DOI:
10.1111/gove.12409

Document Version
Peer reviewed version

Regulatory relationships across levels of multi-level governance systems: from collaboration to competition.

Abstract

The European Union and the United States are paradigmatic examples of multi-level governance systems that are also Regulatory States. In both settings, informal networks of regulators preceded and existed alongside supranational (federal) regulatory agencies. The literature understood their rationale as preparatory to the creation of higher level agencies. This approach, however, cannot explain why informal regulatory networks still exist, years after the establishment of higher level agencies. What explains the persistence of informal regulatory networks? The argument of this paper is that, in multilevel governance systems, the relationship between regulatory networks and the supranational level of governance is co-evolutionary and embodies struggles for autonomy and authority: as the multi-level governance system consolidates, the character of this relationship evolves from collaborative to competitive. The argument relies on a comparative historical analysis of two voluntary networks of energy regulators from the EU and the U.S., based on 27 interviews and archival research.

Keywords: regulatory networks, multi-level governance, EU, U.S., energy

Introduction

In multi-level governance systems, collaboration and coordination across levels of governance are the engines of policy-making. The regulatory governance of network industries, e.g. energy infrastructure, is no exception: regulatory institutions exist at both higher and lower levels of governance. The United States and the European Union are paradigmatic examples: in the former, state-level regulators coexist with federal regulatory agencies; in the latter, national regulatory authorities co-exist with European Agencies. The emergence of the Regulatory State in both polities was a process spanning several years and culminating in the establishment of, respectively, federal and European regulatory agencies (Sunstein 1990, Majone 1994, Stewart 2003, Radaelli and Meuwese 2012).

Before the Regulatory State, regulatory institutions only existed at lower governance levels. They formed informal networks of collaboration that the literature has understood as meant to foster regulatory convergence and prepare for the establishment of higher level regulatory institutions, both in the European system (Dehousse 1997) and in the American one (Rodgers 1979, Childs 2001). Indeed, following several rounds of legislation, sectoral federal agencies (Childs 2001) and European Agencies (Egeberg, Trondal et al. 2014) were established. Yet, the regulators' voluntary informal networks did not dissolve. To the contrary, they are still actively involved in the policy-making space. What explains the persistence of informal, powerless regulatory networks after the establishment of formal supranational regulatory institutions?

Responding to this question offers the opportunity to reflect on the scope conditions: what can be learned from comparative analysis of multi-level governance systems? This contribution tackles these questions through a comparative historical analysis of two voluntary networks of regulators: the Council of European Energy Regulators (CEER) and the National Association of Regulatory Utility Commissioners (NARUC). These gather, respectively, 28 National energy Regulatory Authorities (NRAs) of the EU (plus Norway) and 50 state Public Utility Commissioners (PUCs) of the U.S..

The argument of this paper is that, in multi-level governance systems, the relationship between regulators across levels of governance is interdependent and co-evolutionary (Trein 2017). The paper characterizes this relationship as complex and evolving from collaborative to competitive (Pfeffer and Salancik 1978): initially, the emergence of a higher level of governance affords regulatory institutions at lower levels the opportunity of policy input, which they seize through their informal networks; later, however, the consolidation of the Regulatory State, entailing the establishment and empowerment of regulatory institutions at higher levels of governance, constrains regulators at lower levels. Rather than dissolving their informal networks, regulators reshape them into platforms for their advocacy against the constraints emanating from higher level regulatory institutions. Networks initially created for professional reasons remain for political ones.

To support the argument, the paper adopts a comparative historical approach that relies on causal narratives (Büthe 2002) based on empirical research comprising 27 elite interviews, archival research and analysis of policy documents. The two networks

emerged and developed in different polities and in different time periods. This is not uncommon for studies that perform macro-causal historical analysis (Mahoney 1999) of rare phenomena: Skocpol (1979)'s study of social revolutions is a case in point. Contributions such as Newman (2008a), Newman (2008b) and Bach and Newman (2007) have shown how regulators leverage their interdependence to create networks, which they use to further their preferred policy options. This paper examines a later stage in the life of regulatory networks, when the salience of regulators' networks declines, given the rise of empowered supranational (federal) agencies.

The findings of this paper contribute to the literature by explaining regulatory relations across levels of governance as dynamic and co-evolutionary, rather than static and immutable. The paper shows that regulatory networks become permanent features of the governance system once the tension between levels of governance becomes itself permanent; the supranational (federal) system may expand its regulatory competence, but cannot forgo the informational and ideational contribution of regulators at lower levels. The analysis holds implications for the study of regulatory collaboration in multi-level governance systems: over time, changes in power balances across levels affect the nature of the collaboration.

2. Literature review

The notion of multi-level governance was coined to describe the EU and its workings (Marks, Hooghe et al. 1996, Eising 2008). Over time, the territorial focus of the multi-level

governance literature has broadened to include a more metaphorical connotation, portraying the complexity of interactions among actors placed at different political and sectoral levels (Stephenson 2013) as well as occurring at different times (Goetz 2010). The kinship between multi-level governance and networks is amply recognized in the literature (Eising and Kohler-Koch 2003) and drawn upon to convey the interdependence of actors across levels and their collaborative attempts to influence European policy-making (Piattoni 2010).

It has been argued that the EU is the main playing field for concept development of multi-level governance (Bache and Flinders 2015). Yet, this conceptualization prevents scholars from comparing the EU to other systems of governance and, therefore, connecting their insights into a broader framework of theory development, particularly insofar as public administration is concerned. Indeed, the concept of multi-level governance has shown impressive descriptive power, but still lacks precise causal mechanisms concerning the relations of the bureaucracy and administrative bodies across different levels (Bauer and Trondal 2015, Benz 2015).

Federal states are governance systems that display interdependencies across levels of governance. In the context of public administration research, the federal state most comparable to the EU is the U.S. The EU and the U.S. are paradigmatic Regulatory States (Seidman and Gilmour 1986, Majone 1997, Lodge 2008, Eisner 2011): states that chose to achieve certain policy objectives through regulation (Selznick 1985), and by delegating authority to expert bodies rather than through direct government intervention (Majone 1997). Both are polities organized across multiple levels of governance, where the

emergence of a supranational (federal) level of governance followed chronologically the creation of political units (nation states or states) at lower levels.

In both contexts, the concept of regulatory state finds its deepest origins in the economic regulation of public utility sectors (Kanazawa and Noll 1994, Lodge 2008). In both, regulatory networks exist at the interface of different governance levels (Childs 2001, Beecher 2012). As a matter of fact, the rise of the European Regulatory State has been compared to the rise of the American Regulatory State (Majone 1991, Radaelli and Meuwese 2012): as a new, higher layer of governance was emerging, it required a re-allocation of administrative and bureaucratic authority (Skowronek 1982).

In the energy sector, infrastructural characteristics contrast with administrative organization: energy infrastructure covers vast swaths, companies operate across borders, but regulatory institutions exert authority within specific jurisdictional boundaries. As territories are joined into bigger socio-political configurations, such as a Federation of States or a Union of nation-states, an integrated regulatory approach becomes necessary and motivates the establishment of higher level regulatory agencies. As shall be seen, in the U.S. the rise of federal regulation stemmed from the need to regulate the railroads, which presented similar characteristics: a mismatch between the reach of any individual regulatory authority and the trans-jurisdictional character of disputes.

Whereas the relationship between national regulators and the European Commission is based on elite consensus (Coen and Thatcher 2005, Blauberger and Rittberger 2015), relationships between PUCs and federal regulatory agencies are theoretically inspired by

a “cooperative federalism” that is, actually, rather confrontational (Childs 2001). Moreover, whereas U.S. federal agencies possess actual regulatory powers, European Agencies have mostly advisory powers and some binding powers on trans-national issues. Furthermore, the American and European regulatory states rose at a century distance: the former in the early 1900s, the latter in the early 2000s. Yet, the cases are emblematic of the opportunities and tensions engendered by interdependence between levels of governance in multi-level governance systems.

They Council of European Energy Regulators (CEER) was created by European national energy regulators (Vasconcelos 2005), which mushroomed across the Member States in the 1990s, following the pioneering example of the United Kingdom (Stern 2014). In the early 2000s, the European Commission incorporated national regulators into the European governance system, by establishing European Regulatory Networks (ERNs) with an advisory role to itself (Eberlein and Newman 2008). Devoid of binding powers, ERNs were found incapable of enforcing their recommendations and policy positions (Coen and Thatcher 2008). The later creation of European Agencies marked the dissolution of ERNs. However, informal networks of regulators, including CEER, persisted. Thatcher (2011) argues that regulators sought to preserve their role in the European regulatory system, resisting the empowerment of European Agencies. This seems to contradict earlier (Coen and Thatcher 2008) and later (Bach, De Francesco et al. 2016) findings asserting that regulatory networks are inconsequential for regulatory convergence. These assertions may be reconciled by accepting that regulatory networks have had no clearly discernible effect on regulatory convergence, but may have served national regulators by affording them a role in the policy process (Farrell and Newman

2014). Understanding the nature of this role is essential to understand why regulators would retain their informal networks even when, ostensibly, they had no remaining purpose.

The U.S. National Association of Regulatory Utility Commissioners (NARUC) has rarely featured in academic contributions. Although the literature is replete with contributions on the politics of regulation at state level in the U.S. (Besley and Coate 2003, Quast 2008, Leaver 2009), it lacks examination of informal collaboration between PUCs and of how they leverage their network toward the federal level. Childs (2001) is a notable exception. In his contribution, Childs retraces the history of PUCs in relation to federal agencies and underscores their conflictual nature. Childs underlines the important role of NARUC in representing PUCs at federal level, but lacks appreciation of its evolution over time. Beecher (2012) focuses on NARUC itself, retracing its history from establishment to the modern day. This contribution illustrates the main features of PUC's long-standing collaboration, and NARUC's structure and functioning. Notably, it argues that NARUC will exist as long as utility regulation will exist in the U.S. The author grounds this claim in the socialization function NARUC performs.

Indeed, the persistence of NARUC and CEER may be simply due to habit: regulators may cherish their networks as their professional clubs. The socialization mechanisms underpinning regulatory networks are important: regulators exchange information, learn from each other, and eventually become better professionals (Bianculli 2013, Papadopoulos 2017). However, the stated aim of NARUC is representing PUCs' interests at federal level. Mere socialization does not appear to warrant the complexity of NARUC's

organizational structure and the multiplicity of its activities. By the same token, socialization is unlikely to be the only reason why European regulators preserved the CEER. Arguably, the creation of ACER increased regulators' costs of attending CEER meetings and working on CEER's deliverables. Participation in CEER is voluntary, and entirely financed by regulators. Hence, if the only reason for CEER's continued existence was serving as professional club, one should see markedly reduced levels of activity following the establishment of ACER. Yet, CEER maintained its usual levels of activity (interview 13, 14, 15, 21).

Investigating cases over time allows the identification of causal mechanisms and explanatory factors rooted in previous phenomena or events, whose significance informs later events (Farrell and Newman 2014). The comparative historical design adopted in this paper leverages the differences in time and space between cases to identify the causal chain leading to the common outcome of interest: network persistence. This approach has been adopted in milestone contributions in comparative historical analysis, such as Skocpol's (1979) study on social revolutions, which examined the causes of social revolutions in late 18th century France, early 20th century Russia, and mid-20th century China. In his critique of Skocpol's (1979) work, Sewell (1996) argues that, for historical facts to be comparable, they must be equivalent and independent. However, he argues, there is a trade-off between the two requirements: the further apart events are in time, the higher the likelihood that they are independent, but the lower the likelihood that they are equivalent, and vice-versa (Haydu 1998).

Sewell (1996), however, praises Skocpol for her use of causal narratives and her depiction of key events, which made her argument persuasive. Indeed, Sewell (1996) argues that the study of "events" was an underestimated methodological approach of comparative historical analysis. His conceptualization of events recalls the features of 'critical junctures': key moments that disrupt the status quo, setting in motion new path-dependent sequences (Collier and Collier 1991, Pierson 2000, Capoccia and Kelemen 2007). "Critical junctures" happen in moments of political indeterminism, when multiple courses of action are possible the usual structural constraints on action are relaxed, allowing "wilful actors" to shape circumstances "in a more voluntaristic fashion than normal circumstances permit" (Mahoney, 2001, p. 7). As shall be seen, critical junctures play a key role in CEER's and NARUC's evolution.

Sewell (1996) stated that the conditions of equivalence and independence could only rarely be met. The phenomenon examined in this paper is one of those rare cases: the cases of NARUC and CEER have emerged sufficiently apart for being independent, while also being equivalent. The equivalence stems from their embeddedness in the historical process of emergence of a new, additional, higher level governance– the federal state and the European Union – over previously separate polities. This process entailed the transformation and growth of the administrative system (Skowronek 1982, Majone 1996). Both polities became Regulatory States: although different in their manifestations, they both adopted regulation as a means of adjudicating between winners and losers from the governance transformation.

The paper relies on elite interviews, documentary analysis and archival research in NARUC's archives. This choice aims at focusing the narrative on the regulators' perceptions of their networks. The founders of NARUC have left behind copious information on their initial meetings, and began maintaining a regular bulletin in 1905. These are available in NARUC's archives. Their main insights have been recorded in a book, which represents a fundamental source of evidence for the NARUC case. The book was written by Paul Rodgers, former regulator and first Executive Director of NARUC (he held that position for over three decades until 1986), and published in 1979 in a dozen copies. By contrast, interview material informs the core of the European case study, given the absence of written records. All interviewees and informants have been guaranteed full anonymity.

A rarely highlighted feature of qualitative methods concerns their reliance on the testimony of those who were directly involved in the process under study (Van Evera 1997) to make sense of their decision-making process and the effect that institutional arrangements had on it (George and McKeown 1985). Blatter and Haverland (2014) include "confessions" among the elements needed for within-case analysis, as actors' perceptions, although biased, can shed light on decisions as well as non-decisions, given anticipated consequences. Such emphasis on contingent individual behaviour matches the concerns of historical analyses, thus bringing the two frames of reference to converge.

3. The history of CEER: building the European regulatory framework.

Between 1983 and 1989, the government of the United Kingdom launched a wide-ranging privatization and liberalization program, whereby it privatized most of its formerly state-owned utilities. Thereafter, the British government created Offices of Regulation, independent from the government and from industry, tasked with regulating the natural monopoly sectors. In 1992, Norway also engaged in a vast liberalization program of its electricity sector, soon followed by Sweden and other Scandinavian countries. In 1994, the Spanish, Italian and Portuguese governments followed in those footsteps (interview 22), and decided to launch liberalization programs and to establish independent energy regulatory authorities.

In 1996, the first comprehensive package of European legislation on energy markets was released. The so-called First Energy Package mandated the end of the energy monopolies by removing exclusive rights enjoyed by incumbents to produce, supply and transport gas and electricity and requiring them to negotiate with new entrants on the terms of access to their networks (Hancher and Salerno 2017). The package did not mention national regulatory authorities and allowed national governments to decide on the institutional means to achieve the ends of the law. The establishment of NRAs, therefore, occurred at national governments' initiative.

In February 1997, existing energy NRAs (from Italy, Spain, Portugal, Sweden, Norway, and the UK) met for the first time at an international conference on electricity market

restructuring[i] jointly organized by the European Union and the World Bank in Vasteras (Sweden). At the time, the British electricity regulatory authority was widely perceived as being paradigmatic. Eager to learn the ropes of a completely new profession, the newly established southern European regulators sought to establish closer links their more experienced UK and Scandinavian counterparts. They were, however, disappointed: Scandinavian regulatory authorities had developed out of pre-existing ministerial departments, thus representing no rupture but continuity with their administrative tradition (Ziller 2001). Conversely, the UK regulatory authority observed with more interest the privatization programs then ongoing in South America and Australia than the embryonic opening of southern European markets (interviews 1, 2, 3, 4, 6, 12, 14, 15).

The three Southern European regulators realized they shared important common challenges: as soon as the political and economic consequences of cost-reflective energy tariffs (i.e. higher consumer bills, the end of subsidization of energy companies, substantial layoff of employees, etc.) became evident, both governments and industry executives became scarcely collaborative, if not openly hostile, towards these new institutions (interview 3). United in their quest for benchmarks, and for legitimacy, the three Southern European regulators agreed to start communicating on a regular basis about the issues they faced in their national markets. They started meeting quarterly, in each of their countries' capitals. Their first joint meeting took place a month after the Vasteras conference, in March 1997. Soon, they decided to establish three working groups, each chaired by one of them. Each dedicated staff to maintaining regular communications with their counterparts.

In those same years, the European Commission, the first supranational Euro-regulator of sort (Majone 1991), also faced considerable difficulties. It was severely under-resourced, especially in sectors for which it did not have well-defined competence, such as energy policy. The only providers of information to Commission officials were the national energy incumbent companies, which had incentives to provide a biased picture of their costs. For this reason, by the late 1990s Commission officials reached out to national regulators[ii].

3.1 The European Commission co-opts the regulators.

In the course of 1997, the Director of the European Commission Directorate General on Transport and Energy had learnt about the meetings of the three Southern European regulators. He shared with them his idea of establishing a multi-stakeholder Forum for dialogue on energy market reforms to encourage progress towards the creation of the Internal Energy Market (IEM). The Forum was supposed to become a regular gathering of the European Commission and regulators, grid operators, traders, and other national energy market stakeholders.

That idea materialized into what was called the European Electricity Regulatory Forum. The first meeting of the Forum was held in Florence (Italy) in February 1998. Henceforth it was commonly referred to as “the Florence Forum”. Now a taken-for-granted policy event, the Florence Forum at the time represented a veritable revolution in the governance of the European energy sector: stakeholders shared information all others did not have access to, so that many industry and policy plans were unveiled during those

meetings. The corresponding gas Forum, held in Madrid for the first time, henceforth renamed "the Madrid Forum", was set up in 1998. The "regulators' group", emerged as a distinct voice in the debate on the regulatory framework since the very first meetings[iii].

With the exceptions of France (that did so in 2003) and Germany (in 2005), all EU-15 Member States established energy NRAs quickly thereafter. The three Southern European regulators welcomed them to their informal club. In December 1999, during the 4th meeting of the Florence Forum, the three Southern European regulators expressed the intention to establish an association of European energy regulators.

> "*In the beginning, most of the work was national. (…) The CEER was a club, it was interesting to go there because you met colleagues, on a national level you did not have colleagues (…) you had nobody to talk to and find out "Oh this is a usual problem or my issues are totally different from everybody else's? Am I doing something wrong?" (…) In the meantime, the CEER continued to develop and we found that as a group we have some influence at EU level, so it's not just exchanging best practices and learning from each other, which is also a component, but we also have an impact on what happens next*". (interview 28)

The bold move of the regulators followed from their understanding that establishing an association would have allowed the "regulatory position" to come across directly to the Commission (interviews 1, 3, 4, 5, 22, 25, 28). A direct channel of communication to the European Commission implied that regulators enjoyed a vantage position of access to European energy regulatory policy formulation, which they leveraged domestically towards government and industry alike.

"*At that point, everyone became very interested in collaborating and started showing up at meetings. We decided we needed to make agendas for the meetings, having minutes, and draft a work plan. Everyone was really eager to take part, because they understood that it was in their interest to do so. What we were doing was benefiting everybody: we were becoming listened to, and this made us more authoritative.*" (interview 1)

In March 2000, representatives from Belgium, Finland, the UK, Ireland, Northern Ireland, Italy, Norway, the Netherlands, Portugal, Spain and Sweden met in Brussels to sign the Memorandum of Understanding (MoU) establishing the CEER. The MoU was non-binding and merely declared the intention of regulators to coordinate in the interest of achieving the Internal Energy Market.

In 2000, the European Council launched the Lisbon Agenda. Among other things, it requested the full liberalization of national energy markets and market integration across the EU. The Council asked the European Commission to prepare legislative proposals. The Commission sought the regulators' views, and decided to formalize their mutual relationship (interview 1). In November 2003, the Commission created the European Regulators Group for Electricity and Gas (ERGEG). The European Commission could not devolve any resources to the ERGEG; the CEER managed it entirely. A few days earlier, the CEER had been registered as a no profit association under Belgian law.

"*The Commission wanted to consolidate the CEER as advisory organ to itself. But we, the regulators, said 'Well, we don't want to be part of something that can only be convened by the Commission… we want to be able to convene meetings and*

talk about our things, for instance training, exchanges of information, of help…. we don't dissolve the CEER'. And so, there were the CEER and the ERGEG." (interview 1)

In six years, CEER had grown from a three member professionals' club to a collective body of European energy regulators contributing to the formulation of European energy policy. By networking, regulators had gathered a body of information and expertise of immense value to European policy-makers.

Regulators collaborated to the preparation of the Second Energy Package, which was released in 2003.

"*We helped making the idea of independent regulation a European standard. Remember that the first directives of 1996/1998 did not foresee regulators. I wonder whether, without CEER, the 2003 Directive would have imposed the obligation of independent regulation in all Member States. By showing the importance of strong, independent and cooperative (among themselves and with the Commission) regulators, CEER created a de facto standard. The description of NRAs in the 2003 Directive was based, to a large extent, on the mandates of the Portuguese and Italian NRAs*". (interview 13)

Preparatory work for the Third Energy Package began soon thereafter. Released in 2009, the third package provisions were ambitious. They included the restructuring of national energy sectors through the unbundling of vertically integrated incumbents, mandated third-party network access, and cross-border trade. The CEER espoused the European

Commission's policy goals, and developed policy proposals concerning both market provisions and regulatory powers and independence (interviews 1, 2, 3, 4, 13, 14, 15, 21, 25).

3.3 The CEER after the European Agency.

The Third Package also established the ACER, which comprises all EU national energy regulators as well as the European Commission. National regulators were strongly supportive of its creation.

> "*The Agency was necessary, we all knew that. Because… there are things that just will not happen through voluntary cooperation, because there are too many obstacles, domestically, etc. However, we had imagined it differently. What is there now is not a European regulatory agency. It is a hybrid thing. It is useful, of course, but not a real regulator*." (interview 13)

The ACER took office in 2011. This event, which regulators had imagined in continuity with their growing role at European level, represented instead an abrupt break with that established pattern. Although all 28 national regulators sit in the ACER Board, the organization is managed by Commission officials. Furthermore, companies and lobbies look at the European agency as the source of transnational energy policy formulation (interviews 13, 14, 15, 18). Several interviewees (3, 13, 14, 18, 21, 25) have mentioned that sharing the driving seat of ACER with the European Commission curtailed the regulators' autonomy on setting their agenda of collaboration. Within the Agency,

regulators leverage their established operational collaboration against the constraints imposed by the newly formed Agency (Heims 2015).

ACER deprived CEER of its uniqueness (Busuioc 2016). Hence, CEER's relationship with the Commission has changed from collaborative and consensual, to competitive (Pfeffer and Salancik 1978): interviewees affirmed that the Commission is "too ideological" and too keen on achieving integration, overlooking differences between the Member States. and transformed CEER into their platform of advocacy.

> "*The CEER has been incredibly successful but its initial role is finished, it's gone, pretty much, it's transferred to ACER. So now CEER is still working but I think it's got a philosophical purpose, which is to preserve the interest of independent energy regulators. (…) It can also lobby, of course… lobby is the wrong word… it can also try to influence the political establishment in Europe in ways which ACER can't, really, because technically ACER is kind of an arm of the EC so it would be wrong for it to (…) lobby publicly in ways which disagree with the EC because it would be like the EC arguing with itself, but CEER can do these things and that I think is the real example of the independent voice of regulators.*" (interview 14).

4. NARUC: regulation through confrontation.

The long history of regulation in the U.S. is also the long history of NARUC. The emergence of NARUC and of regulation in the U.S. is entwined with the appearance of the railroads (Kolko 1965, Kerr 1968, Skowronek 1982, Kanazawa and Noll 1994, Dobbin

1995). In the late 1820s, steam-powered locomotive technology revolutionized transportation across the American states. The technological disruption caused a series of abuses: wherever the railroads faced competition from other technologies – typically, over long distances, where competition from canal and riverboats kept prices low (Law and Long 2011) – customers demanded below-cost service; in the short haul, however, railroads had virtually no competitors and exploited their monopoly power.

The ensuing volume of litigation exposed the limits of states legislatures in regulating railroad operations and responding to business and consumer complaints over their practices (Rodgers, 1979). In the early 1870s, widespread public discontent prompted the legislatures of four Midwest states (Iowa, Illinois, Wisconsin and Minnesota) to pass legislation, imposing regulation of railroad companies by regulatory commission. Railroad companies challenged the constitutionality of state regulatory legislation in a series of legal cases. In 1876[iv], the Supreme Court affirmed that when private property becomes affected with a public interest it can be subject to governmental regulation (Rodgers, 1979). This verdict represented the cornerstone of the legitimacy of state regulation.

Between the 1860s and 1880s, Public Utility Commissions (PUCs) were established in most states. These early PUCs, however, did not have any real regulatory powers; their responsibilities were limited to undertaking an appraisal of the worth of a company's property and enforcing railroad safety standards. They often consisted of only one commissioner.

PUCs began meeting informally in 1874; Commissioners from Wisconsin, Illinois and Minnesota held the first meeting (Rodgers, p. 5). This group expanded as more

commissions were created in the various states, with the last recorded meeting held in 1881. Meanwhile, the American Regulatory State was taking shape and superimposing its authority over that of the individual states. In 1886 the Supreme Court, in the Wabash vs Illinois[v] case, affirmed the exclusive competence of Congress over interstate commerce, confining PUCs' authority to their state.

In 1887, Congress created the first US federal regulatory agency: the Interstate Commerce Commission (ICC). The first president of the ICC, Judge Cooley of Michigan, "*recognized that his new agency then lacked the resource to carry out even the modest tasks set for it by Congress*" (Rodgers, p. 9). The resource it lacked most was information on railroad practices in different states. Therefore, Cooley convened the first meeting of the Convention of Railroad Commissioners, which was to become NARUC, at ICC offices in Washington DC on March 5, 1889 (Rodgers, p. 8). Representatives of 21 PUCs attended the Convention, whose goal was to encourage regulatory convergence in the railroad sector across the states. Cooley became the association's first president, representing the cooperative relationship between the ICC and NARUC.

4.1. Electricity: the utilities' demand for regulation of themselves.

Whereas railroad executives struggled to eliminate state level regulation of their business, electric utility executives engaged in the opposite battle: they actively sought state regulation and protected it from federal and local encroachment (Anderson 1980,

Anderson 1981, Hausman and Neufeld 2011). The utilities called for state regulation as alternative to state franchises, which were subject to corruption, and municipal ownership.

State franchises were contracts whereby municipalities allowed the utilities to provide services by placing their equipment on municipal land. They usually lasted for several decades. The terms of the franchises varied considerably among municipalities and did not foresee constant oversight. However, municipal governments often threatened the utilities with entry and competition unless a bribe was paid and appropriated part of the utilities' revenues (Hausman and Neufeld, 2011). The introduction of state regulation gave utilities' revenues the status of a constitutional right protected by both state and federal courts. At the time, electricity networks did not extend across state boundaries. The typical utility served a small area from a single generating plant in a single state (Hausman and Neufeld, 2011). Hence, PUCs had full jurisdiction over the utilities and regulation effectively guaranteed the utilities protection from competition.

4.2 The Shreveport Doctrine: questioning the legitimacy of state regulation.

The early 1900s, however, saw the further empowerment of the ICC and the beginning of conflicted relationships between PUCs and federal regulators (Childs 2001). In 1912, the PUC of Louisiana filed a complaint against the Texan PUC with the ICC: intrastate railroad rates in neighboring Texas (established by the Texan PUC) were much lower than interstate rates between Texas and Louisiana (established by the ICC). This resulted

in Louisianan shippers paying higher prices to reach commercial cities in eastern Texas, close to the border, than Texan shippers did, even though the latter had to cover much longer distances within Texas. The initial decision of ICC was to order the railroad companies to adjust intrastate rates: they could either either raise intrastate rates to the interstate level, or lower the interstate rates. The railroads seemed to be authorized to make these decisions without the approval of either the relevant PUC, whose authority was entirely bypassed, or the ICC.

The long ensuing case culminated in a 1914 verdict where the Supreme Court considered that discriminatory intrastate rates constituted an undue burden on interstate commerce, and that the decision to alter them rested in the ICC (Childs, 2001), thereby establishing the so-called Shreveport Doctrine[vi] and, with it, the primacy of federal regulation. The railroads exulted. PUCs, through NARUC, opposed the decision as it was factually subordinating their jurisdiction to the federal one. Then, Congress set up a "*special joint subcommittee [...] to conduct an investigation into government regulation of interstate and foreign transportation and government ownership of all public utilities*" (Rodgers, p.24). The subcommittee never completed its task, however, because the U.S. entered WWI.

4.3 The consolidation of the NARUC: post-WWI arrangements.

When the U.S. decided to engage in WWI, it became evident that the railroad system was unable to meet the coordination demands of the war and risked plunging into chaos. This prompted the Council of National Defense to ask railroad companies to halt competitive

activities and to coordinate their operations nationally. In 1918, President Wilson created the temporary US Railroad Administration (RA), to manage the railroads for the duration of the war and populated it with railroad executives. Swift rate increases were authorized, damaging shippers. The ICC had only advisory tasks, its powers virtually abrogated. Only one NARUC representative sat in one of the RA committees (Kerr 1968), reducing the representativeness of PUCs to the minimum. Their common exclusion prompted the ICC and PUCs to ally against railroad executives.

At the end of WWI, the entire regulatory system of the railroads was put under discussion. Stakeholders proposed to Congress more than thirty different plans for reform (Waterman 1919). NARUC "*urged the elimination of federal control of the railroads [...], the establishment of an ICC-State cooperative mechanism for ratemaking, and the eradication of the Shreveport Doctrine*." (Rodgers, p. 20). "*But the commissioners' most important role in the post- war legislative debate was to communicate, through the National Association of Railway and Utilities Commissioners, with the Interstate Commerce Commission in developing arguments to counter the railroad attack on the regulatory system*." (Kerr, p. 202).

Since legislation had empowered it with federal decision-making authority, the ICC and PUCs had collaborated less. After WWI, however, NARUC persuaded the ICC of the necessity of cooperating in order to retain their respective spheres of regulatory authority. In other words, state regulators, "*battling attempts to centralize regulatory action in Washington*" (p. 702), managed to work out a role for themselves "*in the emerging modern regulatory state*" (Childs, 2001, p. 703). "*Once the state commissioners had persuaded*

national regulators, Congress, and the courts to accept the cooperative approach, they employed the power of their association, NARUC, to solidify their victories with a concerted movement to "professionalize" the business of regulation" (p. 704). NARUC had become indispensable to PUCs to preserve their powers.

4.4 The creation of federal agencies.

During the New Deal, many federal agencies were created, such as the Federal Power Commission (created in 1920 to regulate hydroelectric projects) and the Federal Communications Commission (FCC, created in 1934). NARUC purposefully shaped its relationships with all new federal agencies in a cooperative fashion. As a matter of fact, previous NARUC members were often Board members in these new agencies. NARUC representatives helped drafting these agencies' statutes, careful to prevent the Shreveport doctrine from being enshrined in them (Childs, 2001).

The Federal Motor Carrier Act of 1935 was particularly important as it institutionalized the ICC – NARUC cooperation. The Act negated the application of the Shreveport Doctrine to intrastate rates and provided for the use of State joint boards, nominated by PUCs and appointed by the ICC, to decide motor carrier issues involving not more than three States (Rodgers, p. 31). According to Rodgers (1979), these were NARUC's proposals, which ended up in the law. The Act also provided for NARUC to have office space in or close to the ICC building in Washington. At any rate, the tension between federal agencies and PUCs had become a permanent feature of American regulatory federalism.

Between the end of the Second World Was and the 1970s, the energy sector enjoyed a relative calm (Hausman and Neufeld, 2011). The industry was growing and reaping the benefits of economies of scale; increased consumption was rewarded with lower tariffs and rates were perceived as "*just and reasonable*". (Anderson 1980). This period of calm ended once economies of scale were exploited to the fullest and utilities began facing difficulties in raising capital. The oil embargoes of the 1970s made rates soar and pushed several big utilities on the verge of bankruptcy (Anderson, 1980). A conspicuous amount of litigation ensued. The whole regulatory process became much more contested, as did PUCs' relationships with the federal agencies.

In 1935, the Federal Power Commission was given jurisdiction over the sale and transportation of electricity and gas. It was renamed the Federal Energy Regulatory Commission (FERC). Since then, FERC has seen its jurisdiction constantly expanding, by allowing it increasing policy relevance and control. The introduction of competitive generation through the Public Utility Regulatory Policies Act (PURPA) of 1978 and, in particular, through the Energy Act of 1992, entailed increased competencies for FERC. This worsened relationships across levels of governance (interviews 16, 21, 26, 27) The political support for restructuring and deregulating infrastructure sectors grew unabated across the states during the 1980s and the 1990s (Hausman and Neufeld, 2011). Over time, state regulators' control over the utilities in their state diminished (interviews 16, 21). To this day, NARUC remains the organization defending the powers of PUCs in the US federal system.

5. Discussion and conclusions.

The interaction between CEER and NARUC and their supranational (federal) counterparts was governed by similar mechanisms through time. Both networks emerged before the regulatory apparatus of the supranational (federal) level. Their emergence was primarily driven by the regulators' desire to form a professional club for information exchange and learning. Their accumulated information and experience, however, came to represent a valuable resource for the emerging Regulatory State, almost as an unintended consequence. By calling on the regulators' networks to inform supranational (federal) policy, the developing Regulatory State afforded them access to the early stages of policy formulation. The regulators' networks underwent its first transformation: from professional club to a direct channel of communication with higher level institutions. Through the network, lower level regulators acquired an enviable role in the formulation of the supranational (federal) policy framework, only to partially lose it with the empowerment of the institutions of the Regulatory State.

In their discussion of the resource dependency between organizations, Pfeffer and Salancik (1978) depict relationships as evolving from collaborative ("*where the output of one is the input of the other*", p. 41), to competitive (*"the outcome achieved by one can only be higher if the outcome achieved by the other is lower"*, p. 41). Their framework aptly describes the evolution of the regulatory relationships between levels of governance in the cases investigated here. In the U.S. case, the federal agencies obtained decision-making powers that overrule those of state regulators. In the European case, ACER regulates cross-border issues only, for now. However, the scope of its powers may

expand. Furthermore, the establishment of supranational (federal) risked rendering the networks themselves obsolete, prompting regulators to transform them into their advocacy platforms.

From the standpoint of historical institutionalism, institutions are characterized by stability or constrained, adaptive change. The concept of path-dependence, underlies this view. Any explanation of the regulatory networks considered here must adopt the logic of path-dependence, since they have outlived their initial *raisons d'être*, sometimes quite considerably. For NARUC and CEER, the moment of official foundation represented little more than a formality, their real identities having formed at different stages in their evolution in response to certain path-breaking events: in the history of CEER, the establishment of ACER certainly triggered the network re-invention; in the history of NARUC, the concrete possibility of the disappearance of state regulators during WWI consolidated PUCs' allegiance to NARUC for many decades to come. Understanding these events as critical junctures helps capturing the shift in the essence of regulatory networking from contributing to policy formulation to representing a strategy of preservation. Regulators transformed their networks into advocacy platforms as a result of the realization that their authority would always be potentially subject to erosion from competing sources of regulatory authority at higher levels of governance.

However, the emergence of the supranational (federal) Regulatory State did not make national (state) regulation redundant. Rather, the consolidation of the Regulatory State rendered the tension for authority between levels of governance a permanent feature of both governance systems. This explains the considerable longevity of both networks and

their continued usefulness to their members. The similarity in European and American regulators' response to the growth of the supranational (federal) Regulatory State suggests that the underlying tensions are common and, perhaps, characteristic of multi-level governance systems more generally. In this sense, this paper contributes to the literature on multi-level governance by striving to identify the causal mechanisms deriving from the interdependence between governance levels in a sector that is traditionally overlooked in this literature, i.e. public administration (Benz 2015).

The importance of sequencing in these cases can hardly be overstated. In both cases, events followed a remarkably similar sequence, starting with a policy crisis inducing the introduction of independent regulation in selected jurisdictions and culminating in the formalization of the supranational (federal) regulatory framework. More generally, a historical institutionalist perspective enables an understanding of regulatory relationships within and across levels of governance and over time as a dynamic and co-evolutionary process (Trein 2017). More generally, this paper calls for an understanding of regulatory networks as adaptive structures, featuring complex causal chains of evolution.

The paper stems from the perceptions of regulators and does not include the point of view of other institutional stakeholders. This was a conscious choice. In both cases, regulators managed their networks autonomously and in concert. Hence, this analysis focuses on the regulators' perceptions of the evolution of their relationship with the supranational (federal) level and the responses they articulated to changes in their institutional environment.

Concluding, this paper bridged across several strands of literature in order to conceptualize the multi-faceted role of regulatory networks: not just functionally deriving from the necessity of convergence, but politically motivated by institutional concerns. These may vary over time, in response to events: from the pursuit of policy influence, to the struggle to retain authority. The paper enriches our understanding of how multi-level governance systems come into being: different actors seek to fill policy gaps through horizontal and vertical informal collaborative ties. It also shows how they evolve as power balances change, leading to new path-dependent arrangements. The key takeaway from this analysis that should inform further research on regulatory policy in multi-level governance systems, whether domestic or transnational, is that the collaborative activities of different actors should not only be examined in view of the stated policy goal that they seek to achieve, but also with a view to the institutional concerns and priorities that different actors can be expected to hold.

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Interview 5, 05/11/2014, Current, Academic, CEER

Interview 6, 07/11/2014, Former, Regulator, CEER

Interview 7, 07/11/2014, Former, Consultant, CEER

Interview 8, 03/12/2014, Former, Executive, CEER

Interview 9, 04/12/2014, Former, Executive, CEER

Interview 10, 04/12/2014, Current, Executive, CEER

Interview 11, 05/12/2014, Former, Regulator, CEER

Interview 12, 05/12/2014, Current, Regulator, CEER

Interview 13, 05/12/2014, Current, Regulator, CEER

Interview 14, 11/12/2014, Former, Consultant, CEER

Interview 15, 11/12/2014, Current, Regulator, CEER

Interview 16, 11/03/2015, Former, Executive, NARUC

Interview 17, 24/03/2015, Current, Regulator, CEER

Interview 18, 30/03/2015, Current, Consultant, CEER

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Interview 20, 23/04/2015, Current, Regulator, CEER

Interview 21, 25/05/2015, Former, Regulator, NARUC

Interview 22, 25/05/2015, Current, Regulator, CEER

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[i] Second World Conference on Restructuring and Regulation of the Electricity Market, 3-5 February 1997, Vasteras (Sweden).

[ii] The foregoing three paragraphs are based on the interview data gathered from interviewees 1, 2, 3, 4, 5, 14, 15, 22, 24, 25, 28.

[iii] European Commission staff kindly sent me the minutes from the first ten years of meetings of the Florence and Madrid. They are available upon request.

[iv] *Munn v. Illinois*, 94 U.S. 113 (1876)

[v] *Wabash, St Louis and Pacific Railway Company v. Illinois*, 118 U.S. 557 (1886)

[vi] *Houston, East and West Texas Railway Company vs United States, 234 US 342, 58 L. Ed. 1341*.