically efficient to duplicate, regulation to ensure non-discriminatory access to these ‘essential facilities’ is crucial
(Baldwin et al. 2011). At the EU level, access to interconnections is a vital precondition for establishing a competitive internal market.

The EU regulation of congestion management in electricity and natural gas offers a particularly appropriate case for studying the relationship between experimentalist architecture and policymaking, and in particular, the conditions under which the Commission engages in experimentalist policymaking. The Commission has discretion in choosing among different forms of policymaking, because there are no guidelines on when to use more experimentalist or hierarchical methods. It can engage in more experimentalist and hierarchical forms of policymaking under the same governance architecture, thanks to more experimentalist and hierarchical institutional arrangements and decision-making procedures that developed in parallel and almost identically across electricity and natural gas. Among the more hierarchical decision-making arrangements, there is the ordinary legislative procedure, whose design does not greatly reflect key elements of experimentalist architecture, as defined by its proponents (Sabel and Zeitlin 2008, 2010). In particular, it does not envision obligations on national authorities and regulated companies to regularly report and participate in peer reviews, nor on a wide variety of actors to periodically contribute to rule revision. Comitology, which was introduced in both electricity and natural gas in the mid-2000s (European Parliament and Council 2003, 2005), is another more hierarchical decision-making procedure. This is because its institutional design does not expect the regular provision of information about different implementation experiences by member states and companies or their frequent participation in comparative peer reviews exercises. Nor does it explicitly mandate the periodic revision of rules by a wide circle of actors. On the contrary, its composition is limited to the Commission and member states representatives. ³ This is especially true relative to the Florence Forum for electricity and
Madrid Forum for natural gas, organized by the Commission in 1998 and 1999 immediately after the first round of liberalisation legislation. These are more experimentalist institutional arrangements, because they are intended to provide ‘a neutral and informal framework for the discussion of issues and exchange of experiences’, by once or twice a year bringing together the Commission, European regulatory networks and agencies, national regulatory authorities and ministries, transmission system operators, suppliers, traders, exchanges, consumers and other stakeholders such as outside commercial and academic experts. An additional more experimentalist decision-making procedure is that for developing ‘network codes’, introduced in 2009 in both electricity and natural gas. It is more experimentalist because it establishes that priorities and rules be co-developed by the Commission, the EU regulatory agency, and the European network of system operators in consultation with stakeholders, and that implementation issues be raised in order to ‘elaborate upon solutions, taking into account stakeholders’ ideas’.

The evidence comes mainly from primary sources, which include policy documents central to the regulatory initiatives studied (e.g., minutes of meetings, progress reports, impact assessments, drafts for consultation and rules adopted). They also include semi-structured interviews with interviewees selected for their knowledge and expertise and who are representative of a number of dimensions (e.g., more and less senior representatives of both public and private bodies), which help crosscheck and address possible gaps emerging from publicly available documents. The data were analysed using a double methodology. First, the processes through which the Commission favours more experimentalist or hierarchical policymaking by employing more experimentalist or hierarchical institutional arrangements were traced. Second, the forms of policymaking and the conditions under which they are used were compared.
**Experimentalist and hierarchical policymaking in EU energy regulation**

*Finding more experimentalist policymaking in electricity than in natural gas*

In each sector, the Commission engaged in both types of policymaking; however, despite the same institutional architecture, the Commission did so in varying degrees. In electricity, the dominant form of policymaking was experimentalist, which is more inclusive, leaves more scope for local discretion, and values the comparison of decentralised implementation experiences, which in turn, informs incremental rulemaking and revision. In natural gas, by contrast, policymaking was more hierarchical, whereby member states and regulated companies are obligated to adopt more uniform solutions designed by the Commission with less inclusion of stakeholders and monitoring is primarily focused on compliance enforcement. Table 2 gives an overview of the experimentalist approach pursued more in electricity than in natural gas.

At the beginning of the liberalisation and integration of European energy markets in the late 1990s, the Commission engaged in experimentalist policymaking in both electricity and natural gas. The first Directives had granted member states and companies a large margin of discretion regarding key regulatory issues, including the allocation of network capacity and congestion management (European Parliament and Council 1996, 1998). Right after this first round of legislation in 1998 and 1999, the Commission created experimentalist institutional arrangements, namely the Florence Forum for electricity and the Madrid Forum for natural gas, which were not derived from the Directives or EU legal system. From their very first meetings, the Fora collected and discussed information about different local solutions that were being implemented, notably in the most experienced markets such as those of the United Kingdom, Nordic countries, Spain, the Netherlands and the United States (Florence...
Forum 1998a, 1998b; Madrid Forum 1999, 2000). Informed by these debates and comparisons, reforms were agreed upon by broad circles of actors. In 2000 and 2003, in electricity and natural gas respectively, the Commission, member states representatives, national regulatory authorities, system operators, producers, traders, exchanges and consumers voluntarily agreed within the Florence and Madrid Fora to non-binding guidelines on congestion management. These suggested the use of auctions in electricity, and non-secure, interruptible Use-It-Or-Lose-It (UIOLI) provisions in natural gas, on the grounds that these are non-discriminatory market-based approaches favouring market entry and competition (Florence Forum 2000; Madrid Forum 2003).

Shortly after these agreements were reached, the Commission codified them in both sectors through traditional hierarchical policymaking. In 2001 and 2003, it reduced stakeholder participation by tabling legislative proposals for electricity and natural gas, respectively, through the ordinary legislative procedure (European Commission 2001, 2003), a more hierarchical institutional arrangement than the Fora. The resulting 2003 and 2005 Regulations obligated member states and companies to adopt more uniform solutions, namely those previously agreed upon experimentally. In addition, they required the detailed monitoring of reports, with a focus more on compliance enforcement than on the review of alternative local solutions (European Parliament and Council 2003, 2005).

Yet, from the mid-2000s onwards, the Commission engaged in experimentalist policymaking more in electricity than in natural gas. In electricity, member states and companies had the discretion to pursue different approaches. The 2003 Regulation, while mandating that network congestion problems be addressed through auctions, did not define what specific type of auction be used, let alone through which detailed arrangement. In particular, it left open the choice between ‘explicit auctions’, where
commodity and transport rights are explicitly traded through separate auctions, and ‘implicit auctions’, where transport rights are traded implicitly while trading commodity, through a single auction (European Parliament and Council 2003).

For a number of years, member states and companies’ different implementation experiences were compared, notably through progress reports of the European regulatory network, and then debated more broadly in the Florence Forum. The adoption of explicit auctions, for example at the Italian border with Slovenia and Switzerland, was juxtaposed with the use of implicit auctions in other voluntary regional initiatives, such as the ‘Trilateral Market Coupling’ (TMC) connecting France, Belgium and the Netherlands, the Iberian project linking Spain and Portugal, and the integration of continental Europe and the Nordic countries through Germany and Denmark. Thereafter, implementation experiences with different subtypes of implicit auctions were also compared and discussed, namely, ‘volume coupling’ arrangements, particularly used at the Danish-German border, and ‘price coupling’ arrangements, notably employed in the TMC (ERGEG 2007, 2008).

Based on these comparisons, reforms were agreed upon with much stakeholder participation. In 2009, in the Florence Forum, a variety of actors including the Commission voluntarily agreed on a ‘target model’ and implementation roadmap, proposed by a multi-stakeholder group comprised of representatives of traders, generators and suppliers, exchanges, system operators and the European regulatory network. It suggested that congestion management be addressed through implicit rather than explicit auctions, based on price rather than volume coupling arrangements, to be progressively extended from the TMC to neighbouring regions (Florence Forum 2009). Then the informal agreement brokered in the Florence Forum was formalized through
the network codes procedure, which as anticipated, involves the Commission, the EU agency, the European network of system operators, and stakeholders.

In natural gas, by contrast, under the same institutional architecture, the Commission favoured a more hierarchical form of policymaking. Prompted by concerns about rising energy prices and limited consumer choice, in the mid-2000s it launched a sector inquiry, which concluded that existing interruptible UIOLI arrangements were ineffective, as incumbents often used less transport capacity than they had reserved, precluding potential new players from entering the market (European Commission 2007).

Revision of the existing rules was less informed by the comparative review of alternative implementation experiences and was less inclusive than in electricity. Upon the Commission’s request and without comparing different local approaches, the European regulatory network suggested that a secure UIOLI would have significantly enhanced competition, by bringing unused capacity back to the market on a contractually non-interruptible basis (ERGEG 2009a). Thus, it was recommended that interruptible UIOLI be replaced by firm UIOLI (ERGEG 2010), even though at the time, no practical experience with such a solution existed. After receiving this recommendation, rather than using the Madrid Forum and the network codes procedure, the Commission directly proposed its adoption to the relevant comitology committee, in which participation is limited to itself and member states representatives. During the comitology process, rule revision was less focused on comparing different implementation experiences than on ensuring that no vital interests of member states be threatened. Rather than leaving room for local discretion, the resulting 2012 Decision obligated member states and companies to adopt more uniform solutions. Specifically, it mandated the compulsory application, from 2016 onwards, of firm, non-interruptible
UIOLI at pipelines facing congestion above certain levels (European Commission 2012a). Furthermore, it also introduced monitoring provisions focused more on compliance enforcement than on the comparative review of alternative local solutions, by requiring the EU regulatory agency to produce annual monitoring reports verifying compliance with the adopted uniform solution (European Commission 2012a).

**Accounting for the forms of policymaking found**

From a perspective that emphasises the importance of *de jure* polyarchy, it is hard to explain why, between the late 1990s and the early 2000s in both electricity and natural gas, the Commission engaged in both experimentalist and hierarchical forms of policymaking, even though the formal distribution of powers had not changed. Equally, it is hard to understand why, from the mid-2000s onwards, the Commission engaged in experimentalist policymaking more in electricity than in natural gas, even though *de jure* polyarchy did not vary across the two sectors, in which the Commission was equipped with equivalent comitology powers at similar times (European Parliament and Council 2003, 2005).

The similarities and variations in forms of policymaking found are instead, consistent with strategic uncertainty. In the late 1990s, in both electricity and natural gas, the liberalisation of national markets was a very new policy area with little experience to draw upon, while the integration of such national markets was entirely virgin territory (Eberlein 2008, 2010). At the time, cross-border transactions were modest and informally negotiated within a framework of technical cooperation among neighbouring system operators, focusing more on system security than on commercial objectives. A new level of coordination had to be established (European Commission 1999). Yet key actors, including the Commission, only had general preferences for non-discriminatory congestion management procedures (European Parliament and Council
1996, 1998; Florence Forum 1998a, 1998b; Madrid Forum 1999, 2000). Under these conditions of greater strategic uncertainty, as seen in the late 1990s, the Commission favoured more experimentalist policymaking in both electricity and natural gas.

Thereafter, in the early 2000s, it opted for more traditional hierarchical policymaking in both sectors. It did so shortly after it had developed more specific policy preferences, namely for auctions in electricity and interruptible UIOLI in natural gas, as evidenced by the guidelines on congestion management that it voluntarily agreed upon in the Florence (2000) and Madrid Fora (2003). That is, more hierarchical policymaking was favoured under conditions of lower strategic uncertainty.

Then, as observed from the mid-2000s onwards, policymaking was more experimentalist in electricity than in natural gas. In electricity, the 2003 Regulation established that market-based auctions be used, but did not express a preference for either explicit or implicit auctions, let alone for specific arrangements to implement them (European Parliament and Council 2003). Nor did the Commission indicate any such preference (2004, 2005). Proposals and reports conducted upon invitation of the Commission rapidly identified implicit auctions, then implemented only in the integrated Scandinavian ‘Nord Pool’, as the theoretically ideal solution. But questioned their practical feasibility in continental Europe, organised instead in several national markets managed by a number of electricity exchanges (Consentec and Frontier Economics 2004; ETSO and EuroPEX 2004). Neither the Commission nor other actors knew whether, in actuality, this approach could be adopted in continental Europe and, if so, how.7

It was only in 2007 that the Commission expressed a specific preference, namely, for implicit rather than explicit auctions (2007). This only happened after the implementation of practical experiences was compared and debated. Among various
voluntary regional experiences, it was especially important the TMC project connecting France, Belgium, and the Netherlands, which since 2006 demonstrated that it is actually possible to apply implicit auctions to continental Europe even in the absence of a single European electricity exchange (ERGEG 2007, 2008). Still, when the Commission had developed precise preferences for implicit auctions, it had not also developed specific preferences for the detailed arrangements to implement them (2007). Instead, it was only in 2009 that the Commission, together with other actors, developed more specific preferences in this regard, namely for price rather than volume coupling arrangements (Florence Forum 2009). This only happened after, through extensive comparisons and deliberation among a broad range of actors, the volume coupling alternative came to be considered less efficient and predictable, especially because in the Danish-German implementation experience it had failed to launch twice and had delivered economically incoherent results. However until then, many believed that this was a feasible alternative. In contrast, by particularly reflecting on the TMC project, a variety of private and public actors including the Commission concluded that price coupling had proven its ability to operate efficiently (Florence Forum 2009).

In simplified terms, the reform essentially entailed the adaptation of the Nordic model to continental Europe, including the application of such a model in the absence of a central European electricity exchange. But in practice, this proved to be so complicated that the Commission could not have conceived it on its own and imposed it hierarchically. Instead, it required experimentalist policymaking, in which the Commission acted as the main convener of a process whereby rule revision was agreed on the basis of the comparative review of alternative implementation experiences and the TMC project represented ‘the’ experiment.
While in electricity, the Commission and other actors were exposed to policy questions about which they did not have precise preferences, namely what type of auctions should be used and through which detailed arrangements; in natural gas they could rely on more precise preferences for specific solutions, namely UIOLI provisions. In contrast to electricity, in natural gas the Commission had a very clear idea of both its goal and how to achieve it, namely, releasing transport capacity through more effective UIOLI. More precisely, the Commission had a clear preference for contractually secure rather than interruptible UIOLI provisions. Already in the conclusions of the sector inquiry that prompted revision of the existing rules, the Commission ‘highlighted the importance of enhancing the scope for entry through […] strict application of use-it-or-lose-it provisions’ (2007: 327). The same preference was shared by the Commission’s formal advisory body, which upon invitation of the Commission and despite the absence of any practical implementation experience, recommended the replacement of interruptible with firm UIOLI (2009a, 2010). Thereafter, this position was reaffirmed in an impact assessment, in which the Commission reiterated its belief that secure UIOLI represents a very effective tool for creating a ‘level playing field’ between incumbents and new entrants (2012b).

Backed by certainty about its preferred solution and thus under conditions of lower strategic uncertainty, as seen, rather than employing more experimentalist institutional arrangements such as the Madrid Forum and the network codes procedure, the Commission directly put forward a proposal to the relevant comitology committee. This resulted in a Decision, which at its core, obligates member states and companies to apply more uniform solutions and requires the EU regulatory agency to monitor compliance with them (European Commission 2012a). As recognized by the Commission’s advisory body itself, the aim was to ‘rapidly adopt new provisions
allowing to reduce congestion’ (ERGEG 2009a: 2). Indeed, the Commission sought a ‘quick win’ and confident about its preferred solution, chose to use a faster and less inclusive, more hierarchical decision-making procedure.\textsuperscript{13}

Nevertheless, an exclusive focus on strategic uncertainty to the neglect of the more political dimension would be detrimental. Indeed, considering also the role of \textit{de facto} polyarchy provides a fuller understanding. There is no evidence suggesting that, from the late 1990s to the early 2000s, the relative concentration or dispersion of preferences among key public and private actors was different across electricity and natural gas. However, both publicly available documents and interviews suggest that, from the mid-2000s onwards, such preferences were less concentrated in electricity than in natural gas. To be sure, in electricity the Commission could count on the industry, which was a driving force behind the rulemaking process. However, generators and suppliers were often even more active and supportive than national regulators themselves;\textsuperscript{14} national electricity exchanges strenuously resisted the creation of a single European exchange, which would have threatened their very existence,\textsuperscript{15} while traders did not support the transition to implicit auctions, which do not allow arbitraging, traders’ key business.\textsuperscript{16} On the whole, then, in electricity there was not only more strategic uncertainty, but also more \textit{de facto} polyarchy in terms of coalitional alignment of actors.

In natural gas, incumbents strongly resisted the reform process (ERGEG 2009b). But in contrast to electricity, in natural gas the Commission was supported by regulators, both the European network and national authorities, especially the German and Austrian ones, which were convinced that stricter UIOLI provisions were indeed needed.\textsuperscript{17} This led the Commission, with the support of key national regulators, to impose its own less uncertain preferences on the recalcitrant industry actors.
Conclusions

By engaging with an innovative, experimentalist interpretation of EU policymaking and using energy regulation as case study, this article found that the same architecture can be used more or less experimentally or hierarchically, depending upon strategic uncertainty and *de facto* polyarchy. Through in-depth comparative analysis of EU regulation of a crucial issue (i.e., congestion management) in electricity and natural gas over the past two decades, it advances empirical research on EU energy regulation.

It also contributes to the experimentalist governance and EU policymaking literatures. By introducing a distinction between governance architectures and policymaking and defining the former as institutional arrangements and decision-making procedures and the latter as how decision-making actually occurs within such architectures, the main premise of this article already offered a first conceptual innovation relative to the existing literature, which thus far has focused on documenting the diffusion of experimentalist architectures without differentiating between them and their operation (Sabel and Zeitlin 2008, 2010). A second, related methodological innovation is the development and use of an original set of indicators to more clearly distinguish more experimentalist or hierarchical decision-making procedures from policymaking processes. Since these criteria are widely applicable, they might be directly useful in future research studies.

Furthermore, by contending that polyarchy can be understood in both *de jure* and *de facto* terms and allowing for possible variations in both, this article showed that polyarchy is not fixed (Sabel and Zeitlin 2012a), but might in fact vary (Borzel 2012). Equally, by proposing an alternative operationalisation based on the specificity of key actors’ preferences, it showed that strategic uncertainty is neither consistently rising (Sabel and Zeitlin 2012a) nor gradually declining (Eberlein 2010), but rather, varies cyclically. Of course, the generalisability of these findings
should not be overstated, but should instead be tested, also exploring what role strategic uncertainty might play in the determination of actors’ preferences. In addition, by finding forms of policymaking that are not based on formal or *de jure* polyarchy, but are instead consistent with strategic uncertainty and effective or *de facto* polyarchy, this article refines existing claims (Sabel and Zeitlin 2008, 2010), suggesting that strategic uncertainty, with *de facto* rather than *de jure* polyarchy, might be jointly sufficient for experimentalist policymaking. Once again, one should be cautious about the external validity of these inductive arguments, which should be tested. Also, instead of a linear trend in which hierarchical governance re-emerges and experimentalist governance loses relative importance as strategic uncertainty gradually declines and distributive conflicts resurface (Eberlein 2010), this article found cyclical variation. Nonetheless, the interactions between these forms of governance deserve attention beyond temporal alternation, both in their simultaneous operation (Eberlein 2010) and in their trajectories (Sabel and Zeitlin 2010). Moreover, since policymaking might not necessarily be confined to experimentalist and hierarchical forms (Borzel 2012), future research might also widen the two-dimensional approach adopted here.

More broadly, this article not only reinforces the message that, in contrast to conventional practice in which institutional characteristics are often considered the determinants of policy outcomes and already known institutional variables are eventually used as explanatory factors due to lack of information on policy-level variables (Radaelli et al. 2012), scholars need to look beyond institutional design to the ways in which decision-making actually occurs. It also challenges mono-causal explanations that put exclusive emphasis on either political considerations (Kelemen and Tarrant 2011; Tarrant and Kelemen 2017) or functional needs. Instead, it supports more nuanced perspectives that interpret political and functional accounts as not
necessarily mutually exclusive, extending such perspectives from questions of choice and design of bureaucratic structures (Blauberger and Rittberger 2015, 2017) to their actual operation.

Notes on contributor

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Notes

While there has been significant debate about whether experimentalist governance requires a shadow of hierarchy or penalty defaults, both accounts concern the ‘effectiveness’ of experimentalist governance due to greater or lesser willingness of non-state actors to cooperate. Since neither of these accounts makes any prediction about the article’s question, which instead concerns the likeliness of public actors to more or less adopt experimentalist methods, these factors were not considered.

For reasons of tractability, this article focuses on the energy markets’ timeframe commonly considered most important, namely, ‘day-ahead’.

Certainly, no assumption is made about how comitology operates in practice. The point here is merely that comitology, in its design, does not greatly reflect key elements of experimentalist architecture.


Interview with Dr. Juan Jose Alba Rios, Chairman of Eurelectric and Vice President of Endesa. Brussels, 17 May 2016.

Interview with Peter Styles, Chairman of EFET. London, 28 July 2016.

Interview with Alberto Pototschnig, Director of ACER. Ljubljana, 9 June 2016.

Interview with Dr. Matti Supponen.
Interview with Stephen Rose, Chairman at and Head at RWE. London, 25 May 2016.

Interview with Dr. Margot Loudon, Deputy Secretary General of Eurogas. Brussels, 18 May 2016.

Interview with Stephen Rose.

Interviews with Dr. Juan Jose Alba Rios; Alberto Pototschnig; Edith Hofer.

Interviews with Dr. Guido Cervigni, Head of the Italian power exchange. Email, 7 April 2015; Dr. Juan Jose Alba Rios.

Interviews with Alberto Pototschnig; Dr. Martin Povh, Officer at ACER. Ljubljana, 9 June 2016.

Interviews with Dr. Annegret Groebel, Vice President of CEER and Head at German regulatory authority. Telephone, 10 June 2016; Csilla Bartok, Team Leader at ACER. Ljubljana, 9 June 2016; Thomas Hoelzer, Officer at ACER. Ljubljana, 9 June 2016.
References


ERGEG (2008) ‘The Regional Initiatives – Europe’s key to energy market integration’


Table 1. Distinguishing between experimentalist and hierarchical policymaking.

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Experimentalist policymaking</th>
<th>Hierarchical policymaking</th>
</tr>
</thead>
<tbody>
<tr>
<td>How far rule-making and revision is informed by comparative implementation experience</td>
<td>More</td>
<td>Less</td>
</tr>
<tr>
<td>How much non-governmental stakeholders are consulted</td>
<td>More</td>
<td>Less</td>
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<tr>
<td>How much scope for local discretion is granted</td>
<td>More</td>
<td>Less</td>
</tr>
<tr>
<td>To what extent monitoring focuses on comparative review rather than compliance enforcement</td>
<td>More</td>
<td>Less</td>
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</tbody>
</table>

Table 2. Experimentalist and hierarchical policymaking in EU energy regulation.

<table>
<thead>
<tr>
<th>How much rulemaking and revision were informed by comparative implementation experiences</th>
<th>Electricity</th>
<th>Natural gas</th>
</tr>
</thead>
<tbody>
<tr>
<td>How much non-governmental stakeholders were consulted</td>
<td>More</td>
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<td>How much scope for local discretion was granted</td>
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<td>Less</td>
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<tr>
<td>Policymaking</td>
<td>More</td>
<td>More</td>
</tr>
<tr>
<td>experimentalist</td>
<td>More</td>
<td>hierarchical</td>
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</tbody>
</table>

WORD COUNT 7996 (= 6394 words of title, abstract, keywords, and main text + 1352 words of notes and references + 250 words for slightly more than half page of tables)