EU Regulation between Uniformity, Differentiation, and Experimentalism: Electricity and Banking Compared

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 Integrating Diversity in the European Union (InDivEU)

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The objective of InDivEU is to maximize the knowledge of Differentiated Integration (DI) on the basis of a theoretically robust conceptual foundations accompanied by an innovative and integrated analytical framework, and to provide Europe’s policy makers with a knowledge hub on DI. InDivEU combines rigorous academic research with the capacity to translate research findings into policy design and advice.

InDivEU comprises a consortium of 14 partner institutions coordinated by the Robert Schuman Centre at the European University Institute, where the project is hosted by the European Governance and Politics Programme (EGPP). The scientific coordinators of InDivEU are Brigid Laffan (Robert Schuman Centre) and Frank Schimmelfennig (ETH Zürich).

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Abstract

This paper examines how far and under what conditions experimentalist governance (XG), defined as a recursive process of provisional goal setting and revision, based on comparative review of implementation in different local contexts, may be an effective and legitimate means of responding to diversity among EU member states, in comparison both to conventional uniform regulation (UR) and to differentiated integration (DI). The paper tackles this question through a comparative analysis of EU regulatory governance in two major policy domains, where the dilemma of how to accommodate national diversity has arisen prominently: electricity and banking. Our findings show that in these two cases the conjunction of high interdependence with high uncertainty has resulted in the emergence of a distinctive type of XG architecture, combining synchronic uniformity with diachronic revisability. Under these conditions, uniform rules and practices can be accepted as effective and legitimate by EU Member States, provided they are applied in contextually sensitive ways and regularly revised on the basis of implementation experience, through deliberative review processes in which national officials themselves participate. Our findings thus suggest that far from uniformity and experimentalism being antithetical to one another, diachronic experimentalism may be a necessary condition for synchronic uniformity of regulation within a heterogeneous polity like the EU. Our findings on EU banking regulation, where non-euro Member States may opt out of the Single Supervisory Mechanism (SSM), but where both the SSM and the European Banking Authority (EBA) operate along experimentalist lines, further suggests that XG and DI may be complementary, but asymmetrically so, in that the latter depends on the former to accommodate diversity within and across Member States, but not vice versa.

Keywords

Differentiated integration, European Union, experimentalist governance, electricity, banking.
1. Integrating Diversity within the European Union: Alternative Approaches

How can advances in European integration be reconciled with diversity among Member States? Rightly or wrongly, EU regulation has acquired an increasingly contested reputation, at least within the Union itself, where the “Brussels rule factory” has become a term of abuse even among committed supporters of the European project. This contested reputation is partly due to the perceived technocratic character of EU rule making, and its remoteness from national parliaments and citizens. It is likewise partly due to the politically contested character of EU rules themselves, which may involve value conflicts and distributive consequences for Member States, firms, and taxpayers. But it is also due in no small measure to concerns about misfits between one-size-fits-all, centrally imposed uniform regulation (UR) and heterogeneity of socio-economic conditions, institutional structures, and policy preferences in an increasingly diverse Union of 27 Member States, from which one (the UK) has recently departed (Matthijs et al. 2019).

One widely canvassed solution to this dilemma is differentiated integration (DI). Its underlying assumption is that deeper integration of markets and societies within the EU requires uniform, centrally determined rules, which some Member States may be unwilling or unable to accept, at least initially. Where other Member States wish nonetheless to push ahead, the result is DI: policies and rules that apply only to some Member States (internal DI), as well as in some cases to certain non-Member States (external DI). Most such internal DI, as recent research has shown, is temporary, resulting from transitional exemptions from EU rules in accession agreements or secondary legislation, which are eventually scheduled to expire (“multi-speed” integration). But other forms of internal DI are more durable, especially where they reflect “constitutional” reservations among some Member States to the integration of so-called “core state powers”, in fields such as foreign and defense, interior and justice, or monetary policies. Among the best known and most visible forms of such durable “multi-tier” integration are the Euro Area and the Schengen borderless zone (de Vries et al. 2021; Schimmelfennig & Winzen 2020).

Several scope conditions for such enduring DI have been identified in the recent literature. Beyond heterogeneity of national preferences, variations in their intensity and political salience are crucial to understanding why some Member States choose to opt out from further integration in specific policy fields, while others forge ahead. So too is the degree of mutual interdependence, which must be sufficient to motivate closer integration among the vanguard, but not so high as to create externalities (whether negative or positive) that outweigh DI’s expected benefits. Another crucial scope condition is modularity: the key policy choice must be reducible to a binary option, which Member States can choose to embrace or reject. Enduring, multi-tier DI thus appears most likely under conditions of heterogeneous preferences, high but asymmetrical politicization, moderate interdependence, and high modularity (de Vries et al. 2021; Schimmelfennig & Winzen 2020; Schimmelfennig et al. 2015).

DI, defined in these ways, offers both advantages and disadvantages for European integration (de Vries et al. 2021). On the positive side, DI may allow a closer match between EU policies and rules on the one hand and Member-State preferences and conditions on the other. In so doing, it allows greater self-determination for national demoi within the Union, and may help to blunt euroscepticism and secessionist movements, such as Brexit. DI may also help to avoid sub-optimal, lowest-common-denominator solutions at EU level by permitting national opt-outs or closer cooperation among avant-garde Member States (Bellamy & Kröger 2017; de Vries 2018; Schimmelfennig & Winzen 2020). On the negative side, however, DI may also divide Member States and EU citizens into separate and unequal groups. It may likewise fail to address (unanticipated) externalities resulting from national policies and functional spillovers between interdependent policy fields (Schimmelfennig & Winzen 2020). Finally, where DI becomes durably entrenched, it may fragment the European market and create opportunities for regulatory arbitrage by transnational firms (Howarth & Quaglia 2020).

Yet DI is not the only available approach to accommodating diversity within the EU. A growing body of recent research has shown that in many key policy domains, EU governance is characterized not
by top-down imposition of rigid UR, but rather by an experimentalist architecture of provisional goal setting and revision, based on recursive learning from comparative review of implementation in different local contexts (Sabel & Zeitlin 2008, 2010; Zeitlin 2015, 2016). In this iterative, multi-level architecture, framework goals, rules, and metrics for assessing their achievement are established jointly by the EU institutions and the Member States, typically following consultation with relevant stakeholders. “Lower-level” units (such as national administrations and regulatory authorities) are then given substantial discretion to pursue these goals in ways adapted to their local contexts. But in return for this autonomy, they must report regularly on their performance and participate in a peer review in which their results are compared to those of others following different means towards the same ends. Where Member States are not making good progress, they are expected to take corrective measures, based on a plausible plan for improvement informed by the experience of their peers. The goals, rules, metrics, and decision-making procedures are then periodically revised in response to the problems and possibilities revealed by the review process, and the cycle repeats. For a diagrammatic representation, see Figure 1 below.

Figure 1: EU XG as an iterative, multi-level architecture

In many cases, these experimentalist governance (XG) architectures are underpinned by “penalty defaults”: destabilization mechanisms that induce reluctant parties to cooperate in framework rule making and respect its outcomes, while stimulating them to propose plausible and superior alternatives, typically by threatening to reduce control over their own fate. In the EU context, such penalty defaults frequently involve court judgments or (threats of) Commission decisions, which oblige Member States and/or private actors to explore how to pursue their preferred goals in ways compatible with the fundamental principles of European law, but without hierarchically imposing specific solutions (Sabel & Zeitlin 2008: 305–8, 2010: 13–16; Sabel & Zeitlin 2012: 413–14; Zeitlin 2016: 3–4; Gerstenberg 2019; Svietiev 2020).

Like DI, XG in this form also depends on several scope conditions. The first is strategic uncertainty, where policy makers cannot define their precise goals or how best to achieve them ex ante, but must instead discover both in the course of problem solving, because they are operating in a turbulent,
rapidly changing environment. A second is a polyarchic or multi-polar distribution of power, in which
no single dominant actor is able to impose their own preferred solution without taking into account
the views of others. A third is a high level of diversity, which increases the difficulty of adopting and
enforcing uniform rules. A final scope condition concerns interdependence, which must be sufficient
to motivate actors to collaborate in seeking joint solutions to common problems, but not so high as
to preclude decentralized experimentation by local units (Sabel & Zeitlin 2012: 174-5; Rangoni &
Zeitlin 2021: 823-4).

Where these scope conditions are met, XG architectures have four fundamental advantages,
relative both to conventional UR and to DI. First, they accommodate diversity by adapting common
goals and rules to varied local contexts, rather than seeking to impose one-size-fits-all solutions
or dividing Member States into separate groups of “Ins” and “Outs”. Second, they provide a
mechanism for coordinated learning from local experimentation through disciplined comparison of
different approaches to advancing the same general ends, which can be used to generate new
policy solutions and regulatory frameworks that may then be applied in contextually specific ways
across the Union as a whole. Third, the same processes of mutual monitoring, peer review, and joint
evaluation that support learning from diverse experience also provide dynamic, non-hierarchical
mechanisms for holding both central and lower-level actors accountable for their actions in pursuit
of agreed goals. Finally, because both the goals themselves and the means for achieving them are
explicitly conceived as provisional and subject to revision in light of experience, problems identified
in one phase of implementation can be corrected in the next iteration.

Although XG architectures of this type are neither universal nor ubiquitous in the EU, they are
widely diffused across a variety of policy domains. Well-documented examples include: regulation of
competition, energy, telecommunications, and finance; food, drug, chemicals, and maritime safety;
environmental protection; employment promotion and social inclusion; justice and home affairs; data
privacy, anti-discrimination, and fundamental rights (Sabel & Zeitlin 2008, 2010). These architectures
also play a growing part in EU external governance, where the revisable framework rules they generate
are frequently extended to third-country actors (Zeitlin 2015). A typical pattern in recent years has
been progressive formalization of EU regulatory networks, without full supranational centralization.
In some sectors, under conditions of high interdependence coupled with high uncertainty, concern
for the integrity of integrated markets has led to the creation of a single set of harmonized but
provisional rules, revisable through ongoing monitoring and review of implementation experience,
as for example in chemicals regulation. These developments in turn raise the possibility, which we
will explore further in this paper, of the emergence in such cases of simplified XG architectures,
combining synchronic uniformity with diachronic revisability (Zeitlin 2016; Rangoni & Zeitlin 2021).

2. Cases and Methods

How far and under what conditions may XG represent an effective and legitimate means of
responding to diversity of preferences and conditions among EU Member States, in comparison
both to conventional UR and to DI? Drawing on new empirical research conducted within the Horizon
2020 project on “Integrating Diversity with the EU (InDivEU)”, the paper tackles this question through
a comparative analysis of EU regulatory governance in two major policy domains: electricity and
banking.¹ In each of these domains, the dilemma of how to accommodate national diversity in
EU policy making has arisen prominently. Each is also characterized by high levels of strategic
uncertainty, associated with rapidly changing markets and technologies (positive scope condition for
XG). Each domain belongs to the internal market, where interdependence and the resulting demand
for uniform rules is strong (negative scope condition for both DI and XG in its classic form); each
is likewise politically salient and controversial, to varying degrees across Member States (positive

¹ Within the framework of this project, we also studied a third policy domain, regulation of genetically modified organisms (GMOs). A
discussion of our findings on this domain will be presented in a separate working paper.
scope condition for DI). Comparison across these domains thus offers valuable analytical leverage in responding to the core research question about the relationship between XG, UR, and DI in integrating diversity within the EU.

The research reported in this paper followed a process-tracing approach, combining a wide range of expert interviews with European and national policy actors with extensive review of official documents and literature to reconstruct the evolution of EU regulatory governance in each domain, and assess the changing balance between XG, UR, and DI within it. In the remainder of this paper, we briefly present the key findings of the research on each domain in turn, focusing on the incidence of XG relative to UR and DI, both in formal institutional structures and in organizational practices. The final section draws some comparative conclusions from the cases about the extent to which XG may in fact be considered an effective and legitimate alternative – or complement – to both UR and DI.

3. Electricity: Uniform Rules Made and Revised Experimentally

The need to keep electricity demand and supply in balance at all times (due to the currently very limited storage possibilities), the fact that electricity follows the “laws of physics” rather than political boundaries, and the risk of negative externalities and cascading effects make this an especially interdependent sector (Roe & Schulman 2008; Dillon & Wright 2005). Such interdependence has only grown over time, as European markets have become more interconnected and unscheduled flows of electricity from renewable sources have increased. If the familiar need to avoid regulatory arbitrage and foster a “level playing field” in the European internal market already calls for uniform rules across countries, electricity’s high interdependencies makes such a demand particularly strong. Yet electricity is no exception to the diversity of preferences, institutional structures, and socio-economic conditions at the heart of Europe. As part of the broader energy domain, it is also politically sensitive and subject to high-profile regulatory conflicts, at both national and European levels. Historically, Member States jealously guarded their sovereignty over what was considered a strategic sector, and sought to protect “national champion” firms from foreign competition and takeovers; today, political debates over fuel mix, nuclear power, renewable energy, and the fight against climate change remain highly salient (Hancher 1997; Solorio & Jörgens 2020). At the same time, moreover, electricity is also a complex and rapidly changing sector, characterized by high levels of uncertainty about the future development of markets, technologies, and consumer behavior. Within the EU, the challenges of managing interconnected cross-national power grids on a continental scale have raised a series of regulatory and operational problems to which no ready-made solutions were available in advance (Eberlein 2008; Rangoni & Zeitlin 2021).

Our research on EU electricity regulation examined the relationship between uniform, differentiated, and experimentalist governance across five key policy issues. These include, first, the conditions, and second the tariffs for using cross-border electricity networks, as both are essential to promote market competition and integration. Indeed, along with natural gas, electronic communications, rail transport, and water, electricity is considered a “network industry”, characterized by naturally monopolistic infrastructures which are economically inefficient to duplicate. Under these conditions, the possibility for new players to compete on the market depends on non-discriminatory access and pricing for using networks, which are typically controlled by historically publicly owned incumbents. But since electricity regulation extends beyond “market rules” such as network access and pricing, the third issue examined concerns “operational rules”, namely regional security coordination of electricity flows on high-voltage networks. While such coordination has a long history (e.g. to avoid blackouts), its importance has grown in recent years as European electricity markets have become

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2 For a fuller presentation of the research on each policy domain, including a complete but anonymized list of expert interviews and extensive references to both primary documents and secondary literature, see Rangoni (2020) and Zeitlin (2021). For reasons of space, only the most essential citations to these sources are provided in subsequent sections.
more interdependent, and shares of renewables have risen. Fourth, we examined the regulation of market manipulation based on insider trading, a task at the crossroads between energy and financial regulation that was entrusted in 2011 to the newly formed EU Agency for the Cooperation of Energy Regulators (ACER) and its constituent national authorities. ACER’s foundational task, fifth, is to produce and revise, together with the European Commission and the European Network of Transmission System Operators (ENTSO), guidelines and network codes for a series of substantive areas, which together constitute the EU “rulebook” for governing cross-border electricity trade.3

Table 1 summarizes our findings about the relationship between UR, DI, and XG in EU electricity regulation across these five issues on three dimensions: the uniformity or differentiation of the rules, their detailed or framework character, and the process through which they have been developed and revised (experimentalist or otherwise). The results are strikingly consistent. Across all five policy issues, there is no evidence of DI, while on the contrary, the rules apply uniformly to all Member States. On all issues (with the partial exception of regional security coordination), these uniform rules are rather detailed, and have become progressively more so. But at the same time, the rules always leave some discretionary room for local adaptation, whether explicitly or implicitly, which helps to ensure their legitimacy and acceptance among national actors. Finally, in each of these cases, the uniform and increasingly detailed rules have not been developed and imposed hierarchically by EU institutions, but instead defined and revised by polyarchic networks of European and national stakeholders through experimentalist comparisons of different local implementation experiences.

Table 1: Rules and processes in EU electricity regulation: comparative findings

<table>
<thead>
<tr>
<th>Policy issue</th>
<th>Uniform or differentiated rules?</th>
<th>Detailed or framework rules?</th>
<th>Rule-making processes?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network access</td>
<td>Relatively uniform; no DI</td>
<td>Increasingly detailed</td>
<td>Much XG</td>
</tr>
<tr>
<td>Network tariffication</td>
<td>Relatively uniform; no DI</td>
<td>Increasingly detailed</td>
<td>Much XG</td>
</tr>
<tr>
<td>Regional security coordination</td>
<td>Relatively uniform; no DI</td>
<td>Moderately detailed</td>
<td>Moderate XG</td>
</tr>
<tr>
<td>Market integrity &amp; transparency</td>
<td>Relatively uniform; no DI</td>
<td>Increasingly detailed</td>
<td>Much XG</td>
</tr>
<tr>
<td>Network guidelines &amp; codes</td>
<td>Relatively uniform; no DI</td>
<td>Increasingly detailed</td>
<td>Much XG</td>
</tr>
</tbody>
</table>

Source: own elaboration based on Rangoni (2020).

A first key research finding is thus that across all the policy issues analyzed, rules have been uniform rather than differentiated. For any given issue, EU rules apply homogeneously to all Member States, instead of dividing them into groups of “Ins” and “ Outs”, as in DI. No matter whether one looks at network access, network pricing, regional security coordination, market integrity and transparency,

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3 In addition, we also examined EU regulation of renewables, a complex and rapidly changing policy issue, which we do not discuss in this paper for reasons for space. For details, see Rangoni (2020: pp. 34-37).
or network guidelines and codes, their EU regulation applies in the same manner to all countries. Moreover, such formal uniformity has remained constant over time. To illustrate with two examples, EU rules on network access initially established that rights to transport electricity over cross-border networks should be allocated to market players in a non-discriminatory manner, then via market-based auctions, later via “implicit auctions”, and most recently via “price coupling”. Equally, EU rules on network tarification initially required that pricing for the use of cross-border networks should be non-discriminatory, then that TSOs should be compensated for the costs incurred to host cross-border energy flows on their networks and that network charges paid by generators (“G charges”) in each Member State should be kept within a given range, and more recently that compensation should focus on existing infrastructures and that “energy-based” G-charges should be set to zero. But at each of these moments in time, the same set of EU rules applied across all Member States (Zeitlin 2021: 14-15, 16-19; Directive 96/92/EC; Regulation (EC) No 1228/2003; Commission Regulation (EU) 2015/1222).

A second key finding is that across most of the issues analyzed, these uniform rules have been quite detailed and indeed progressively so. To continue with the previous examples EU regulation of network access at first only mandated the very generic solution that this should be non-discriminatory. Shortly thereafter, it was clarified that such non-discriminatory network access should be granted based on auctions. A few years later, this uniform solution became more specific, mandating that such auctions should be of a certain type, namely “implicit”. In recent years, the rules have become even more specific, detailing that such implicit auctions should be implemented through a specific arrangement, known as “price coupling” (Directive 96/92/EC; Regulation (EC) No 1228/2003; ERGEG 2007; Commission Regulation (EU) 2015/1222). Similarly, EU regulation of network tarification initially only established the general requirement that this be non-discriminatory. Shortly after, it was specified that TSOs should be compensated for the costs resulting from hosting of electricity, including both losses and infrastructure availability. More recently, the rules have further specified that the compensation should be limited to existing infrastructures, and that the network charges levied on generators should be set to zero (Rangoni 2020: 14-15, 16-19; Directive 96/92/EC; Commission Regulation (EU) No 838/2010; ACER 2013, 2014).

In the field of regional security coordination, where formal EU regulation is still relatively new and concerns for local autonomy remain strong, the rules strike a looser balance between uniformity and diversity. On the one hand, EU rules mandate the establishment of Regional Coordination Centres (RCCs) and stipulate a standardized list of tasks that these should perform. On the other hand, the TSOs retain discretion over a variety of important issues. For example, in calculating the network capacity available for cross-border exchanges, TSOs can choose between two different methodologies; when a potential operational security is diagnosed, they can also decide whether or not to follow the remedial action recommended by the relevant RCC. In each case, however, TSOs must follow a “comply-or-explain” procedure if they deviate from the recommended calculation methodology or the remedy suggested by the RCC (Rangoni 2020: 20-23; Commission Regulation 2015/1222; Commission Regulation 2017/1485; Regulation 2019/943).

At the same time, however, our research reveals that no matter how detailed and uniform EU rules may be, they always leave some discretionary space for local contextualization, either explicitly or implicitly (or both). Thus in the case of network access, whereas the very first set of EU rules mandated that network access should be non-discriminatory, they left open the question of how this should be achieved. The next set of EU rules mandated the use of market-based auctions, but explicitly allowed the use of two types of auctions, “explicit” and “implicit”. The subsequent generation of rules established that auctions had to be implicit, yet left open questions of how to implement them. Most recently, EU rules have clarified that such implicit auctions should be based on “price coupling”, but national regulators and TSOs continue to debate the terms and conditions under which such arrangements should be conducted (Rangoni 2020: 14-15; Directive 96/92/EC; Regulation (EC) No 1228/2003; Commission Regulation (EU) 2015/1222). Similarly in the case of network pricing, initial
EU rules established the principle of non-discrimination, but did not introduce a common tariffication approach. The next generation of rules set up such a common tariffication approach, which included an Inter-Transmission System Operator Compensation (ITC) mechanism and largely harmonized G charges, which explicitly allowed discretion within a certain range. Most recently, EU rules have specified that the ITC mechanism should apply only to existing infrastructures and that energy-based G charges should now all be set to zero. Yet national regulators still retain considerable say on cross-border cost-allocation agreements for new investments and on ex-post compensation for the losses induced by unscheduled "loop flows" of electricity. They also retain discretion over other transmission charges levied on generators, as well as over distribution tariffs that play an increasingly important role in decarbonization by incentivizing households to alter their consumption behaviour (Rangoni 2020: 16-19; Directive 96/92/EC; Commission Regulation (EU) No 838/2010; ACER 2013, 2014).

A third key finding is that the uniform and increasingly detailed rules found in these policy issue-areas were not developed and imposed unilaterally by central actors such as the European Commission, as typical of UR, but were instead agreed and revised by a polyarchic combination of actors in a multi-stakeholder regulatory forum, based on deliberative comparison of different local implementation experiences. Continuing with the example of network access (Rangoni 2020: 17-19), it was by meeting and discussing twice a year in the "Florence Forum" that the European Commission, European networks of national regulators and TSOs, and European associations of suppliers, generators, power exchanges and consumers agreed in the late 1990s that the market-based auctions pioneered at the Spanish-French border were preferable to the then most-used "pro-rata" and "first-come, first-served" methods (Florence Forum 2000). Using the same governance architecture during the 2000s, these actors then monitored and compared the implicit auctions successfully experimented by the "Trilateral Market Coupling (TMC)" project connecting France, Belgium, and the Netherlands, eventually judging them more effective than the more-widely used explicit auctions (Florence Forum 2007). And it was again through the same process and governance architecture that this combination of actors developed a consensus in favour of the price-coupling arrangements tested by the TMC project, as opposed to alternative volume-coupling arrangements which had delivered disappointing results at the German-Danish border (Florence Forum 2009). Similarly in the case of cross-border tarification, the uniform and increasingly detailed EU rules were largely developed through the experimentalist processes of the Florence Forum. On this issue, too, comparison of experiences among public authorities and market participants from the late 1990s through the early 2000s first produced agreement on the need to compensate TSOs for the costs incurred in hosting on their networks cross-border electricity flows, and then a more specific consensus on an "Inter-TSO Compensation (ITC)" mechanism, followed by limitations on differential charges on generators to avoid distorting competition (Rangoni 2020: 14-16; Florence Forum 2002, 2003).

Since 2011, the full set of harmonized rules governing cross-border exchanges of electricity have been brought together in a series of framework guidelines and binding network codes covering market, operation, and connection issues. Like the network access and pricing rules discussed previously, these uniform network codes, which are binding on all Member States, have been developed through an inclusive experimentalist process orchestrated by the ACER, ENTSO, and the Commission, but drawing on the expertise and experience of national regulators, TSOs, user and consumer groups, and other experts. These network codes are overseen by a joint ACER-ENTSO-Commission implementation and monitoring group, which in consultation with multi-stakeholder committees may issue non-binding guidance and propose amendments based on problems encountered and lessons learned from their application (Rangoni 2020: 30-33; European Commission et al. 2017). In the field of market transparency and integrity, the uniform rules laid down in the founding and delegated REMIT regulations have been elaborated through non-binding guidance documents, which are frequently
revised by ACER in response to feedback on their implementation from national regulators and other stakeholders (Rangoni 2020: 25-30; Regulation 1227/2011; ACER 2020).4

Taken together, the findings of our research on the evolution of EU electricity regulation across these five key policy issues display a striking pattern. On the one hand, there is a clear trend towards the development of increasingly uniform, detailed rules, which apply to all Member States, without any formal DI, even if the rules themselves still leave some space for local discretion, whether explicitly, implicitly or both. On the other hand, these rules have been developed through deliberative comparison of different local approaches by polyarchic networks of European and national stakeholders, rather than being centrally designed and hierarchically imposed on Member States by the EU institutions. The rules themselves, moreover, are explicitly conceived by the actors concerned as provisional, to be regularly revised on the basis of lessons learned from comparative review of implementation experience in different local contexts. We will return in the conclusion to this distinctive pairing of synchronic uniformity with diachronic experimentalism, which arguably reflects the combination in this sector of high interdependence with high uncertainty.

4. Banking: Experimentalist Governance within Differentiated Integration

Like electricity, banking regulation is subject to a high level of interdependence, especially within the eurozone, but also within the EU internal market. The global financial and European sovereign debt crises graphically exposed the dangers of regulatory arbitrage and cross-border contagion in open, interconnected banking markets with incompletely harmonized rules and weak arrangements for supervisory cooperation and crisis management across EU Member States (Ferran 2012). At the same time, however, banking regulation is also a highly politically sensitive field, closely linked to monetary policy, public finance, economic development, and other core state powers over which national governments have been historically reluctant to relax sovereign control (Howarth & Quaglia 2015). Despite the reduction of legal barriers to free movement of capital, moreover, national banking markets within the EU remain significantly diverse, in terms of ownership mix, business models, concentration rates, and consumer behaviour, reinforced by regulatory variations in adjacent areas such as accounting, insolvency, housing, and corporate governance (Miklaszewska 2017). Finally, banking regulation is widely agreed to operate under conditions of high uncertainty, in the face of volatile and rapidly changing financial markets, technologies, and business strategies (Black 2012). In terms of scope conditions, therefore, the characteristics of this sector might be considered ex ante both favourable and unfavourable in different respects to all three forms of regulatory governance analyzed in this paper: UR, DI, and XG.

In practice, the EU has opted since 2012 for a distinctive form of DI in this sector: a Banking Union for the eurozone, comprising a Single Supervisory Mechanism (SSM) attached to the European Central Bank (ECB) and a freestanding Single Resolution Mechanism (SRM), nested within the Single Market and Union-wide financial regulation.5 The SSM, on which we concentrate in this paper as the most institutionally developed component of the Banking Union, was explicitly designed to break up the “cozy relationships” between banks and national supervisors, which were deemed to have contributed through lax oversight to the global financial crisis, as well as to cut the “doom loop” between banks and sovereigns, which had become a key source of contagion during the euro crisis (Moloney 2014; Veron 2015; Howarth & Quaglia 2015). Participation is obligatory for countries within

4 In the case of regional security cooperation, the latest rules mandate continuous monitoring of implementation practices and annual reporting by the RCCs, including on security failures and responses to them, to both ACER and ENTSO, so that lessons can be identified and spread across the actors involved. But this incident reporting system could be developed further to take place in real time, as for example in US nuclear power safety regulation, rather than on a periodic basis. It is for this reason that we characterize the rule-making processes in this area as “moderately experimentalist” (Rangoni 2020: 22-24).

5 The original Banking Union project included a European Deposit Insurance System as a third pillar, but no agreement on its establishment has yet been reached.
the Euro Area, but other EU Member States may also apply to join the SSM (and the SRM) under a system of “close cooperation” with the ECB. So far, only Croatia and Bulgaria have joined the SSM on this basis, as part of their preparations to adopt the euro, though Romania has announced its aspirations to follow suit in the mid-2020s. Denmark and Sweden are both considering entering the Banking Union as non-euro Member States, but neither has yet come to a decision, for reasons that appear to have more to do with domestic political sensitivities than substantive concerns about the governance and functioning of the SSM itself. The other non-euro Member States (Poland, Hungary, and Czechia) show no current interest in joining, because of political preferences for “banking nationalism” combined with broader “constitutional” concerns about sovereignty and integration of core state powers (Schimmelfennig & Winzen 2020: 130-131; Mack 2020; Danish Ministry of Industry, Business, and Finance 2019; Government of Sweden 2019; Méró & Piroska 2016).

The SSM (and the Banking Union project more generally) are thus closely linked to euro membership, and display an element of path dependency, in which DI in one area may lead to further DI in an adjacent functionally interdependent policy field (de Vries et al. 2021; Schimmelfennig & Winzen 2020: 122-24). Not only was the Banking Union originally proposed during the euro crisis as a condition for allowing the newly created European Stability Mechanism (ESM) to provide funds for bank recapitalization, but the exemption of non-euro Member States from mandatory participation was undoubtedly crucial to allowing the project to go ahead in the face of opposition from countries like the UK with stronger preferences for retaining national control (Schimmelfennig & Winzel 2020: 130-135).

Like other national supervisors outside the Banking Union, the SSM is expected to apply EU financial regulation, which applies equally to all Member States. Oversight of the EU’s “single rulebook” in this field remains the purview of the European Banking Authority (EBA), created after the financial crisis to promote stronger convergence of national supervisory practices and improve coordination among National Competent Authorities (NCAs). The EBA is empowered to propose binding technical standards for the elaboration of EU banking regulation, which the Commission must endorse or present compelling reasons not to do so. It is likewise empowered to develop a body of non-binding guidelines on the implementation of EU banking regulation, with which supervisory authorities (including the SSM itself) are required to “make every effort” to comply, subject to peer review of national practice. As a condition for the acceptance of Banking Union, the EBA Board of Supervisors, which includes representatives of all NCAs, has adopted a double majority voting arrangement to safeguard the interests of non-euro Member States, with the ECB as a non-voting participant (Ferran 2012, 2016).

The creation of the SSM reflects variations in Member State preferences towards stronger and more integrated European banking supervision, rooted in the higher level of interdependence within the Eurozone and in the differential intensity of concerns for preserving national sovereignty in this field. At the same time, however, joining the SSM is a binary choice, which does nothing to address the very significant challenges of integrating diversity in banking markets and business models among the participating Member States. Our research investigated how the SSM has sought to reconcile the pursuit of stronger and more uniform supervision of eurozone banks on the one hand with accommodation of banking diversity within volatile and rapidly changing financial markets on the other. In so doing, we analyzed the evolution and functioning of the SSM’s institutional structures, decision-making processes, and organizational practices, from its inception in 2014 to the present. In the remainder of this section, we summarize our findings in relation to three overlapping perspectives on the SSM: first, as a centralized hierarchy, seeking to impose and enforce uniform rules, standards, and procedures across the Banking Union; second, as a polyarchic network, seeking to orchestrate intensive cooperation between the ECB and NCAs; and finally as an experimentalist organization, seeking to accommodate and learn from diversity by adapting common rules and procedures to the specificities of individual banks, and revising them regularly through peer review of implementation experience at multiple levels.
The SSM was explicitly designed as a more centralized and hierarchical institution than the EBA. The ECB has final authority to grant and withdraw banking licenses within the SSM, and is directly responsible for supervising the largest and most systematically important eurozone banks. It can also take over supervision of less significant institutions (LSIs) from NCAs where it deems this necessary to “ensure consistent application of high supervisory standards”. The SSM is committed to “intrusive, hands-on” supervision of significant credit institutions (SIs), through Joint Supervisory Teams (JSTs) of ECB and national officials, supported by on-site inspection missions and central benchmarking. Through its annual Supervisory Review and Evaluation Process (SREP) decisions, the SSM can require SIs to hold additional capital to cover specific risks, as well as to revise their governance arrangements, planning processes, controls, and other internal systems. The SSM has created a large body of detailed and prescriptive internal manuals, operational guides, and guidance documents to promote harmonization and convergence of supervisory approaches across participating units. It has likewise sought to develop “joint supervisory standards” to steer and harmonize national supervision of LSIs. The ECB has consistently sought to enhance the uniformity of the Single Rulebook for EU banking regulation and harmonize its implementation at national level, notably by restricting the use of options and discretions provided to NCAs under EU legislation. Such harmonization and supervisory convergence is considered crucial to advance the SSM’s mission and strategic aims of “contributing to the safety and soundness of credit institutions and the stability of the financial system” while “promoting European financial integration”, by reducing opportunities for regulatory arbitrage, removing national barriers to cross-border operations, and ensuring a level playing field for all eurozone banks (Zeitlin 2021: 11-14; ECB Banking Supervision 2018: 4-6, chs. 3-5, 2015: 5, 2016).

Alongside these centralized hierarchical features, however, the SSM also displays significant characteristics that support an alternative view of eurozone banking supervision as a polyarchic network. Thus, all major decisions of the SSM must be approved by its Supervisory Board, where NCA representatives account for 21 of 27 votes. Hence all important SSM initiatives and policies are developed through joint working groups, task forces, and drafting teams convened by ECB divisional networks, but often led by NCA officials. The ECB has never exercised its powers to take over supervision of LSIs from national authorities, and prefers co-development of joint supervisory standards to the imposition of binding instruments, which are slow and difficult to change. The ECB does not directly employ or control the large numbers of NCA staff involved in off- and on-site supervision through the JSTs and inspection missions. NCAs themselves retain an independent voice on EU banking regulation through their dominant position in the EBA, which they value as a means of ensuring that distinctive national preferences and concerns are taken into account in framing the rules the SSM is expected to apply. The institutional design of the SSM can thus be said to encourage a cooperative rather than a hierarchical approach by the ECB to joint supervision with the NCAs (Zeitlin 2021: 14-19; Petit 2019; Gren 2018).

Like EU electricity regulation, the SSM clearly diverges in significant respects from the classic experimentalist architecture identified in previous studies of EU governance (represented graphically in Figure 1). Rather than setting open-ended framework goals and giving national or sub-national actors substantial autonomy to pursue them in ways adapted to their own local circumstances, the SSM has developed increasingly detailed and prescriptive rules and methods, which banking supervisors are expected to apply as consistently as possible across credit institutions and jurisdictions. But within these limits, experimentalist practices of learning from diversity, peer review, and continuous revision based on local implementation experience are central to its operations. Adoption of these experimentalist practices flows directly from the SSM’s deliberate efforts to adapt its rules, methods, and procedures to banks’ diverse business models on the one hand, and constantly to update them in response to uncertain and rapidly changing markets and technologies on the other.

Thus, despite the SSM’s emphasis on regulatory harmonization and supervisory convergence, it does not seek to homogenize banks’ business models or impose a one-size-fits-all approach to their
supervision. Instead, it seeks to accommodate banking diversity across the eurozone by tailoring common rules and methods to firms’ specificities, “balancing uniform supervisory anchor points with constrained supervisory judgment”, while combining the “deep specific knowledge of national supervisors with the broad-ranging experience of the ECB”. To achieve these objectives, the design of the SSM’s supervisory model was itself the outcome of joint deliberation and comparison of national practices by mixed ECB-NCA teams. The development of the JSTs has similarly involved an intensive process of cross-fertilization and “learning from difference” among supervisors from different national systems. To foster this multi-perspectival approach to bank supervision, the SSM systematically combines multiple forms of comparison both nationally and cross-nationally through ongoing peer review and benchmarking within and between JSTs, onsite inspectors, and ECB divisional networks. NCAs of banks with subsidiaries or headquarters in other Member States appreciate the deeper insight into each other’s national markets and supervisory approaches provided by the JSTs, while systematic peer review and benchmarking play crucial roles in resolving disagreements between ECB and national officials about the SREP decisions on individual banks, and in ensuring consistent outcomes across the SSM (Zeitlin 2021: 20-24; ECB Banking Supervision 2015: 5).

From the outset, the SSM has sought to engage in “forward-looking” supervision, aimed at identifying emerging prudential risks and threats to financial stability, rather than “looking backward towards audited accounts”. Its manuals and guides are therefore regarded as “living documents, subject to continuous review and improvements” in light of implementation experience and new developments. Peer review and benchmarking at multiple levels serve as powerful mechanisms for clarifying reasons for disagreement, exposing blind spots, and identifying opportunities for improvement, which should be addressed in subsequent iterations. In this process, frontline supervisors can and regularly do propose revisions to rules, procedures, and methodologies based on problems and possibilities revealed by local application, which are then taken up through joint ECB-NCA networks (Zeitlin 2021: 24-28; ECB Banking Supervision 2015: 5, 56; 2018: 4, 6). The EBA, whose own peer review and supervisory convergence activities are likewise conducted on experimentalist lines, provides a complementary framework for learning from difference among NCAs across the Banking Union divide in drafting, overseeing, and revising the EU’s Single Rulebook (Zeitlin 2021: 28; Bozina Beřos 2021; Ferran 2016).

The SSM, as we have seen, represents a distinctive form of DI, in which integrated supervision of banks within participating Member States is nested within Union-wide financial regulation. This dual arrangement in turn reflects asymmetries in national preferences and interdependence in this field, path-dependently linked to euro membership, together with concerns to safeguard the integrity of the Single Market and limit negative externalities for non-participating Member States. Within its sphere of authority, however, the SSM is firmly committed to the development of uniform rules, methodologies, and procedures, which supervisors are expected to apply as consistently as possible across banks and jurisdictions. Such uniformity and consistency, its leaders firmly believe, are crucial to advance the SSM’s overarching goals of financial stability and market integration, by reducing opportunities for regulatory arbitrage, removing barriers to cross-border operations, and ensuring equal treatment for credit institutions across the Banking Union.

Yet as our research has shown, the SSM does not seek to impose a “one-size-fits-all” approach on eurozone banks, but instead to calibrate its supervision ever more finely to the latter’s diverse business models and risk profiles, by combining local knowledge with broader comparative perspectives through the JSTs and the ECB’s horizontal benchmarking services. Despite the far-reaching powers over eurozone banks and NCAs granted to the ECB, the SSM’s common policies, rules, methodologies, and procedures have been collaboratively developed by a dense network of joint working groups, task forces, and drafting teams of European and national officials. Such collaboration is rooted in the SSM’s polyarchic governance structure, in which all major policies and decisions must effectively be agreed by the NCAs, while supervision of individual banks depends in large measure on tasks carried out by national officials over whom the ECB lacks direct
hierarchical control. But the ECB and NCAs created these elaborate joint structures for feeding local knowledge into the design and application of common methods and procedures not merely because they felt obliged to do so politically, but also because they considered them functionally essential for tackling the diversity of business models and conditions across the Banking Union, while adapting to rapid changes in financial markets, technologies, and lending practices. The SSM has accordingly instituted a remarkable array of experimentalist processes for recursive revision of its rules, methodologies, and procedures through continuous peer review and benchmarking of their application at multiple levels. While at any given moment, the SSM seeks to apply uniform policies, processes, and practices across eurozone banks, as in conventional UR, the latter are thus regularly updated and revised on the basis of learning from comparative review of implementation experience in different local contexts, as in the classic XG architecture.

5. Conclusions

EU electricity and banking regulation clearly diverge on one key point. In electricity, EU-wide policies and rules for cross-border exchange and management of interconnected power grids apply equally to all Member States, with no possibility for opt-outs. In banking, by contrast, supervision of eurozone credit institutions has been integrated into a single authority under the aegis of the ECB, with far-reaching powers over bank licensing, capital holdings, governance, and internal processes, but nested within EU-wide financial regulation. Participation in the SSM is mandatory only for the Euro Area, though other EU Member States may also apply to opt in under a system of “close cooperation” with the ECB. This distinctive form of DI reflects asymmetries in national preferences and interdependence, path-dependently connected to the binary choice for euro membership, coupled with concerns to safeguard the integrity of the Single Market and limit externalities for non-participating Member States. Although energy policies are likewise historically linked to core state powers and remain highly sensitive politically, it has nonetheless proved possible to extend European integration of electricity regulation step-by-step, without dividing Member States into separate groups of “Ins” and “Outs”.

Beyond this crucial difference, however, the evolution of EU regulatory governance displays a similar trajectory across these two major sectors. In both electricity and banking, the integrated rules themselves and the methodologies for their application have become progressively more uniform and detailed. At the same time, however, these increasingly uniform and detailed rules and methodologies always leave room for local adaptation and contextualization, whether through a margin of discretion (explicit or implicit) for national authorities, as in electricity, or through customization to firm specificities and direct participation in their application by national supervisors, who can flag misfits and propose changes in response to local conditions, as in banking. In both sectors, moreover, the common policies, rules, and methods are not centrally designed and hierarchically imposed by the EU institutions, as in conventional UR, but are instead developed collaboratively by polyarchic networks of European and national officials, with varying degrees of participation from other stakeholders. In both sectors, finally, these increasingly uniform policies, rules, and methods have been developed through experimentalist comparisons of different national and regional approaches, and are regularly updated and revised through joint review of their implementation in different local contexts.

The cases of EU electricity and banking regulation thus show that the conjunction of high interdependence with high uncertainty may indeed result in the emergence of simplified XG architectures, combining synchronic uniformity with diachronic revisability. In such simplified XG architectures, framework rules and procedures may be progressively specified and discretion for lower-level actors at any given moment narrowed, but the rules and procedures themselves remain

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6 Such participation is broader in electricity than in banking, where financial institutions and other interested parties are regularly consulted by the SSM and the EBA, but play no direct role in the rule-making process itself, unlike that of TSOs in the drafting of network codes.
contestable in light of local application, while revisions over time based on learning from comparative review of implementation experience provide a crucial source of improvement and adaptability for the governance system as a whole. Such architectures have previously been identified in sectors like chemicals, where there is at any given time a single harmonized list of authorized substances whose commercialization Member States are obliged to accept, but which is open to challenge and regularly revised through review processes involving not only national and European regulators, but also a wide range of stakeholders within and beyond the EU (Biedenkopf 2015). Simplified XG architectures of this type may also become increasingly prevalent in other sectors of EU regulation subject to rapid and unpredictable changes in markets and technology, where concerns to promote a level playing field and prevent regulatory arbitrage are similarly strong, such as competition or telecommunications (Svetiev 2020; Mathieu & Rangoni 2019).

The cases of electricity and banking regulation support the view that while conditions of high interdependence coupled with high uncertainty require rules and practices to be both uniform and revisable in order to be effective, these can be accepted as legitimate by diverse EU Member States, provided they are applied in contextually sensitive ways and regularly revised on the basis of local implementation experience, through deliberative review processes in which national officials themselves participate. In this sense, these two cases further suggest that from uniformity and experimentalism being antithetical to one another, diachronic experimentalism may be a necessary condition for synchronic uniformity of regulation within a heterogeneous polity like the EU.

What finally of the relationship between XG and DI? The SSM is obviously an instance of DI, whose creation would not have been possible without an opt-out for non-euro Member States, especially the UK. But if DI allowed the Banking Union to move forward initially, it does nothing to address the very substantial challenges of integrating diversity among participating Member States, for which the SSM’s experimentalist organization and practices are instead essential. The EBA, whose own peer review and supervisory convergence activities are conducted on experimentalist lines, likewise provides a parallel framework for learning from difference among NCAs across the Banking Union divide. The case of EU banking regulation thus suggests that XG and DI may be complementary, but asymmetrically so, in that the latter depends on the former to accommodate diversity within and across separate groups of Member States, but not vice versa.
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