

## How institutions moderate the effectiveness of regional policy: A framework and research agenda

Johannes Glückler\*, Regina Lenz\*

**ABSTRACT:** This paper develops a research agenda toward the systematic inclusion of institutions into the analysis of regional policy effectiveness. Departing from the commonly shared observation that formal rules of regulation and policies not always lead to the intended outcomes, we argue that institutions are crucial mediators of the workings of regulation and regional policies in specific geographical contexts. By defining institutions as stable patterns of interactions based on legitimate mutual expectations (Bathelt and Glückler, 2014), we open analytical scope for analyzing the multiple relations between regulated rules and regular social practice. Hence, we build on Helmke and Levitsky's (2004) conception of the interdependencies between regulation and institutions, and extend their heuristic into a dynamic framework at the regional scale on how to pursue what we call institutional policy-making.

**JEL Classification:** O17; P48; R58; Z18.

**Keywords:** Institutions; regional development; institutional policy-making; relational economic geography; policy-effectiveness.

**RESUMEN:** El artículo desarrolla una agenda de investigación orientada a la inclusión sistemática de las instituciones en el análisis de la efectividad de la política regional. A partir de una observación comúnmente compartida de que las reglas formales de regulación y las políticas no siempre conducen a lograr los resultados perseguidos, se argumenta que las instituciones constituyen mediadores cruciales de los trabajos de regulación y de política regional en contextos geográficos específicos. A partir de definir las instituciones como estructuras estables de interacciones basadas en las mutuas expectativas legitimizadas (Bathelt y Glückler, 2014), se abre un campo analítico para analizar las múltiples relaciones entre reglas reguladas y prácticas sociales regulares. A partir de ello y sobre la concepción de Helmke y Levitsky (2004) sobre las interdependencias entre

---

\* Economic Geography Group, Institute of Geography, Heidelberg University, Germany.

*Acknowledgements.* We are grateful to the guest editor of this special issue, Juan-Ramón Cuadrado-Roura, as well as to Henry Farrell, Michael Handke, Kevin Morgan, José-Luis Sánchez-Hernández and two anonymous referees for helpful suggestions on earlier versions of the manuscript.

regulación e instituciones se extiende su contenido en un marco dinámico a escala regional sobre cómo llevar a cabo lo que nosotros llamamos *policy-making* institucional.

**Clasificación JEL:** O17; P48; R58; Z18.

**Palabras clave:** instituciones; desarrollo regional; *policy-making* institucional; geografía económica relacional; eficiencia de las políticas.

## 1. Introduction

The persistence of regional disparities in the structure and dynamics of economic development, as well as the limited transferability of allegedly successful growth models have been central challenges for theories of regional economic development. One major finding has been the realization that regional disparities in growth can neither be fully explained by external incentives nor by endogenous, knowledge-based approaches, exclusively (Rodríguez-Pose, 2013). Instead, more and more significance is being attributed to the impact of social institutions on economic development. This insight has been encouraging extensive research over the last 20 years, analyzing the conditions for institutions, as well as their effects. A veritable *institutional turn* (Martin, 2000) has become preeminent in many disciplines of the social sciences, such as in economic geography (Storper, 1997; Gertler, 2010; Storper, 2011; Rodríguez-Pose, 2013), economics (Williamson, 1985; Hall and Jones, 1999; Rodrik *et al.*, 2004; Acemoglu *et al.*, 2014), organization science (Barley, 1990; Whitley, 1992; Zilber, 2011) and political science (March and Olsen, 1984; Helmke and Levitsky, 2004; Farrell, *forth.*).

The proliferation of research on institutions across these and other disciplines has led to a considerable polysemy of the meaning of the term «institution». This diversity implies several challenges for institutional research more generally, and for regional research, in particular (Colyvas and Powell, 2006; Bathelt and Glückler, 2014). On the one hand, advances in our understanding of the empirical antecedents and consequences of institutions are closely tight to the very concept of institution and thus tend to be conflated when associated with only either implicit or all-encompassing concepts of institutions. The heterogeneous use of the concept, in turn, has made it arduously difficult to integrate the findings into a coherent institutional framework. On the other hand, the precise roles of institutions in regional development are still little understood. Though often celebrated as the sine-qua-non factors making a difference for regional trajectories, institutions have hardly been unpacked from the black box of regional analysis. Instead, their importance is often inferred from an increasing inappropriateness of traditional explanations for regional development. As long as institutions are hidden in the residual factor of regional growth equations (Rodríguez-Pose, 2013), we have not yet understood how institutions are actually related to both the effects on regional development and to the effectiveness of regulation and regional policy.

This paper both proposes a framework and a research agenda that include institutions and institutional dynamics into the analysis of regional policy effectiveness. We argue that institutions are crucial mediators of the workings of regulation and regional policies in specific regional contexts. Thus, institutions can be the answer to the question, why the formal rules of regulation and policies not always lead to the intended outcomes. Building on a relational perspective (Bathelt and Glückler, 2011), we first give a short review of institutional research in various disciplines. We then briefly review the predominant concepts of institutions and define institutions as stable patterns of interaction based on legitimate mutual expectations (Bathelt and Glückler, 2014). This conception opens analytical scope for studying the interdependencies between regulation and institutions for which we draw on the framework by Helmke and Levitsky (2004). In extension of their approach, we adopt a dynamic and territorial perspective to develop a framework of how to elaborate on what we call institutional policy-making.

## 2. Taking stock of institutional research

There is neither place nor is it the purpose of this paper to offer a comprehensive appraisal of the vast body of research on the relation between institutions and economic development. Instead, we would like to offer a perspective of major commonalities within and differences between two broad approaches, which we distinguish according to whether research focuses on the antecedents or outcomes of institutions. Research that focuses on the social and economic effects of institutions contributes to what we call institutional theories, whereas research focusing on how institutions emerge, change and are sustained adds to what we define as theories of institutions (Table 1):

**Table 1.** Analytic approaches in institutional research

<i>Antecedent</i>	<i>Outcome</i>	
	<i>Non-institutional</i>	<i>Institutional</i>
Non-institutional	Non-institutional theory	Theory of institutions (2.2)
Institutional	Institutional theory (2.1)	Institutional theory of institutions (2.2)

### 2.1. Institutional Theories

Institutional theories focus on the social and economic effects of institutions which are seen as conditioning frames for social actions, thereby potentially contributing to regional path dependencies (Martin and Sunley, 2006). Economics, political science and economic geography are prominent disciplines within this approach, seeing institutions mostly as either the rules or players of the game (North, 1990). A key interest is to determine «good institutions» that facilitate socio-economic development in order to generalize them into action models. While facing the difficulty of op-

erationalizing and measuring institutions adequately (Robinson, 2013; Shirley, 2013; Voigt, 2013), such studies are often based on quantitative and comparative research designs (Farole *et al.*, 2011) that analyze the enabling or constraining effects of differences in rules and regulations. They suggest, for instance, that a country's growth and development depend on the existence of property rights (Galiani and Schargrodsky, 2010; Acemoglu *et al.*, 2014), rule of law (Duquet *et al.*, 2014), or specific mechanisms of allocation and distribution (Di Tella *et al.*, 2007), labor market conditions and political systems (Glaeser *et al.*, 2004). Research on varieties of capitalism (Hall and Soskice, 2001; Streeck and Thelen, 2005; Hall and Thelen, 2009), on national innovation systems (Cooke *et al.*, 1997; Morgan, 2004; Asheim and Gertler, 2006), and on social systems of production (Hollingsworth and Boyer, 1997; Hollingsworth and Müller, 2002) is equally concerned with the effects of institutional conditions on economic outcomes. Assuming a systemic character, these approaches try to include "all parts and aspects of the economic structure and the institutional set-up affecting learning, searching, exploring" (Lundvall, 1992: 12).

Not only on the national, but also on the regional and urban levels, this stream of research investigates into what kinds of institutional arrangements facilitate economic development (Amin, 1999; Huggins, 2016), i.e. the «institutional quality» needed (Revilla Diez *et al.*, 2016). Apparently objective measures such as the European Quality of Government Index are used, for instance, to quantify and compare the perceived quality of government at the regional level within the European Union, to map its interregional variation (Nifo and Vecchione, 2013; Charron *et al.*, 2014, 2015), and its effects on economic prosperity.

Given its particular research motivation, institutional theory is inherently teleological: it focuses predominantly on the effects of institutional variables on social and economic outcomes and seeks to identify «good» institutions that are conducive for economic prosperity. This is not a problem per se, but it involves at least two challenges. First, due to the instrumental logic underlying the analysis of institutional effects on economic growth, the meaningful conceptualization of institutions is sometimes sacrificed in favor of «stylized facts» (Clark, 1998) and tangible quantitative assessments. Examples are abundant: surveys on trust in strangers and the strength of norms of civic cooperation (Knack and Keefer, 1997), ratings of perceived quality of government (Nifo and Vecchione, 2013), reported fear of failure in entrepreneurship (Vaillant and Lafuente, 2007), or the number of voluntary organizations per inhabitant (Laursen *et al.*, 2012). Second, even once seemingly «good institutions» are identified, institutional theories have not much to say about how institutions are actually built or reproduced in other contexts. This theoretical limitation, requires an additional body of research which explores the processes of emergence, creation, maintenance and change of institutions.

## 2.2. Theories of Institutions

Instead of focusing on their effects, theories of institutions treat institutions as the dependent variable themselves. They seek to understand the conditions and processes

of their emergence, change or maintenance. In contrast to earlier studies on the diffusion of institutions (Meyer and Rowan, 1977; Tolbert and Zucker, 1983) and on external shocks as triggers of institutional change—such as environmental changes, the introduction of new laws, incentives or technologies (Barley, 1990; D’Aunno *et al.*, 2000; Ahmadjian and Robinson, 2001)—more recent studies focus on the endogenous quality of institutional change by attributing greater influence to actors, like the ability to either reproduce or modify the institutional bases that at the same time condition their actions (Seo and Creed, 2002; Lounsbury and Crumley, 2007). This mutual influence of structure and individual or collective, as well as intended or unintended agency is expressed and analyzed, for example, by the institutional work and institutional logics approaches (Thornton *et al.*, 2012; Lawrence *et al.*, 2013; Zilber, 2013).

Research in the fields of organization studies (Munir and Phillips, 2005; Suddaby and Greenwood, 2009), economic history (Greif, 1993), and some approaches to game theory (Greif and Laitin, 2004; Aoki, 2007) have shown that institutional change can happen unintentionally (Smets *et al.*, 2012) or be the result of the purposeful action of «institutional entrepreneurs» (DiMaggio, 1988; Maguire, *et al.*, 2004; Crouch, 2005; Munir and Phillips, 2005). Depending on the context, the key actors of institutional change can be located in the center (Phillips and Zuckerman, 2001; Greenwood and Suddaby, 2006) or in the periphery of an organizational field (Leblebici *et al.*, 1991; Haveman and Rao, 1997; Kraatz and Moore, 2002; Maguire *et al.*, 2004; Glückler, 2014) which can itself be either emerging or already established (Greenwood and Suddaby, 2006).

Theories of institutions are often non-teleological, and instead put much emphasis on theorizing the quality of institutions and the manifold processes of institutionalization in carefully observed contexts of micro-social practice. Sometimes, however, the often qualitative and case study-based research leads to rather fuzzy and all-inclusive definitions of institutions. At least two challenges emerge from this stream of research: First, although the advances in understanding processes of institutional change have been substantial, there is still much to be learned about the mechanisms conducting this change, the role that stakeholders take in it and the contingent conditions that enable or constrain the operation of these mechanisms. Secondly, since the majority of research on theories of institutions has been conducted outside geography, the geographical dimension of institutionalization has been overly neglected: To what extent are institutions spatially bound and, if so, what are the mechanisms that lead to regionally specific institutions as well as to interregional differences in institutional practices?

A preliminary conclusion of these two lines of research points to some research gaps and the need for research in at least three directions: First, as has been shown in the brief review above, institutional theories as well as theories of institutions are incomplete with regard to an endogenous understanding of how institutions emerge, sustain and change as well as how they affect related institutional and economic outcomes. An inclusive and endogenous theory of institutional change will thus have to integrate knowledge about the antecedents and consequences of institutions into what we define as «institutional theories of institutions» (Table 1). This task, however, is not at the focus of this article and must be left to future research.

Secondly, and as a prerequisite for such a theoretical endeavor, any institutional approach needs to be explicit and sufficiently precise about its very concept of institution to make meaningful contributions to empirical analysis and normative practice. Only when clearly defined and conceptually operated for empirical observation can diverse institutional approaches compare and connect their findings with a larger institutional framework (Bathelt and Glückler, 2014). In the next section, we first appraise two well-established uses of the term institution before we turn to an alternative, relational understanding of institutions. We endorse a relational perspective to adopt an understanding of institutions as legitimate mutual expectations enacted in stable patterns of social interactions.

Thirdly, and at the heart of the research agenda outlined in this article, a relational perspective distinguishes between institutions on the one hand and the realm of prescriptive rules and regulation on the other. This invites for a more explicit theorization of the moderating role of institutions on the effectiveness of regulation and also regional policy-making. The framework that we develop hereafter is dedicated to the systematic analysis of the manifold interdependencies between regulation and institutions in search of unpacking the contextual nature of policy fit and failure (Bathelt, 2006; Bathelt and Glückler, 2011; Glückler and Bathelt, 2017). Our research agenda, then, aims to offer a framework for analyzing the interaction of regulation (and policy-effectiveness) and institutions that invites and inspires future research toward concepts of institutional policy-making.

### 3. Institutions characterize how the game is actually played

#### 3.1. Organizations: Players of the game

Many studies have employed institutions to denote the particular role of *organizations* in economic development, for example trade associations, public bodies, research facilities, or political organizations (Evans, 1985; Keating, 2001; Greco, 2004; Jones and Gordon, 2004; Goodwin *et al.*, 2005). This perspective has been helpful to recognize the important role that organizations play in procuring services which would otherwise be absent and which may be useful in facilitating cooperation, compliant behavior, rule of law, charity, solidarity, etc. The perspective of institutions as organizations can be found in studies of development and international relations, as well as at the regional level. Approaches such as «institutional thickness» (Amin and Thrift, 1995) and the «associational economy» (Cooke and Morgan, 1998) have elaborated on the beneficial effects of connectedness, close collaboration and on the support facilitated by intermediary organizations such as business associations, public research organizations, vocational schools, chambers of commerce, and public authorities. However, an excessive creation of intermediary organizational entities may raise the necessary effort to coordinate them appropriately, and to try to avoid parallel structures, and unhealthy competition among them (Magro *et al.*, 2014; Morgan, 2016). We argue

that organizations should not be conflated with institutions (Bathelt and Glückler, 2014) because the very decisions and actions of organizations are grounded on institutions themselves. In line with North (1990), we argue that organizations are collective actors or players of the game whose action is itself structured by institutions.

### **3.2. Regulation: Rules of the game**

Much of the empirical work done in institutional theory refers to institutions as the rules of the game (North, 1990), i.e. in the sense of consciously built formal or *prescriptive rules*, e.g. property rights, contracts, or patent laws (Acemoglu *et al.*, 2006; Huggins, 2016). However, as decades of development cooperation and well-intended reforms can tell, bringing different regions to the same level of development cannot simply be done by introducing «good» institutions, i.e. supposedly beneficial laws and regulations. Research in regional governance, for instance, laments the lack of enterprise cooperation despite of years of incentivizing this kind of networking (Cooke and Morgan, 1998; Parrilli *et al.*, 2010). Regulatory incentives to cooperate need not lead to the institutionalization of cooperation in real innovation behavior. In fact, a rule that is introduced on the national level can lead to very different outcomes at sub-national levels, depending on what kinds of regional institutions it interacts with. Hence, regulation and institutionalized interaction are two different analytical concepts. Therefore, we distinguish between prescriptive rules and institutions. Often, the perspective of institutions as regulation includes both formal and informal components (North, 1990; Rodríguez-Pose and Storper, 2006; Gertler, 2010). In doing so, this literature explicitly refers to habits, norms and conventions as informal institutions because they are unwritten, socially shared regularities in social realms, and deviance implies sanctions outside the «official» channels, for example through social ostracism and disapproval (Salais and Storper 1992; Farrell and Knight, 2003; Helmke and Levitsky, 2004). While we agree that the latter are institutions, we find it inconsistent to treat prescriptive rules (regulation) as enacted institutions. The actions of individual or collective actors may or may not follow prescriptive rules, despite the risk of sanctions. Instead, practices are said to be institutionalized if they are widely accepted and enacted by actors in specific situations. Formal rules and regulation may influence the institutionalization of such practices, but they leave scope of action, and may even be meaningless with regard to daily practice. Hence, studying the codified, formal regulation to us means studying «not-yet institutions» (Bathelt and Glückler, 2014).

### **3.3. Stable interaction orders: How the game is actually played**

In contrast to the players (organizations) and the rules (regulation) of the game, we view institutions as how the game is actually played differently in different con-

texts, but consistently across recurring situations. Rather than being the prescriptive rules which may or may not be put into practice, institutions are the *relatively stable patterns of interaction which are based on legitimate and mutual expectations* across similar social contexts (Bathelt and Glückler, 2014). Hence, rather than being regulated prescriptions codified on paper, institutions are regular patterns of real interaction. The defining prerequisites of an institution —namely the mutually shared expectations about legitimate alternatives for interaction which are guaranteed by sanctions in case of deviance— resonate, among others, with the French approach of the *économie des conventions*, where conventions are defined as practices that are bound together through mutual expectations (Storper and Salais, 1997; Sánchez *et al.*, 2010).

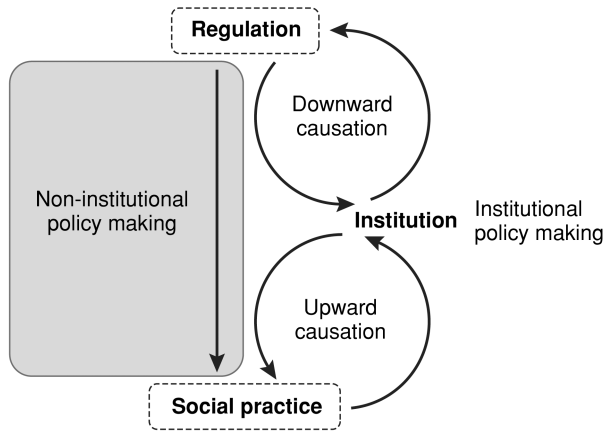
With regard to economic development, institutions can be understood as untraded interdependencies (Storper, 1997). Due to their contextual emergence they are not tradable, they can neither be bought nor licensed —as opposed to tangible assets, financial capital or codified knowledge. Despite their crucial role in hindering or facilitating innovation and regional growth, institutions are not imitable (Asheim and Gertler, 2006) and therefore difficult to transfer into other contexts (Dunford *et al.*, 2016). Institutions, thus, are of priceless value or a great burden for social and regional contexts.

This also shows that institutions are context-specific, and one general institutional blueprint, for example cooperation, can become manifest in rather different legitimate interaction orders in different contexts (Barley, 1990), or in different regions within the same national context. Actors have an implicit knowledge about these behavioral expectations, even when not currently exerting them (Hodgson, 2006). However, institutions can only be observed either in their transformation into action in specific situations (Jones and Murphy, 2010) or in the explicit omission of observable practice. For example, the agreement not to attract qualified staff from competitors or other firms in spatial vicinity is characterized by the deliberate absence of action.

Now that institutions are defined as stable patterns of interaction in real social contexts, the concept serves as a moderator between the micro level of social interaction and the macro level of normative orders (Jessop, 2001). Both levels affect the formation and change of institutions while at the same time being affected by them. Institutions are continuously transformed in simultaneous processes of downward and upward causation (Bathelt and Glückler, 2014): At the micro level, continuous social interaction reproduces existing institutional patterns. At the same time, this everyday practice is itself a source of deviant behavior that may transform into legitimate new institutions when repeated in similar situations and becoming increasingly accepted (Hall and Thelen, 2009). This recursive loop of practices reproducing existing institutions while at the same time challenging them through deviant practices is a source of upward causation. At the macro level, in turn, the imposition of prescriptive rules in the form of codified laws, directives, norms, codes of conduct etc. affects institutions in a contingent process of downward causation (Figure 1).



**Figure 1.** The intermediate role of institutions in policy-making



Although policies are developed on purpose either to protect or change existing behavior, their effect on actual social practices is moderated by existing institutional patterns in each social context. Rules and regulations, thus, come to be used in ways other than intended or designed originally (Thelen, 2004; Streeck and Thelen, 2005). This line of argument is supported by comparative empirical research that illustrates how the convergence of formal policies, such as the regulation of money laundry in the U.S. and the Netherlands, leads to very different and even opposite effects in observed social practice (Unger and van Waarden, 2009). While both regulation and the practice of organizations or individual actors can be empirically observed (Figure 1, dotted boxes), institutions remain an abstract phenomenon. Institutions can only be known through the observation of repeated patterns of interaction in similar situations and are thus read out of practice. Just as a grammar explicates the regularities of speech do institutions describe the legitimate patterns of social interaction (Giddens, 1984).

As long as the inimitability of institutions and the contingency of their effects in other contexts holds true, researchers in regional development will need to understand the processes of evolving, creating, maintaining, and transforming institutions in regional context. Moreover, it will be necessary to theorize the relation between institutions and new, exogenous rules introduced into institutional contexts by means of regulation and regional policies. It is here where we identify a major research gap: Since policies do not always have the intended social outcomes (e.g. Morgan, 2016), we argue that institutions moderate the effects of regulation on social practice and economic outcomes, and that any policy-making will be contingent on its institutional fitness in a specific regional context (Bathelt, 2006; Glückler and Bathelt, 2017). In what follows, we will outline an analytical framework on how to unpack the mutual effects and interrelatedness of institutions and regulation. This framework is meant to open a research agenda that includes institutions into the analysis of regional policy-

making and policy-effectiveness in order to be able to develop an «institutional» policy making that aims at either building on or changing not only behavioral practices, but their underlying institutional foundation (see Figure 1).

#### 4. The relation between institutions and regulation

Now that regulation and institutions have been conceptually distinguished, there is analytical scope for the analysis of the ways in which they mutually affect each other. The theoretical variety of interactive effects between regulation and institutions ranges between convergent and divergent effects on social practice, and offers an important starting point for the conception of institutional policy-making. In what follows, we build on the basic idea of Helmke and Levitsky (2004) to systematically consider the ways in which regulation and institutions affect each other. In their article, Helmke and Levitsky (2004) explore the relationship between formal institutions (i.e. formal rules) on the one hand, and informal institutions on the other, which they define as “socially shared rules, usually unwritten, that are created, communicated, and enforced outside of officially sanctioned channels” (Helmke and Levitsky, 2004: 727). Their typology defines four kinds of informal institutions depending on whether formal institutions are enforced effectively or ineffectively and whether their interactions with informal institutions produce convergent or divergent social outcomes. Hence, they distinguish complementary, accommodating, substitutive and, finally, competing informal institutions (Table 2) and illustrate corresponding empirical cases at the level of national politics such as electoral regulations and practices.

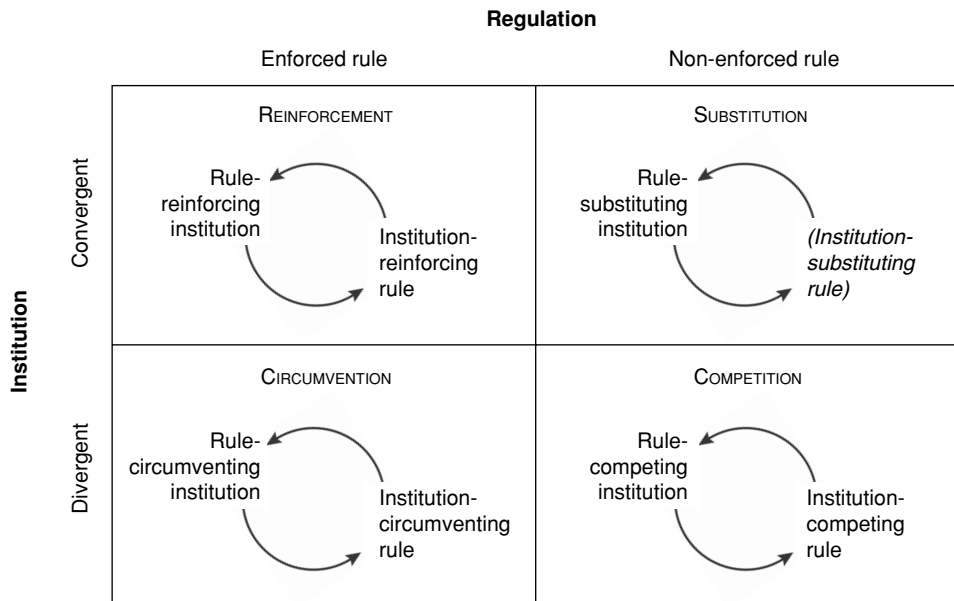
**Table 2.** Typology of informal institutions (Helmke and Levitsky, 2004: 728)

<i>Outcomes</i>	<i>Effective formal institutions</i>	<i>Ineffective formal institutions</i>
Convergent	Complementary	Substitutive
Divergent	Accommodating	Competing

Though being helpful for the original distinction between informal and formal institutions and the outcomes of their various interactions, this typology needs to be revised and extended to serve as an appropriate framework for the regional analysis of institutional policy-making (Figure 2). According to the relational approach and the concept of institution as a stable pattern of interactions adopted here, we first revise the terminology and replace informal institutions with the term institution and formal institution with the term regulation. The effectiveness of rule-making (regulation) is linked to its degree of enforcement, i.e. the resources and efforts involved in monitoring and sanctioning rule infringement. As one aspect of incentivizing and supporting economic development by public bodies, we include policies in the concept of regulation. Second, we extend Helmke and Levitsky’s (2004) typology by adding an explicitly dynamic perspective. As we have argued already above (Figure 1), not only

prescriptive rules have an effect on people’s behavior, but, vice versa, institutions also shape the performance of regulation and may thus limit, strengthen or mediate its effects to various degrees (Simmie *et al.*, 2014). For designing and evaluating policies and regulations, it is crucially important to distinguish whether policy interventions (new rules) are made in response to given institutions or whether and how institutions change or emerge in response to incumbent regulations. Consequently, our framework distinguishes two dynamic sequences for each of the four interactions between institutions and regulation, depending on whether (effective or ineffective) regulation responds to an existing set of (convergent or divergent) institutions or, vice versa, whether an institution emerges in response to a given regulation. In sum, we define four types of interactions between institutions and regulation, where for each interaction we further distinguish the temporal sequence of interaction (Figure 2). In what follows we empirically seek to scale the framework down to the level of regions as a subnational territorial scale, and present illustrative case examples for each of the subtypes of our extended framework.

**Figure 2.** A dynamic perspective on the interactions of regulation and institution



#### 4.1. Reinforcement

The first relation is one of mutual reinforcement. In this case, effectively enforced regulation is supported by institutions which help reproduce formal rules in real social practice. Working toward the same goals, institutions do not only exist in parallel to regulation, but can fill in gaps or loopholes left by regulation or not covered by

policies without violating their overall goal (Helmke and Levitsky, 2004). Depending on the direction of the influence, we distinguish between two cases: Rule-reinforcing institutions and institution-reinforcing rules.

An *institution-reinforcing rule* means that an effective rule is introduced to an already existing set of institutions aiming for the same results, thus «formalizing» the institutions. This can be seen, for example, in the comparison between the willingness of Dutch and US American firms to take the risk of innovating (van Waarden 2001). Despite the fact that the legal system in the Netherlands is more effective in reducing uncertainty for entrepreneurs, US firms are more likely to take risks. Van Waarden (2001) concludes that this can only be explained if one acknowledges that risk-averse cultures also produce more risk-averse entrepreneurs and give themselves more uncertainty-reducing policies.

Another example of how existing institutions on the regional level can facilitate regulation can be seen with regard to the introduction of the cluster policy in the Spanish Basque Country. Having a legacy of collective organization in cooperatives (OECD, 2007), and being highly specialized in a few main industrial sectors, as well as strongly relying on its endogenous efforts for lack of investment from abroad (Morgan, 2016), the Basque Country was more receptive than other regions to the successful introduction of cluster policies, and more recently, to smart specialization strategies (OECD, 2007; Aranguren *et al.*, 2016).

The reverse, *rule-reinforcing institutions*, can be seen in the case of the changed attitudes toward sexual harassment at the work place since the corresponding anti-discrimination law was passed in Iowa in 1964. Here, introducing and enforcing a rule has changed attitudes and has created new supporting institutions. As Bilz and Nadler (2014) point out, «citizens' expectations» about how they are entitled to be treated at work have clearly changed over the last three decades, ever since courts began recognizing sexual harassment as discrimination" (Bilz and Nadler, 2014: 243). Specifically, their case shows public outcry after a court had approved the dismissal of a female employee because of the jealousy of her boss' wife. While this kind of behavior would have been tolerated or accepted some decades ago, people today are much more sensitive toward this topic and expect to be treated equally and professionally.

By being aware of, and taking into account positive local conditions, policies can strengthen already existing regional competences and cumulatively reinforce path-dependencies. By acting in accordance with already existing legitimate behavioral expectations, a policy becomes an institutional policy (Figure 1).

## 4.2. Circumvention

A second theoretical interdependence is to be identified if enforced regulation co-exists with divergent institutions. This happens either when an effective rule is made against an existing institution, or when a divergent institution emerges in response to an enforced rule. The latter is a case of *rule-circumventing institutions*, i.e. behavior

that is incentivized by rules but that alters their effects. These institutions are favored and enacted by actors who dislike the outcomes of regulation or policies, but feel unable to change them. They are fostered by lax enforcement of rules and policies, which helps to reconcile different interests. Exceptions are tolerated in order to keep up the intended outcome as a whole. By finding a way to modify their effects, actors might even help to perpetuate given policies (Helmke and Levitsky, 2004).

An example of this can be seen at the level of a single organization in the study of Bensman and Gerver (1963) about the use of a forbidden tool for wing assembly—the tap—at an air plane factory in New York. The tap is a hard steel screw that when inserted into a nut can cut new threads over the original threads of the nut. In the case of the air plane factory, “[t]he use of the tap is the most serious crime of workmanship conceivable in the plant. A worker can be summarily fired for merely possessing a tap” (Bensman and Gerver, 1963: 590). Despite these explicit rules, however, the majority of workers did possess and use the tap in their daily work. If these rule violations were detected, they were not sanctioned; rather, different levels of authorities such as the foremen, the plant quality and Air Force inspectors, knew about the practice of using the tap and unofficially tolerated it for the sake of getting the work done in time and according to the business targets. In addition, the different ranks and positions had institutionalized interaction orders that both purposively helped oversee the use of the tap (what you don’t know won’t hurt you) and that educated workers on how and when to use the tap appropriately. Such an interaction order included all status groups in the firm and thus enabled mutually legitimate expectations about how to jointly get the job done, irrespective of corporate law. It remains a normative question whether rule-circumventing institutions are evaluated as sources of policy failure or sometimes as acceptable deviance in pursuit of a consistent higher goal, in the case of Bensman and Gerver (1963): to get the job done adequately.

The reverse case, an enforced rule made against a divergent institution, can be seen in the case of sanctioning anti-poaching agreements between competitors of certain industry branches. These *institution-circumventing rules* are characterized by regulation that goes against certain institutions by effectively enforcing the rules when detecting deviant behavior. In 2010, for example, the US Department of Justice opened a case against high-tech companies because of their illegal agreement to not recruit each others’ employees (Kirchgaessner and Menn, 2010). Despite violating antitrust laws and going against both free competition and employees’ job and salary opportunities (Lindsay and Santon, 2012), these firms had created divergent institutions (illegal, but legitimate between them) trying to circumvent these rules. Contrary to institution-competing rules (see below, 4.4), however, the rules were effectively enforced once the institutions were discovered, and anti-poaching agreements were stopped: Settlement agreements were put in place for five years prohibiting companies “from engaging in anticompetitive no solicitation agreements” and fees had to be paid (U.S. Department of Justice, 2010).

Since regulation often leaves loopholes and is never fully complete, the above cases demonstrate that this does not necessarily have to be a bad thing as long as the

circumventing institutions work toward the same goals and lead to their better accomplishment. Such an understanding resonates with what Unger and van Waarden (2009) advocate as «risk-based regulation»: Deviation from the strict sense of the rule may be seen as breaking codified rules, yet the actual intentions and social outcomes of deviant practice may well comply with the higher common goal. An institutional policy-understanding, thus, would grant some scope for interpretation on how regulated norms are actually achieved in specific contexts.

### 4.3. Substitution

If regulation is missing or not properly enforced, we can observe institutions developing in response to an ineffective or absent rule, in our terminology *rule-substituting institutions*. Aiming for the same goal, institutions can sometimes achieve what regulation or policies fail to do (Helmke and Levitsky, 2004). In China, for instance, the institution of *guanxi* substitutes for an unstable legal and regulatory support (Xin and Pearce, 1996). Making personal connections and trusting on partners is more important for doing business than open competition; it is not regarded negatively, but rather as a sign of being loyal, especially since governmental support is lacking.

Individual actors or whole industries might even have incentives to regulate themselves in order to preempt governmental regulation, for example in the form of codes of conduct, «voluntary environmental agreements» of industries, or environmental performance standards (Heritier and Eckert, 2008). This kind of legitimate institution-building in a local economy can be seen, for example, in the case of the whale watching industry in Victoria, a city on Vancouver Island off the Canadian west coast (Lawrence and Phillips, 2004). After commercial whale watching had gained momentum and the number of operators had steadily been increasing in the 1980s, concerns about the harassment of the whales came up and «the basic concern was to avoid regulation by instituting a set of voluntary guidelines» (p. 701) covering different aspects from accessing the harbor to limiting the number of boats allowed around whales at the same time. Since there was no regulation (yet), whale watching operators themselves established a pattern of legitimate expectations on how to coordinate and mutually behave in their activities.

The reverse case, *institution-substituting rules*, is not empirically valid because it is unlikely that a rule that is in accordance with existing ways of behaving would be non-enforced. In both cases it is likely that there is no need to create regulation, if only to formalize existing and well-working social institutions in order to maintain the status quo. Self-regulation in various degrees plays an important role here, either voluntarily, because of the threat of governmental regulation, or because of pressures of multinational supplier-client relationships (Christmann and Taylor, 2001). Thus, this field offers a fruitful ground for focusing on institutional dynamics and for the co-working of policy makers and institutional theorists.

#### 4.4. Competition

In this final case, institutions and ineffective regulation are at odds with each other, i.e. they differ with regard to their incentives and outcomes (Helmke and Levitsky, 2004). Two cases can be distinguished: institution-competing rules (a rule is made against an existing institution and remains ineffective) and rule-competing institutions (institutions emerge in divergence to an ineffective rule).

The first case, the introduction of *institution-competing rules*, can be found in the context of development cooperation, where well-meant policies are designed by donor countries and implemented in developing countries. However, when such policies do not recognize regional specificities and prevailing institutions, policies are doomed to fail. One regional example for this can be seen in the application of the so-called «Nucleus Approach» in a development project in the leather sector of Dhaka, Bangladesh. The Nucleus Approach is based on the idea of cooperation between entrepreneurs, and their willingness to discuss their problems and to jointly look for solutions in working groups. Having had worked successfully in other countries and sectors, this approach could not meet the expected goals in its implementation in Dhaka's leather sector because of the prevailing institutions of non-cooperation. There was mutual distrust between the tanners who were expecting others to make use of their experiences without telling their own. Despite incentives to change their attitude toward this, the tanners sanctioned the project's wrong expectations by not attending the group meetings and by continuing their business as usual after the project had ended (Lenz, 2013).

In comparison, *rule-competing institutions*, i.e. divergent institutions emerging as a response to the introduction of an ineffective rule, can be seen with regard to the introduction of a new anti-corruption regulation in the construction sector of Eastern Indonesia (Tidey, 2013). In 2008, a new regulation was passed that was supposed to fight corruption in bidding competitions and to make the competitive tendering procedure better verifiable by adhering to formalities on paper because «if what is visible and tangible appears to be in line with the rules, then there is no “proof” to support anticorruption investigations» (Tidey, 2013: 186). Until then, there was less administrative documentation and bidders were bribing officials to be awarded the contract. After the new regulation was implemented, public officials made sure to adhere to formalities in every detail. But the adherence to official rules did in fact not erase corruption—it just changed the way it was done: Instead of accepting bribes for giving the project to a particular bidder, public officials were now accepting bribes for making sure the application forms were in order. As a consequence of that, the most competitive offers could be disqualified in case of minor failures to form adherence.

These cases not only show that there is no universal «right» policy, and that a policy working well in one context might be a misfit in another context, but they also serve as a good example for policies that solely aim for changes in isolate practices rather than the institutional patterns of interactions. While succeeding in erasing «direct» bribes, the behavioral practices were changed in the way that bidders and officials were now documenting the process. That is, people complied with the new

rule, yet the rule missed its overall goal. This is because it did not change the underlying mutual behavioral expectations of all actors involved, nor the ultimate goal of winning the bid. One practice got exchanged for another, without touching their underlying institutional base. Thus, policies are incomplete if they only aim at practice change and leave the more substantial institutions untouched.

## 5. Conclusion and implications for research

We close by inviting scholars of regional research to acknowledge the critical role of institutions for context-specific policy-making, as well as for the analysis of the effectiveness of regional policies with regard to their intended effects (Bathelt, 2006; Lehmann and Benner, 2015; Dunford *et al.*, 2016; Morgan, 2016; Glückler and Bathelt, 2017). Our major argument has been to move from an atomistic perspective of regulating single practices to a relational perspective of institutional policy-making. Institutional policy-making identifies and responds to the underlying patterns of stable interactions in which single practices are embedded. Such a perspective of institutional policy-making is conducive to cumulatively reinforcing existing strengths in a regional economy, such as cluster policies, but also to successfully taking a turn for the better in regions suffering allegedly bad institutions such as nepotism, corruption, non-cooperation etc.

Taking an institutional perspective on policies can also help to overcome the so-called «innovation gap» (Parrilli *et al.*, 2010; Glückler and Bathelt, 2017), as well as the limited compatibility or missing impact of regional development plans and policies (Kitching *et al.*, 2015). As we have argued in this paper, formal rules and regulation may influence the institutionalization of actors' behavior in given situations, but they leave much scope of action, and may even be meaningless with regard to daily practice (Greenwood *et al.*, 2008; Bathelt and Glückler, 2014). In turn, the concept of institutions may answer the question of how regulation and policies that aim to change practices sometimes fail to have their intended effects. To move a step further in our understanding of the intricate relation between regulation and institution, we have built on Helmke and Levitsky (2004) to suggest a more detailed and dynamic framework that systematically characterizes the mutually convergent and divergent effects among regulation and institutions. Moreover, we have detailed a number of examples of how policies may get either reinforced, substituted or circumvented, and even competed by institutions.

Our typology of theoretical linkages is suggested as an analytical framework to detect policy challenges and to promote an understanding of policy-making that is sensitive to institutions and their spatio-temporal contextuality. We should distinguish two types of policies according to what they are aiming for: one, where policies are introduced to change atomistic practice while ignoring their institutional embeddedness, the other where policies are directly implemented to change the underlying institutions (Figure 1). A good example for the latter is the *Tostan* program operating in Senegal, which is trying to abolish the practice of female genital cutting. In 1999,



Senegal introduced a law making it illegal to practice female genital cutting, but rather to please Western values than out of the belief of doing the right thing. While this kind of top-down approach can be seen as too coercive, the *Tostan* program tried to address the issue on a more deep-rooted level (Shell-Duncan *et al.*, 2013). Instead of aiming for a superficial and temporal change in behavioral practice —by imposing the «better» practice of non-cutting— they inform people more generally about health topics and human rights to let them make up their mind on their own. In addition to these «nudges», they acknowledge that rules or policies cannot easily change single practices that are embedded into institutionalized traditions, and therefore aim at the long-term change of these underlying institutions. To achieve this, they need to change each other's behavioral expectations and fear of sanctions: people try to comply with others' expectations and will only change their behavior if they can credibly expect others to do the same, which is why they publicly vow to refrain from genital cutting in the future (Bicchieri and Mercier, 2014). Since 1997, the program has achieved that more than 5,000 communities in Senegal have made such public declarations (Shell-Duncan *et al.*, 2013). This example also illustrates again the potential for regional specificities in the interaction between institutions and regulation. While the introduction of a law on national level did not change people's behavior, the more profound work of *Tostan* was able to achieve some changes in certain regions.

In pursuing a perspective of institutional policy-making, important questions lie ahead of us: To what extent are institutions spatially bound and reproduced? To what extent are institutions interwoven into other institutions, thus raising their hysteresis against change? How can «good» institutions be leveraged for successful support policies of innovation, entrepreneurship, and qualification but also for regional welfare, enduring employment, environmental sustainability and social solidarity? Are some of the relationship types outlined above more prevalent in some territories than others based on the effectiveness of rule enforcement? For example, are substituting and competing relationships more likely to be found in developing economies while reinforcing and circumventing ones are easier to achieve in more advanced economies? How can adverse practices which are based on «bad» institutions be actively transformed into «good» and socially desired institutions? What role do power and hierarchy play in this process, and how can policy-making be adjusted to change institutions rather than isolate practices?

Answers to all these questions presuppose a micro-social and process understanding of social interaction and institutionalization. Recent research criticizes the fact that institutions are left vague when it comes to their specific modes of action (Dellepiane-Avellaneda, 2010). As long as the statement that «institutions matter» is not substantiated by explanations, institutions continue to be treated as «*deus ex machina*» (Tomaney, 2013) and will remain a truism that explains regional differences solely by the very existence of institutions (Rafiqui, 2009). This is why a greater focus needs to be put on the mechanisms of the process of institutional change. Only by making these mechanisms visible can the effects of institutions be understood, as well as the possibility of their political malleability. An explicitly micro-social process perspective is needed in order to clarify the ambivalence of the relationship

between action and action-restraining or action-enabling structures (Hodgson, 2006; Boxenbaum, 2014).

Concretely, this means to identify local conditions and all stakeholders involved in a given practice and situation. It needs to be clear on which incentives individual behavior is based: is it guided by official rules, or are people following behavioral expectations that deviate from official rules? Only by identifying the underlying guidelines that really influence behavior can we see the starting point for institutional change, and can ultimately contribute to an endogenous «institutional theory of institutions» which explains institutional effects by institutional mechanisms themselves.

## 6. Bibliography

- Acemoglu, D., Gallego, F. A., and Robinson, J. A. (2014): «Institutions, human capital, and development», *Annual Reviews of Economics*, 6, 875-912.
- Acemoglu, D., Johnson, S., and Robinson, J. A. (2005): «Institutions as a fundamental cause of long-run growth», in P. Aghion and S. Durlauf (eds.), *Handbook of Economic Growth*, vol. 1A, Amsterdam, Elsevier, 386-472.
- Ahmadjian, C. L., and Robinson, P. (2001): «Safety in numbers: Downsizing and the deinstitutionalization of permanent employment in Japan», *Administrative Science Quarterly*, 46, 622-54.
- Amin, A. (1999): «An institutionalist perspective on regional economic development», *International Journal of Urban and Regional Research*, 23, 365-78.
- Amin, A., and Thrift, N. (1995): «Institutional issues for the European regions: From markets and plans to socioeconomics and powers of association», *Economy and Society*, 24, 41-66.
- Aoki, M. (2007): «Endogenizing institutions and institutional changes», *Journal of Institutional Economics*, 3, 1-31.
- Aranguren, M. J., Morgan, K., and Wilson, J. (2016): «Implementing RIS3: The case of the Basque Country», *Cuadernos Orkestra 2016/2017*.
- Asheim, B. T., and Gertler, M. S. (2005): «The geography of innovation: Regional innovation systems», in J. Fagerberg, D. C. Mowery and R. R. Nelson (eds.), *The Oxford Handbook of Innovation*, Oxford, Oxford University Press, 291-317.
- Barley, S. R. (1990): «The alignment of technology and structure through roles and networks», *Administrative Science Quarterly*, 35, 61-103.
- Bathelt, H. (2006): «Geographies of production: Growth regimes in spatial perspective 3 - Toward a relational view of economic action and policy», *Progress in Human Geography*, 30, 223-236.
- Bathelt, H., and Glückler, J. (2011): *The Relational Economy. Geographies of Knowing and Learning*, Oxford, Oxford University Press.
- (2014): «Institutional change in economic geography», *Progress in Human Geography*, 38, 340-363.
- Bensman, J., and Gerver, I. (1963): «Crime and punishment in the factory: The function of deviancy in maintaining the social system», *American Sociological Review*, 28, 588-598.
- Bicchieri, C., and Mercier, H. (2014): «Norms and beliefs: How change occurs», in M. Xenidou and B. Edmonds (eds.), *The Complexity of Social Norms*, Heidelberg, Springer, 37-54.
- Bilz, K., and Nadler, J. (2014): «Law, moral attitudes, and behavioral change», in E. Zamir and D. Teichman (eds.), *The Oxford Handbook of Behavioral Economics and the Law*, Oxford, Oxford University Press, 241-267.

- Boxenbaum, E. (2014): «Toward a situated stance in organizational institutionalism: Contributions from French pragmatist sociology theory», *Journal of Management Inquiry*, 23, 319-323.
- Charron, N., Dijkstra, L., and Lapuente, V. (2014): «Regional governance matters: Quality of government within European Union member states», *Regional Studies*, 48, 68-90.
- (2015): «Mapping the regional divide in Europe: A measure for assessing quality of government in 206 European regions», *Social Indicators Research*, 122, 315-346.
- Christmann, P., and Taylor, G. (2001): «Globalization and the environment: Determinants of firm self-regulation in China», *Journal of International Business Studies*, 32, 439-458.
- Clark, G. L. (1998): «Stylized facts and close dialogue: Methodology in economic geography», *Annals of the Association of American Geographers*, 88, 73-87.
- Colyvas, J., and Powell, W. W. (2006): «Roads to institutionalization: The remaking of boundaries between public and private science», *Research in Organizational Behavior*, 27, 305-353.
- Cooke, P., Gomez Uranga, M., and Etxebarria, G. (1997): «Regional innovation systems: Institutional and organisational dimensions», *Research Policy*, 26, 475-491.
- Cooke, P., and Morgan, K. (1998): *The Associational Economy: Firms, Regions, and Innovation*, Oxford, New York, Oxford University Press.
- Crouch, C. (2005): *Capitalist Diversity and Change: Recombinant Governance and Institutional Entrepreneurs*, Oxford, Oxford University Press.
- D'Aunno, T., Succi, M., and Alexander, J. A. (2000): «The role of institutional and market forces in divergent organizational change», *Administrative Science Quarterly*, 45, 679-703.
- Dellepiane-Avellaneda, S. (2010): «Review article: Good governance, institutions and economic development: Beyond the conventional wisdom», *British Journal of Political Science*, 40, 195-224.
- Di Maggio, P. J. (1988): «Interest and agency in institutional theory», in L. G. Zucker (ed.), *Institutional Patterns and Organizations: Culture and Environment*, Cambridge, Ballinger Publishing, 3-21.
- Di Tella, R., Galiani, S., and Schargrodsky, E. (2007): «The formation of beliefs: Evidence from the allocation of land titles to squatters», *The Quarterly Journal of Economics*, 122, 209-241.
- Dunford, M., Aoyama, Y., Campolina Diniz, C., Kundu, A., Limonov, L., Lin, G., Liu, W., Park, S. O., and Turok, I. (2016): «Area development and policy: An agenda for the 21st century», *Area Development and Policy*, 1, 1-14.
- Duquet, S., Pauwelyn, J., Wessel, R. A., and Wouters, J. (2014): «Upholding the rule of law in informal international lawmaking processes», *Hague Journal on the Rule of Law*, 6, 75-95.
- Evans, P. B. (ed.) (1985): *Bringing the State Back In*, Cambridge, Cambridge University Press.
- Farole, T., Rodríguez-Pose, A., and Storper, M. (2011): «Human geography and the institutions that underlie economic growth», *Progress in Human Geography*, 35, 58-80.
- Farrell, H. (forth.): «The shared challenges of institutional theories: rational choice, historical institutionalism and sociological institutionalism», in J. Glückler, R. Suddaby and R. Lenz (eds.), *Knowledge and Institutions* (Knowledge and Space, vol. 13), Berlin, Springer.
- Farrell, H., and Knight, J. (2003): «Trust, institutions, and institutional change: Industrial districts and the social capital hypothesis», *Politics & Society*, 31, 537-566.
- Galiani, S., and Schargrodsky, E. (2010): «Property rights for the poor: Effects of land titling», *Journal of Public Economics*, 94, 700-729.
- Gertler, M. S. (2010): «Rules of the game: The place of institutions in regional economic change», *Regional Studies*, 44, 1-15.
- Giddens, A. (1984): *The Constitution of Society. Outline of the Theory of Structuration*, Cambridge, Polity Press.
- Glaeser, E. L., La Porta, R., Lopez de Silanes, F., and Shleifer, A. (2004): «Do institutions cause growth?», *Journal of Economic Growth*, 9, 271-303.

- Glückler, J. (2014): «How controversial innovation succeeds in the periphery? A network perspective of BASF Argentina», *Journal of Economic Geography*, 14, 903-927.
- Glückler, J., and Bathelt, H. (2017): «Institutional context and innovation», in H. Bathelt, P. Cohendet, S. Henn and L. Simon (eds.), *The Elgar Companion to Innovation and Knowledge Creation: A Multi-Disciplinary Approach*, Cheltenham, Edward Elgar.
- Goodwin, M., Jones, M., and Jones, R. (2005): «Devolution, constitutional change and economic development: Explaining and understanding the new institutional geographies of the British state», *Regional Studies*, 39, 421-36.
- Greco, L. (2004): «An institutionalist approach to redundancies in the chemical industry: The cases of Teesside (UK) and Brindisi (Italy)», *European Urban and Regional Studies*, 11, 141-155.
- Greenwood, R., and Suddaby, R. (2006): «Institutional entrepreneurship in mature fields: The big five accounting firms», *The Academy of Management Journal*, 49, 27-48.
- Greenwood, R., Oliver, C., Sahlin, K., and Suddaby, R. (2008): «Introduction», in R. Greenwood, C. Oliver, K. Sahlin and R. Suddaby (eds.), *The Sage Handbook of Organizational Institutionalism*, London, Sage Publications Ltd., 1-46.
- Greif, A. (1993): «Contract enforceability and economic institutions in early trade: The Maghribi traders' coalition», *American Economic Review*, 83, 525.
- Greif, A., and Laitin, D. D. (2004): «A theory of endogenous institutional change», *American Political Science Review*, 98, 633-652.
- Hall, P. A., and Soskice, D. (2001): *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*, Oxford, Oxford University Press.
- Hall, P. A., and Thelen, K. (2009): «Institutional change in varieties of capitalism», *Socio-Economic Review*, 7, 7-34.
- Hall, R. E., and Jones, C. I. (1999): «Why do some countries produce so much more output per worker than others?», *The Quarterly Journal of Economics*, 114, 83-116.
- Haveman, H., and Rao, H. (1997): «Structuring a theory of moral sentiments: Institutional and organizational coevolution in the early thrift industry», *The American Journal of Sociology*, 102, 1606-1651.
- Helmke, G., and Levitsky, S. (2004): «Informal institutions and comparative politics: A research agenda», *Perspectives on Politics*, 2, 725-740.
- Heritier, A., and Eckert, S. (2008): «New modes of governance in the shadow of hierarchy: Self-regulation by industry in Europe», *Journal of Public Policy*, 28, 113-138.
- Hodgson, G. M. (2006): «What are institutions?», *Journal of Economic Issues*, 40, 1-25.
- Hollingsworth, J. R., and Boyer, R. (eds.) (1997): *Contemporary Capitalism: The Embeddedness of Institutions*, Cambridge, Cambridge University Press.
- Hollingsworth, J. R., and Müller, K. H. (eds.) (2002): *Advancing Socio-Economics: An Institutional Perspective*, Lanham, Rowman & Littlefield.
- Huggins, R. (2016): «Capital, institutions and urban growth systems», *Cambridge Journal of Regions, Economy and Society* 9, 443-463.
- Jessop, B. (2001): «Institutional re(turns) and the strategic-relational approach», *Environment and Planning A*, 33, 1213-1235.
- Jones, A., and Murphy, J. T. (2010): «Theorizing practice in economic geography: Foundations, challenges, and possibilities», *Progress in Human Geography*, 35, 366-392.
- Jones, M., and Gordon, M. (2004): «Regional spaces, spaces of regionalism: Territory, insurgent politics and the English question», *Transactions of the Institute of British Geographers*, 29, 433-452.
- Keating, M. (2001): «Rethinking the region: Culture, institutions and economic development in Catalonia and Galicia», *European Urban and Regional Studies*, 8, 217-234.
- Kirchgaessner, S., and Menn, J. (2010): «Tech firms agree to halt anti-poaching deals», *Financial Times*, 25 September 2010. Website: <https://www.justice.gov/opa/pr/justice-de>

- partment-requires-six-high-tech-companies-stop-entering-anticompetitive-employee. Accessed: 13 July 2016.
- Kitching, J., Hart, M., and Wilson, N. (2015): «Burden or benefit? Regulation as a dynamic influence on small business performance», *International Small Business Journal*, 33, 130-147.
- Knack, S., and Keefer, P. (1997): «Does social capital have an economic payoff? A cross-country investigation», *The Quarterly Journal of Economics*, 112, 1251-1288.
- Kraatz, M. S., and Moore, J. H. (2002): «Executive migration and institutional change», *The Academy of Management Journal*, 45, 120-143.
- Laursen, K., Masciarelli, F., and Prencipe, A. (2012): «Regions matter: How localized social capital affects innovation and external knowledge acquisition», *Organization Science*, 23, 177-193.
- Lawrence, T. B., Leca, B., and Zilber, T. B. (2013): «Institutional work: Current research, new directions and overlooked issues», *Organization Studies*, 34, 1023-1033.
- Lawrence, T. B., and Phillips, N. (2004): «From Moby Dick to Free Willy: Macro-cultural discourse and institutional entrepreneurship in emerging institutional fields», *Organization*, 11, 689-711.
- Leblebici, H., Salancik, G. R., Copay, A., and King, T. (1991): «Institutional change and the transformation of interorganizational fields: An organizational history of the U.S. radio broadcasting industry», *Administrative Science Quarterly*, 36, 333-363.
- Lehmann, T., and Benner, M. (2015): «Cluster policy in the light of institutional context: A comparative study of transition countries», *Administrative Science*, 5, 188-212.
- Lenz, R. (2013): «Endogenous growth in the development context: Assessing the nucleus approach in the Bangladeshi tannery sector», *Spaces Online*, vol. 11, 2013-03, Toronto and Heidelberg: [www.spaces-online.com](http://www.spaces-online.com).
- Lindsay, M., and Santon, K. (2012): «No poaching allowed: Antitrust issues in labor markets», *Antitrust*, 26, 73-77.
- Lounsbury, M., and Crumley, E. T. (2007): «New practice creation: An institutional perspective on Innovation», *Organization Studies*, 28, 993-1012.
- Lundvall, B.-A. (1992): *National Systems of Innovation: Towards a Theory of Innovation and Interactive Learning*, London, Pinter.
- Magro, E., Navarro, M., and Zabala-Iturriagoitia, J. M. (2014): «Coordination-mix: The hidden face of STI policy», *Review of Policy Research*, 31, 367-389.
- Maguire, S., Hardy, C., and Lawrence, T. B. (2004): «Institutional entrepreneurship in emerging fields: HIV/AIDS treatment advocacy in Canada», *The Academy of Management Journal*, 47, 657-679.
- Martin, R. (2000): «Institutional approaches in economic geography», in E. Sheppard and T. J. Barnes (eds.), *A Companion to Economic Geography*, Malden, Blackwell Publishing Ltd, 77-94.
- Martin, R., and Sunley, P. (2006): «Path dependence and regional economic evolution», *Journal of Economic Geography*, 6, 395-437.
- Meyer, J. W., and Rowan, B. (1977): «Institutionalized organizations: Formal structure as myth and ceremony», *American Journal of Sociology*, 83, 340-363.
- Morgan, K. (2004): «The exaggerated death of geography: Learning, proximity and territorial innovation systems», *Journal of Economic Geography*, 4, 3-21.
- (2016): «Collective entrepreneurship: The Basque model of innovation», *European Planning Studies*, 24, 1544-1560.
- Munir, K. A., and Phillips, N. (2005): «The birth of the “Kodak Moment”: Institutional entrepreneurship and the adoption of new technologies», *Organization Studies*, 26, 1665-1687.
- Nifo, A., and Vecchione, G. (2013): «Do institutions play a role in skilled migration? The case of Italy», *Regional Studies*, 48, 1628-1649.

- North, D. C. (1990): *Institutions, Institutional Change and Economic Performance*, Cambridge, Cambridge University Press.
- OECD (2007): *Competitive Regional Clusters: National Policy Approaches*, Paris, OECD.
- Parrilli, M. D., Aranguren, M. J., and Larrea, M. (2010): «The role of interactive learning to close the “innovation gap” in SME-based local economies: A furniture cluster in the Basque Country and its key policy implications», *European Planning Studies*, 18, 351-370.
- Phillips, D. J., and Zuckerman, E. W. (2001): «Middle status conformity: Theoretical restatement and empirical demonstration in two markets», *American Journal of Sociology*, 107, 379-429.
- Rafiqi, P. S. (2009): «Evolving economic landscapes: Why new institutional economics matters for economic geography», *Journal of Economic Geography*, 9, 329-353.
- Revilla Diez, J., Schiller, D., and Zvirgzde, D. (2016): «Doing business in Ukraine: Multi-national companies in the trap of regional institutions?», *Environment and Planning C: Government and Policy*, 34, 638-655.
- Robinson, J. A. (2013): «Measuring institutions in the Trobriand Islands: A comment on Voigt’s paper», *Journal of Institutional Economics*, 9, 27-29.
- Rodríguez-Pose, A. (2013): «Do institutions matter for regional development?», *Regional Studies*, 47, 1034-1047.
- Rodríguez-Pose, A., and Storper, M. (2006): «Better rules or stronger communities? On the social foundations of institutional change and its economic effects», *Economic Geography*, 82, 1-25.
- Rodrik, D., Subramanian, A., and Trebbi, F. (2004): «Institutions rule: The primacy of institutions over geography and integration in economic development», *Journal of Economic Growth*, 9, 131-165.
- Salais, R., and Storper, M. (1992): «The four “worlds” of contemporary industry», *Cambridge Journal of Economics*, 16, 169-193.
- Sánchez, J. L., Aparicio, J., and Alonso, J. L. (2010): «The shift between worlds of production as an innovative process in the wine industry in Castile and Leon (Spain)», *Geoforum*, 41, 469-78.
- Seo, M.-G., and Creed, W. E. D. (2002): «Institutional contradictions, praxis, and institutional change: A dialectical perspective», *The Academy of Management Review*, 27, 222-247.
- Shell-Duncan, B., Wander, K., Hernlund, Y., and Moreau, A. (2013): «Legislating change? Responses to criminalizing female genital cutting in Senegal», *Law and Society Review*, 47, 803-835.
- Shirley, M. M. (2013): «Measuring institutions: How to be precise though vague», *Journal of Institutional Economics*, 9, 31-33.
- Simmie, J., Sternberg, R., and Carpenter, J. (2014): «New technological path creation: Evidence from the British and German wind energy industries», *Journal of Evolutionary Economics*, 24, 875-904.
- Smets, M., Morris, T., and Greenwood, R. (2012): «From practice to field: A multilevel model of practice-driven institutional change», *Academy of Management Journal*, 55, 877-904.
- Storper, M. (1997): *The Regional World: Territorial Development in a Global Economy*, New York, Guilford Press.
- (2011): «Why do regions develop and change? The challenge for geography and economics», *Journal of Economic Geography*, 11, 333-346.
- Storper, M., and Salais, R. (1997): *Worlds of Production: The Action Frameworks of the Economy*, Cambridge, Mass., Harvard University Press.
- Streeck, W., and Thelen, K. (2005): *Beyond Continuity: Institutional Change in Advanced Political Economies*, Oxford University Press, Oxford.
- Suddaby, R., and Greenwood, R. (2009): «Methodological issues in researching institutional change», in D. Buchanan and A. Bryman (eds.), *The Sage Handbook of Organizational Research Methods*, Thousand Oaks: London, Sage Publications Ltd, 176-195.

- Thelen, K. (2004): *How Institutions Evolve: The Political Economy of Skills in Germany, Britain, the United States and Japan*, Cambridge, Cambridge University Press.
- Thornton, P. H., Ocasio, W., and Lounsbury, M. (2012): *The Institutional Logics Perspective: A New Approach to Culture, Structure and Process*, Oxford, Oxford University Press.
- Tidey, S. (2013): «Corruption and adherence to rules in the construction sector: Reading the “bidding books”», *American Anthropologist*, 115, 188-202.
- Tolbert, P. S., and Zucker, L. G. (1983): «Institutional sources of change in the formal structure of organizations: The diffusion of civil service reform, 1880-1935», *Administrative Science Quarterly*, 28, 22-39.
- Tomaney, J. (2013): «Region and place I: Institutions», *Progress in Human Geography*, 38, 131-140.
- U.S. Department of Justice (2010): «Justice Department Requires Six High Tech Companies to Stop Entering into Anticompetitive Employee Solicitation Agreements. Justice News, 24 September 2010.». Washington, D.C.: The United States Department of Justice. Website: <https://www.justice.gov/opa/pr/justice-department-requires-six-high-tech-companies-stop-entering-anticompetitive-employee>. Accessed: 13 July 2016.
- Unger, B., and van Waarden, F. (2009): «How to dodge drowning in data? Rule- and risk-based anti money laundering policies compared», *Review of Law and Economics*, 5, 953-985.
- Vaillant, Y., and Lafuente, E. (2007): «Do different institutional frameworks condition the influence of local fear of failure and entrepreneurial examples over entrepreneurial activity?», *Entrepreneurship and Regional Development*, 19, 313-337.
- van Waarden, F. (2001): «Institutions and innovation: The legal environment of innovating firms», *Organization Studies*, 22, 765-795.
- Voigt, S. (2013): «How (not) to measure institutions», *Journal of Institutional Economics*, 9, 1-26.
- Whitley, R. (1992): «The social construction of organizations and markets: The comparative analysis of business recipes», in M. Reed and M. Hughes (eds.), *Organizations: New Directions in Organization Theory and Analysis*, Newbury Park, Sage Publications Ltd, 120-143.
- Williamson, O. E. (1985): *The Economic Institutions of Capitalism: Firms, Markets, Relational Contracting*, New York, Free Press.
- Xin, K. K., and Pearce, J. L. (1996): «Guanxi: Connections as substitutes for formal institutional support», *Academy of Management Journal*, 39, 1641-1658.
- Zilber, T. B. (2011): «Institutional multiplicity in practice: A tale of two high-tech conferences in Israel», *Organization Science*, 22, 1539-1559.
- (2013): «Institutional logics and institutional work: Should they be agreed?», in M. Lounsbury and E. Boxenbaum (eds.), *Institutional Logics in Action*, part A, Bingley, Emerald Group Publishing Ltd, 77-96.