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Meso-institutions: The variety of regulatory arrangements in the water sector

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Abstract

There are many different ways to regulate water utilities. By focusing almost exclusively on regulatory agencies, the literature has missed important alternatives regarding the mechanisms through which the general rules of the game, defined at the macro-institutional level, interact with operators organizing transactions at the micro-level. Building on recent developments in organization theory and on the distinction between property rights and decision rights, this paper explores the variety of arrangements, identified as ‘meso-institutions,’ providing these links. The analysis is substantiated through a comparative approach to the drinkable water systems in France, England and Wales, and the Netherlands.

Introduction

Douglass North once defined institutions as ‘any form of constraints that human beings devise to shape human interaction’ (1990a: 3). Institutions play this role by establishing rules and/or formalizing norms and by designing devices to implement them. A central aspect in that process and a key to effective institutions is the capacity of these rules and norms and their accompanying devices to reduce uncertainty, thus securing the provision of goods and services while minimizing transaction costs.

When it comes to drinking water, there are many sources of uncertainty, commanded by its very specific nature, which is that it is a resource conditioning the survival of human beings, with no known substitute. Uncertainty may have bio-environmental origins, as when there is drought, resource depletion, or pollution; it may be due to economic forces, as when monopolistic positions or the importance of sunk costs challenge accessibility; or it may come from socio-political factors, from collective values to conflicts of interests or wars threatening availability of water. This combination of essentiality for humans with numerous causes putting its provision at risk likely explains why drinking water is such a highly regulated resource. However, this paper does not come back to the well-

documented reasons WHY there is regulation in the water sector. It rather focuses on the various FORMS the exercise of regulation can take. Regulation is hereafter understood as the set of devices and mechanisms allocating and monitoring rights, modalities that vehicle societal arbitrages in the development and usage of the resource. This paper therefore presumes a variety of such institutional arrangements, which are the go-between linking operators and users to the general rules and norms framing the provision of drinking water.

Paradoxically, the complexity of these rules might by itself be an additional source of uncertainty. Several characteristics feed this complexity: (a) the diversity of rules embedded in water management, since these rules cover a large spectrum of technological, economic, environmental, and health issues; (b) the multi-level decision-making systems involved (local, regional, national, supra-national); (c) the existence of multiple users of the resource with potentially conflicting goals (e.g., urban consumption vs. agriculture, gardening or swimming pools vs. provision to the poor); (d) the cost of building and coordinating institutional arrangements to overcome these challenges; (e) the stickiness of institutions, making the feasibility of desirable changes uncertain.

There is already an abundant literature about the 'macro-institutions' dealing with such issues, from political systems to the judiciary and the administration. Acemoglu and Robinson, 2012, Aoki, 2001, Greif, 2006, North, 1990a, Ostrom, 2005 are major references among hundreds of contributions. When it comes to the specific institutional arrangements needed to implement and monitor the rules and norms defined at this macro level, recent contributions focused almost exclusively on one form: regulatory agencies. Laffont and Tirole (1993) synthesized the view developed by mainstream economists, who consider the problem through the lens of agency theory: regulation is a principal-agent problem, and the key issue for a regulator is to find incentives to align various and often conflicting interests while reducing information asymmetries. On the institutionalist side, well-illustrated by Spiller (2009), the emphasis has been on the significance of political as well as economic transaction costs involved in the running of regulatory agencies. However, these approaches, which prevail in empirical analyses of the drinking water sector (Savedoff and Spiller, 1999; chap. 1; Tremolet and Binder, 2010), have little to say about this striking fact: there are many different modalities to implement rules and norms established at the macro-institutional level. The European Union is illustrative: the 'Drinking Water Directive' (1998) and the 'Directive 2000/60' (2000) provide guidelines thereafter embedded in different national laws that are themselves implemented through numerous different devices (public bureaus, which are administrative entities embedded in Ministries or Public Departments; regulatory agencies; etc.). However, these devices and the mechanisms through which they operate are rarely analyzed on their own.

This paper is about this last aspect. It explores the variety of institutional arrangements that can operate under the umbrella of common rules, as illustrated by the water sector in Europe. Focusing on the case of drinking water, it builds on recent developments in organization theory, with the central distinction between property rights and decision rights; and in institutional analysis, pointing out the role of transaction costs, to account for this diversity and the resulting trade-off among alternative solutions. Section 2 derives from these developments a framework that identifies 'ideal types' of regulatory arrangements grouped under the concept of 'meso-institutions'. Section 3 Command-and-control through bureaus, 4 Delegation to agencies, 5 Devolution and the central role of local communities, 6 The missing figure: monitoring rights entirely through markets substantiates through three contrasted 'models': France, England and Wales, and the Netherlands, and the missing figure of 'pure markets'. Section 7 discusses the relevance of this typology and concludes by emphasizing the need to elaborate robust institutional indicators for an improved guidance of public policies.

Section snippets

Institutional framework: the key role of meso-institutions

The drinking water sector is deeply embedded into a highly regulated environment. This embeddedness comes out of characteristics (physical-chemical properties; non-substitutability; centrality to human survival; multi-dimensional externalities) that make drinking water a critical network infrastructure, highly exposed to socio-political interferences (Svedoff and Spiller, 1999; chap. 1; Moteff et al., 2003, Ioris, 2008, Kunneke et al., 2010). However, analyses taking this institutional...

Command-and-control through bureaus

Notwithstanding numerous reforms promoted by international organizations and donors since the 1990s, the drinking water sector remains largely dominated by public management. It is so for well-known reasons: drinking water comes as close as possible to the characteristics of a natural monopoly, requiring heavy decentralized infrastructures and involving very significant sunk costs. According to (Tremolet and Binder, 2010: 96), public companies continue to provide water (as well as sewerage) to...

Delegation to agencies

In the context of the challenges to government interferences that gained ground in the 1970s and 1980s and the so-called 'deregulation' of network infrastructures that followed, particularly in countries operating under 'Common Law' regimes, an alternative and competitor to the 'French way', the 'Anglo-saxon way,' became increasingly influential in the water sector'.¹³ This approach mainly relies...

Devolution and the central role of local communities

An alternative solution, vigorously promoted by the Nobel Prize winner Elinor Ostrom, is to keep rights in the hands of local communities (Ostrom, 2005, Ostrom, 2014). The argument, initially developed in relation to the common pool problem, concurs with the influential paper from Hayek (1945) who emphasized the superiority of organizations and institutions that build on knowledge generated by and among actual actors. In the water sector, the 'pure' version of this 'community management' has...

The missing figure: monitoring rights entirely through markets

The risk of capture by lobbies or local interest groups in the three 'models' described above is a key argument for proponents of market-based solutions, with the example of telecoms at the forefront (Bergman, 1998). In theory such arrangements could eradicate intermediate, meso-institutions, viewed as nesting most political interferences, with rules and rights defined and implemented directly at the macro-institutional level, typically through parliaments and/or courts. New Zealand routinely...

Discussion and conclusion

This paper explored the nature and role of a neglected class of institutional arrangements that are central in framing water management through the interpretation, monitoring, and implementation of public policies. Its central hypothesis is that these arrangements, identified as 'meso-institutions', provide the

essential link between the general rules and norms established at the macro-level of the social, political, or judiciary systems, rules and norms in which are embedded policies that...

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...Several scholars have recognized that the interaction between the macro and micro levels of analysis is an important issue (Oxley, 1999; Roe, 2000, 2005; Williamson, 1979). Nevertheless, few of them have thoroughly investigated this important topic (Ménard, 2014, 2017). Ménard (2014) introduced the concept of meso-institution as a means of investigating the interface between organizational arrangements at the micro-level and their institutional counterpart at the macro-level...

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...She suggested differentiating 'constitutional' rules, which delineate the domain and mechanisms of choice established by a society; political rules, through which specific institutions define specific rules framing specific socio-economic activities; and 'operational' rules that actually define how agents process transactions. Taking inspiration from this conceptualization, several contributions suggest embedding these different rules within distinct institutional layers that provide the support they need (Ménard, 2014, 2017; Alston et al., 2018: chap. 1)...

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...This is very much in line with Williamson's three-tier institutional layer schema (Williamson, 1996) and with Hodgson's definition of institutions as "integrated systems of rules that structure social interactions" (Hodgson, 2015). Ménard (2017) breaks institutions down into three levels: the macro-level, where general rules are defined; the meso-level where general rules are translated into specific guidelines and mechanisms that shape their implementation; and the micro-level, where the economic actors take decisions on the institutions of governance, e.g. contracts (Fig. 1). The complexity of agricultural systems further increases because of the multi-level interactions with feedback loops between "the farmers, the land, the environment, physical, natural and financial capital resources, and the chosen agricultural enterprises" (Stephens et al., 2018)...

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