

Between Control and Autonomy: Implementing Independent Regulatory Agencies

An empirical comparison

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Abstract

Political decision-makers, when delegating competencies to independent regulatory agencies (IRAs), are always concerned by the following dilemma: independence must be effective so as to improve the credibility of the agency and foster the quality of regulatory outputs; but it should not consent an uncontrolled self-government of agencies, in order to avoid an undesirable rerouting of the strategic aims of delegation. How to find a middle way between control and autonomy of IRAs becomes therefore a major puzzle for the viability of the global order of regulatory capitalism (Levi-Faur 2005). In this context, some evidence exists showing that the implementation of agencies may produce unanticipated consequences (Wilks and Bartle 2002). Hence it becomes crucial to determine if the formal independence, as prescribed in the statutes of the agency, is properly implemented, and explain the possible variation. To do this, in this paper I will present a way to conceptualise and assess the *de facto* independence of IRAs. Moreover, I will discuss the expected deviation of agencies from their statutory prescriptions, drawing from the relevant literature on: life cycle of agencies (Martimort 1999); path dependence (Pierson 2000); varieties of capitalism (Hall and Soskice 2001). Finally, I will test the related hypothesis with a cross-national comparison between eight West European regulators.

Paper prepared for the conference: « Frontiers of regulation : assessing scholarly debates and policy challenges », An international conference organised by the European Consortium of Political Research, Standing Group on Regulatory Governance and the Centre for the study of Regulated Industries, School of Management, University of Bath. September 7th-8th 2006, University of Bath (UK).

1. Introduction

Following the post-fordist dynamic of capitalist development, the role of States in Western countries is deeply redefining. Governments are partially dismissing their functions of providers of goods and services and their direct interventionism over the economy, in favour of a more indirect regulatory approach (Majone 1994): since 1980, no government activity has grown faster than government regulatory functions (Jacobs 1999). To perform these new tasks, the political decision-makers have to cope with a socio-political environment perceived as increasingly uncertain, contingent and fluid, whereas, the external imperatives deriving from an “internationalized economy” and a “risk society” require certainty, quick adaptations and informed answers. So, several regulatory competencies are increasingly delegated by the political decision-makers to formally independent regulatory agencies (henceforth IRAs), which are technocratic tools conceived for improving the “efficiency” of the political process through technical expertise and insulation from day-to-day and short-term politics, in order to find a reconciliation between an effective policy-making and the management of a complex society. IRAs are in fact build up as “governmental entities that possess and exercise some grant of specialized public authority, separate from that of other institutions, but are neither directly elected by the people, nor directly managed by elected officials” (Thatcher and Stone Sweet 2002). According to the empirical literature on this topic, the shift of power in favour of these bodies is quantitatively impressive and qualitatively relevant: IRAs stand for one main feature of the new global order of regulatory capitalism (Levi-Faur 2005; Levi-Faur and Jordana 2005). IRAs have indeed proliferated worldwide, following a similar trend in about all regulatory domains, becoming the taken-for-granted solution for a wide range of credibility and functional problems (Gilardi 2005).

Nonetheless, a number of queries about the consequences of these developments are still on the table, namely because evidence exists showing that the implementation of agencies may produce relevant unanticipated consequences (Wilks and Bartle 2002). We indeed still lack information on the functioning of IRAs. How far is the formal independence implemented? How do IRAs use their independence? Are they really independent in their routine or are they operating rather in the shadow of the administrative hierarchy? Are they pursuing a process of deviation from the statutory prescriptions? Are they captured by the regulated industries? Are they disconnected from the practices of the target sector? These questions are crucial to understand the meaning and the implications of the spread of regulatory capitalism. Here we claim that a first answer can come primarily from the study of the implementation of the key characteristic of IRAs, i.e. their independence. Thus, the goal of the present inquiry is to discover what is shaping the functioning of regulatory agencies, through the study of their “real” independence, in order to highlight the effectiveness of the new regulatory order.

The paper is structured as follows. I will first present a conceptual discussion of agencies’ de facto independence. Then I will develop some hypotheses concerning the variation of de facto independence, beyond statutory prescriptions. Next, I will discuss data and methods, before testing my theoretical expectations on eight West European regulators, with a multi-value qualitative comparative analysis technique (Cronqvist 2005a). Conclusions follow.

2. Towards an analysis in terms of de facto independence

We argue that, in the literature about independent agencies in Western Europe (starting from research on central banks), two points have received until now too little attention: not only the informal facet of independence has been somewhat neglected, but the role of actors other than the political decision-makers has been probably underestimated as well.

With reference to the first point, I start trying to define the concept of “real” independence of IRAs in the more abstract and straightforward way possible. Studying the implementation of the statutory prescriptions of independence, means assessing the “real” independence during the agencies’ day-to-day regulatory action. There are several definitions of independence following different disciplinary traditions, and a few that specifically treats the problem of its implementation. In his seminal paper, Majone (Majone 1997) identified IRAs as “(...) highly specialised organisations enjoying considerable autonomy in decision-making”. Furthermore, (Verhoest, Peters, Bouckaert and Verschuere 2004), we have to include another aspect in this definition: the exemption of constraints throughout the use of those competencies. With this dual definition in mind, we will use the concept of *de facto independence* to understand the notion of “real” independence in a rather simple manner, namely as the autonomy of an agency in shaping the regulatory action applied to a target sector. On the contrary, we have a reduction of “real” independence if the regulatory action of an IRA is biased by other actors, ex-ante (by colonizing the agency) or ex-post (by swaying the activity of regulation executed by the agency).

Pertaining to the second point, we stress the need for the conceptualization of IRAs in an analogous manner to intermediary agenciesⁱ (Braun 1993). This means, on the one hand, that the third part (here, the target sector) is also expected to affect the functioning of agencies. Accordingly, the political decision-makers *and* the regulatees (that is to say, the representatives of the regulation’s target sector) are the relevant external actors, which are able to mould the regulatory action. We can therefore picture the de facto independence of an agency as a *two-dimensional space with two axes*: the relationship with the political decision makers and the one with the regulatees. On the other hand, we assume that the relationships among an agency, the political decision-makers and the regulatees might be mutually influencing.

3. Explaining de facto independence

The approach in terms of de facto independence is useful since we assume that formal independence only illustrates incompletely the functioning of agencies. Now, before discussing hypotheses about the pertinence of this approach, we have to elucidate our hermeneutical background.

3.1 A world of complex causation

Explaining a phenomenon involves a demonstration of the causal relationships between two or more variables. Methodology is the mean scholars employ to increase confidence in the inferences they make about causal relationships (Hall 2003). Now, according to Hall, the methodology used by political scientist to test their theories is often inappropriate, because it is not in line with the underlying ontology, namely with the set of fundamental assumptions

that scholars make about the nature of the social and political world. Indeed, the standard comparative method and mainstream regression models make a strong set of assumptions - of unit homogeneity, linearity, independence of cases and so on (Wallerstein 2000) - that are not corresponding to the causal structure of the real world, as described in terms of complex (multiple and conjunctural) causation (Ragin 1987; Ragin 2000), with interaction effects among contextual variables (Liebersohn 1985; Liebersohn 1992). Indeed, the problem is not only that the research environment of political science is too rich ("too many variables, not enough cases"), but also that the relationships between variables are more complex than as it is commonly assumed. These drawbacks are particularly strong for studies involving a small-medium number of cases, where on the one hand the standard qualitative method for comparison is currently judged to be too unsophisticated (Burnham 2004), and on the other hand mainstream statistics provide extremely poor reliability and robustness. According to Hall, the first step toward a solution is the formulation of a set of predictions based on different competing theories, illustrating a variety of causal factors, which are to be tested with a technique that is coherent with the underlying ontological framework, such as the Qualitative Comparative Analysis.

In the next section we will illustrate our theoretical expectations about the variation of de facto independence of agencies. We distinguish: a series of hypothesis concerning the de facto independence from political decision-makers; a series of hypothesis concerning the de facto independence from the regulatees. Then we will discuss data and methods for the empirical analysis.

3.2 Hypotheses

The effect of formal independence. We suppose here that formal independence only portrays one part of the functioning of an agency (Thatcher 2002c). There are indeed arguments according to which we can expect that de facto independence could be different from the formal one. I contend that an exclusively formal approach is misleading in at least two crucial features: the discretion allowed by the institutional framework (Friedberg 1997; March and Simon 1958); and the effects of the relationships - less formalised - with other actors than the decision-makers, namely the regulatees, that possibly will affect the behaviour of IRAs (Stern 1997; Thatcher 2002a; Wilks and Bartle 2002).

Hypothesis 1): Formal independence does not explain alone the variation of de facto independence

The life cycle of agencies. The basic idea is that IRAs - similarly and even more than other organisations - always enjoy a certain degree of discretion, permitting the evolution of their relationships with the political decision-makers and with the regulatees, beyond those outlined in the formal constitution. Olson already underlined the increasing influence of groups over time, accumulating collusions that are detrimental for collective action (Olson 1982). More specifically, according to Kahn, regulatory commissions go through a life cycle, setting out as protagonist of the public interest, and then gradually becoming routinized and protective of the interests of the actors they are supposed to regulate (Kahn 1988). Therefore, agencies' functioning should be understood as a dynamic phenomenon. Similarly, Martimort argues that regulatory agencies evolve over time: agencies start to behave in the public interest and then become increasingly bureaucratized and influenced by private interests (Martimort 1999). Correspondingly, Coen, examining different regulatory styles in Europe, shows how the role of regulators has diverged, and how the relation between regulators and stakeholders evolves

over time, following both functional market development and political learning (Coen 2005). From this literature, we can derive the following hypotheses:

Hypothesis 2a): An old IRA is more de facto independent from the political decision makers than a young one.

Hypothesis 2b): An old IRA is less de facto independent from the regulatees than a young one.

The path dependency of regulatory arrangements. Political processes or phenomena are frequently described as path dependent (Pierson 2000). This means that political events are usually strongly shaped by critical moments or junctures that happened in the past. The underlying assumption is that of “increased returns”, that is, the dynamic of growth of the cost of switching from an alternative to another over time. In other words, tenants of this approach assume that: early events are more important than later ones; the probability of further steps in the same path increases with each move down that path; sequence matter. Thus we may assume that preceding stages could be causally relevant in a temporal sequence. The application of this argument to the study of institutions (North 1990) allows, for instance, to explain the unrelenting divergence of market economies of occidental countries. Similarly, some scholars (Skocpol and Fiorina 1999) shows how organizations have a strong tendency to persist once institutionalized. Concerning our discussion about IRAs, this approach is helpful, since it assumes that an earlier mode of regulation is likely to keep on to a certain extent, for instance because of the persistence of informal linkages among the relevant actors. Therefore, we suppose that, when an IRA is created (or reformed), the old regulatory arrangement will partly determine the functioning (regardless the form of the new one). We can obtain the following hypotheses:

Hypothesis 3a): If an IRA is created in a formerly public sector, it will be less de facto independent from the political decision- makers.

Hypothesis 3b): If an IRA is created in a long-standing privatized sector, it will be less de facto independent from the regulatees.

The varieties of regulatory capitalism. A frequent argument in comparative political science is that reforms of national institutions, when they occur, differ across countries (at least during the short and mid-term), because of the domestic institutional context. In other words, in order to study the effect of a single reform, we have to consider that each institution is embedded in an environment shaped by several political and social forces (Polanyi 1983). Therefore, even if powerful cross-national pressures can drive an institutional change beyond the existing domestic setting, producing institutional convergence across nations (Thatcher 2005), the functioning of the new arrangements could vary from country to country. The “varieties of capitalism” approach (Hall and Soskice 2001) allows us to make operational these insights. Developing some crucial findings from the neo-corporatist literature (Crouch and Streeck 1997), Hall and Soskice propose a more firm-centred approach. The starting point is the observation that several models of capitalism exist. They describe two ideal types of institutional models of economy: the coordinated market economies (CME), based on extra-markets coordination between economic and political actors; and the liberal market economies (LME), where the architecture of markets ensures coordination. Furthermore, the concept of institutional complementarities underlines the fact that institutions have to be analyzed in a relational and comprehensive manner: two institutions are complementary if the

presence of one increases the “returns” from the other. Therefore, a nation with a particular type of coordination in one sphere should tend to develop complementarities in other spheres. The result of the existence of such complementarities is that the political dynamics and adaptation strategies differ across countries, because of the influence of domestic institutional settings (not only in a functional perspective). These considerations imply that IRAs created with very similar formal competencies could nevertheless actually function in a different manner, according to their complementarities with the institutional (formal and informal) framework, because the role they play depends from their degree of fit or misfit with others organisations and institutions. Specifically, in a CME the network among the decision-makers, the regulators, and the regulatees should be denser than in a LME, because of the need for extra-market coordination. Consequently, the following hypotheses are on the table:

Hypothesis 4a): In a coordinated market economy, the de facto independence of an agency from the political decision-makers is lower than in a liberal market economy.

Hypothesis 4b): In a coordinated market economy, the de facto independence of an agency from the regulatees is lower than in a liberal market economy.

Intermediary agencies. As we consider IRAs the same as intermediary agencies (Braun 1993), we shall expect that the nature of the relationship between an agency and the political decision-makers will be affected by the relationship between the former and the regulatees, and vice versa. At this stage, it is difficult to decide about the direction and the effect of the relation: it is an empirical matter. We simply hypothesize that the degree of de facto independence from the political decision-makers is consistently related to the degree of de facto independence from the regulatees.

Hypothesis 5): The de facto independence from the political decision-makers is significantly linked to the de facto independence from the regulatees.

4. The analysis

4.1 Methods and cases

In order to test my theoretical expectations, following an ontological framework of complex causation, I will refer to the recent developments of the Qualitative Comparative Analysis (Ragin 1987). QCA is an analytical technique using Boolean algebra to execute a more formalized comparison within a small-medium number of cases and to afford some kind of generalization of the validity of results. Each case is represented as a logical combination of causal conditions (the independent variables, in Boolean terms) and outcome (the dependent variable). Data are then presented in a "truth table". These Boolean combinations can be compared and then simplified. In that way, we obtain *different combinations* of conditions producing a specific result. According to the basic version of QCA, a case is only "in" or "out" of a set, which represents all the cases fulfilling a specific condition. The multi-value QCA (MVQCA) is a way to extend QCA, allowing including some multi-value variables into the analysis, to better fit the cases into categories (Cronqvist 2005a). Logical operations are computed with the software Tosmana 1.255 (Cronqvist 2005b).

In this paper we will build up two different truth tables. Firstly, we will test *competing explanations* concerning de facto independence of agencies from the political decision-makers (“inddefpdm”): formal independence, life cycle, path dependence and varieties of capitalism. Secondly, we will test hypothesis regarding the variation of de facto independence from the regulatees (“inddefreg”). This time, together with the other variables, we will use the de facto independence from the political decision-makers as an additional explanatory factor (related to the notion of intermediary agencies), whereas we will exclude formal independence (which only refers to the relationship with the political decision-makers). The selected cases are eight formally independent regulatory agencies, concerning seven West European corporatist countries (Austria, “aus”; Belgium, “bel”; Finland, “fin”; Italy, “ita”; Norway, “nor”; Sweden, “swe”; Switzerland, “swi”) and two sectors (financial and banking, “bk”; telecommunications, “tc”). The purpose is to obtain a relatively homogeneous universe with nonetheless a consistent internal variety. The main factor for including a case into the dataset is a high level of comparability within the agencies’ organisational models. Data are coded in order to fit into the MVQCA (see the next sections). The *outcomes* are accurately appreciated through three degrees of de facto independence. As until now the software do not allows multiple values in the outcome, we will solve this limitation by executing a dichotomised analysis for each level of de facto independence. In other words, in order to test the conditions for low independence from political decision-makers, we compute as “1” all the cases presenting the outcome “low”, and as “0” the remaining cases of “medium” and “high” independence; and so forth. The multi-value outcome is then presented in the last column of the truth tables.

4.2 Operationalizing and assessing the causal conditions

In order to test the hypotheses, we need to operationalize the relevant variables, that is: the degree of formal independence, the age of agencies, the previous mode of regulation, the degree on coordination of the economy (see table 1), and the link between de facto independence of agencies from political decision-makers and from regulatees. *Formal independence* of agencies (“formalind”) is measured with the Gilardi’s index (Gilardi 2002)ⁱⁱ. In order to keep almost intact the richness of the principal causal condition, data are coded in a multi-value scale, with the value “0” for cases only moderately independent, “1” for a significantly more independent case, and “2” for the remaining very independent cases. The other three conditions are dichotomized. The *age* of agencies (“age”) is assessed by simply subtracting the year of the data collection (2006) to the year corresponding to the creation of the agency (sources are agencies’ websites). Only two agencies are clearly older than the average, and are then coded with a “1”. The assessment of the *path dependence* from the mode of regulation preceding the creation (of reform) of agencies roughly leads to a distinction between sectors (“sectorpath”). In case of previous public ownership of the regulated industries, we code “0”, otherwise we code “1” (Conway and Nicoletti 2006). The index of Hall and Gingerich (Hall and Gingerich 2004) allows us to measure the *degree of coordination* of national economies in Western countries (“coord”). We consider that only one case corresponds to a domestic configuration that is clearly less coordinated (Switzerland), and we code it as “0”. In fact, Switzerland is normally regarded as a specific liberal economy among corporatist countries. Finally, the *link between de facto independence* from the political decision-makers and from regulatees is tested by including the former as a multi-value causal condition in the model presenting the latter outcome, as discussed in the next section.

Table 1: The causal conditions

case	<i>formalind</i>		<i>age</i>		<i>sectorpath</i>		<i>coord</i>	
	data (1)	coded as	data (2)	coded as	data (3)	coded as	data (4)	coded as
belgbk	0.47	0	72	1	4	1	0.74	1
finbk	0.48	0	13	0	3	1	0.72	1
swebk	0.54	0	15	0	3	1	0.69	1
swibk	0.48	0	72	1	5	1	0.51	0
austc	0.71	2	9	0	1	0	1	1
itatc	0.71	2	9	0	2	0	0.87	1
nortc	0.52	0	20	0	1	0	0.76	1
swetc	0.64	1	14	0	1	0	0.69	1

4.3 The operationalization of the outcomes

The operationalization of de facto independence is challenging, on the one hand because it refers mostly to informal features, and on the other because it received until now little systematic attention. Therefore, this variable deserves a detailed discussion, drawing from a framework I have developed to assess the de facto independence of agencies (Maggetti 2006).

Starting from our prior conceptualization of IRAs as intermediary agencies, we will build up two distinct measurements of de facto independence, i.e. one concerning the relationship with the political decision-makers and one concerning the relationship with the regulatees (see table 2). Within each dimension, we claim that de facto independence of an agency - considered as the autonomy in shaping the regulatory action - can be assessed through an analytical distinction between two theoretical components: the self-determination of preferences and the integration of these preferences into the regulatory process. Taking this distinction seriously means, first of all, establishing what determines the preferences of an agency. Then, discussing how the activity of regulation incorporates these preferences.

The self-determination of preferences. To be de facto independent means at first that the preferences of the agency under investigation are self-determined. In other words, agencies are fully independent if their actions follow an internal logic shaped by their organisational dynamic, which is inseparable from official goals (Buchanan, Tullock and Rowley 2004). On the other hand, we have a reduction of independence if the agency's preferences are hetero-determined, that is, defined by external actors, beyond the proper mandate. This is the case if an agency is colonized by the fundamental interests of other actors. So, we have to open the black box. With this purpose, we shall focus on indicators of IRA's self-determination from the political decision-makers and, respectively, from the regulatees. I was inspired by several research fields, especially from literature on central banks (Cukierman, Webb and Neyapti 1992; Grilli, Masciandro and Tabellini 1991); delegation to IRAs (Thatcher 2002b); public policy (Papadopoulos 2003; Peters 2001); courts of justice (Breton and Frascini 2003), capture theory (Pelzman, Levine and Noll 1989; Stigler 1971), corporate governance (IOSCO 2002; OCDE 2004). As a result, the nature of the relationships between the IRA and the political decision-makers is qualified with six indicators of (low) self-determination, which will be qualitatively aggregated in the empirical analysis. Next, pertaining to the relationship between the IRA and the regulatees, we are able to identify another six indicators (see table 2).

The activity of regulation. The second component of the de facto independence of an agency is the ability to translate its preferences into the activity of regulation, i.e. in regulatory texts (ordinances, directives, resolutions, recommendations and so on) and then in single decisions (sanctions etc.). Conversely, we have a reduction of autonomy if external actors, once the agency's preferences established, can manipulate however crucially the activity of regulation, in order to override the will of the relatable IRA. In other words, we now consider the agency as a black box and we shall then try to see if other actors can exogenously sway the regulatory process. Unfortunately, there is neither empirical feasibility nor theoretical basis regarding the direct measurement of the agency's independence during the procedures of controlling and sanctioning carried out on the target sector. Indeed, on the one hand, it is impracticable to highlight the informal pressures concerning a single decision exerted by the political decision-makers or by the regulatees, because no suitable trace of it exists, and on the other, how do we establish what is influencing a specific decision, or, even more notably, a non-decision? Therefore I suggest assessing the independence of the activity of regulation in a slightly more indirect manner. The basic idea is to see how much the preferences of external actors are integrated in the regulations formulated by the agency, through the study of its inner political cycle (Howlett and Ramesh 2003). Concretely, I propose to focus on the active participation on the IRA's rules-making process, in order to assess the extent to which the relevant actors affect the regulatory texts during the investigated time-period. The more the process is exclusive, the more the agency is factually independent. This approach provides parsimony, clarity and comparability within the results, but we must deal with a strong assumption: that participation means influenceⁱⁱⁱ. Indeed, we assume that the most participating actors are very prominent in the production of rules, hence crucially influencing the activity of the IRA.

Table 2: A framework to assess the de facto independence of regulatory agencies from the political decision makers and from the regulatees

Dimensions	Component	Indicators negatively affecting de facto independence	Aggr.
(1) Relationship IRA - Political Decision Makers	<i>Indicators of self-determination of preferences of the IRA</i>	<ul style="list-style-type: none"> - Frequency of revolving door - Frequency of ad hoc contacts (internships, exchanges of expertise, regular meetings) - Influence on budget setting - Influence on organisation setting - Weight of partisan membership on board members nominations, moderated by balance of powers and heterogeneity - Political vulnerability (earlier departures of IRA chief and board members) 	i n d e f p d m
	<i>Autonomy of the activity of regulation</i>	<ul style="list-style-type: none"> - Active participation to the IRA's rules-making process 	
(2) Relationship IRA - Regulatees	<i>Indicators of self-determination of preferences of the IRA</i>	<ul style="list-style-type: none"> - Frequency of revolving door - Frequency of ad hoc contacts (internships, exchanges of expertise, regular meetings) - Relative (in)adequacy of budget dimension - Relative (in)adequacy of organisation dimension - Closeness of the (former and current) professional activity of board members, moderated by full time positions. - Possible personal or affair relations, episodes of corruption or intimidation 	i n d e f r e g
	<i>Autonomy of the activity of regulation</i>	<ul style="list-style-type: none"> - Active participation to the IRA's rules-making process 	

Finally, results concerning the self-determination of preferences and the autonomy of the activity of regulation of agencies can be once more qualitatively aggregated, to obtain one measurement of de facto independence from the political decision-makers (“inddefpdm”) and

one from the regulatees (“inddefreg”). We get then two dependent variables, which will be tested separately.

4.4 The assessment of the outcomes

In the present inquiry, relevant information has been collected with surveys, refined with written documentation when possible and completed with a small amount of interviews^{iv}. The case studies are briefly summarized in table 3a (concerning the relationship with the political decision-makers) and in table 3b (concerning the relationship with the regulatees), with the corresponding degree of de facto independence, from “low” to “high”, on a three point ordinal scale. As we said, de facto independence is conceptualized as the aggregation of two components, i.e. the self-determination of preferences (i) and the autonomy of the activity of regulation (ii). Note that the outcome is firstly dichotomized in order to fit into the triple QCA analysis, and then represented as a multi-value variable (“tot”).

Table 3a: Outcome 1 - De facto independence of agencies from the political decision-makers

case	data (1)	inddefpdm			tot
		low	medium	high	
<i>belgbk</i>	(i) The revolving door is not very frequent, likewise ad hoc contacts. The influence on budget and organisation is low. The weight of partisan membership on board members' nominations is high, but members are homogenously represented and enjoy equal powers. Early departures of board members are very rare. (ii) The interventions during the activity of regulation are moderate.	0	0	1	2
<i>finbk</i>	(i) Revolving door is very frequent, especially towards the administration. Ad hoc contacts, as regular meetings, are very frequent. The influence on budget and organisation is quite low. The weight of partisan membership is low. The chairman was fairly often replaced during the 1990s. (ii) The political decision-makers participate to several phases of the rule-making process.	1	0	0	0
<i>swebk</i>	(i) Revolving door is frequent. Contacts are continuous, because swebk is considered as part of the public administration. The influence on budget and organisation is high. Parties are very influent on board member nominations. The board is homogeneous in composition and in powers. Early departures are rare. (ii) The regulatory texts are to a certain extent influenced by the public authorities.	1	0	0	0
<i>swibk</i>	(i) Revolving door is rare. Contacts are frequent. Influence on budget and organisation is quite high. Political parties are moderately influent and not homogenously represented. Early departures are not infrequent. The chairman position is stable. (ii) The political decision-makers participate to some important phases of the rule-making process.	0	1	0	1
<i>austc</i>	(i) Revolving door is rare. Contacts are quite frequent. The influence on budget is fairly low and the influence on organisation is very low. The influence of parties is low. Early departures are very infrequent. (ii) The public administration participates to some later phases of the rule-making process.	0	0	1	2
<i>itatc</i>	(i) Revolving door and contacts are moderate. Influence on budget is quite low, and it is very low on organisation. The influence of parties is low. Early departures of members or chairman are very rare. (ii) The political decision makers do not significantly affect the regulatory activity.	0	0	1	2
<i>nortc</i>	(i) Revolving door is quite frequent. Contacts are very frequent. Influence	1	0	0	0

	on budget is quite high, whereas the influence on organisation is low. Weight of partisan membership on nominations is low. There is no board, but a director. His position is stable during the investigated time period.				
	(ii) The political decision-makers participate to several crucial phases of the rule-making process				
<i>swetc</i>	(i) Revolving door and contacts are quite frequent. Influence on budget is very high and influence on organisation setting is low. Swetc is perceived as part of the public administration. Weight of partisan membership on board members' nominations is quite strong. Parties are homogeneously represented and members possess the same competencies. Early departures are rare.	1	0	0	0
	(ii) The intervention of political decision-makers during the activity of regulation is moderate.				

Table 3b: Outcome 2 - De facto independence of agencies from the regulatees

case	data (2)	indefreg			tot
		low	medium	high	
<i>belgbk</i>	(i) The revolving door is not very frequent. Contacts are rather frequent. Budgetary and human resources are regarded as fairly sufficient. The chairman, full-time hired, is a former professor. Members are 4/7 full-time (2/7 former employees of the secretariat, 2/7 former professors) and 3/7 Central bank directors. (ii) Regulatees do not intervene significantly during the activity of regulation.	0	1	0	1
<i>finbk</i>	(i) The revolving door is quite frequent. Ad hoc contacts are frequent. Budgetary and human resources are considered as largely sufficient. The chairman and the members of the board are public officials thus they are not full-time hired. (ii) Regulatees do not influence significantly the regulatory texts.	0	0	1	2
<i>swebk</i>	(i) Revolving door and contacts are not so frequent. Budgetary resources are considered as largely sufficient, human resources as fairly sufficient. The chairman, a civil servant, is full time hired. Board members are not full time and they are: a majority of public officials, 11% from the private sector, 22% of politicians. (ii) Regulatees do not influence significantly the regulatory texts.	0	0	1	2
<i>swibk</i>	(i) Revolving door and contacts are very frequent. Budgetary and human resources are regarded as more or less sufficient. The chairman, full-time hired, is a former executive in the private sector. Members are not full time and are composed as follows: 50% private sector, 17% liberal professionals, 33%: professors. (ii) The regulatees intervene intensively during all the phases of the regulatory activity.	1	0	0	0
<i>austc</i>	(i) Revolving door and contacts are very frequent. Human and budgetary resources are largely sufficient. The chairman and the members, 100% former executives in the private sector, are full-time hired. (ii) The regulatees are involved in some stage of the production of regulatory text.	0	1	0	1
<i>itac</i>	(i) Revolving door is quite frequent, and contacts are frequent. Budget is strongly influenced by the regulatees and it is considered sufficient. Human resources are regarded as insufficient. The chairman, a former public official, is full time hired. Members are full time hired. (ii) The regulatees are not significantly influencing the regulatory activity.	0	1	0	1
<i>nortc</i>	(i) Revolving door is quite low. Contacts are frequent. Budget and resources are regarded as largely sufficient. The director, a former employee of the secretariat, is full time hired. (ii) Regulatees do not influence significantly the regulatory texts	0	0	1	2
<i>swetc</i>	(i) Revolving door is quite infrequent. Contacts are fairly frequent. Budget	0	0	1	2

and human resources are more than sufficient. The chairman, non full-time hired, is a public official and former professor. Members are also non full-time and the board is composed as follows: 60% public officials, 10% employees of the secretariat of the agency, 30% professors

(ii) The intervention of regulatees into the activity of regulation is moderate.

5. Results and discussion

From an analytical point of view, we are especially interested in explaining high levels of de facto independence: other results are useful for improving our understanding of these outcomes^v. Then, since QCA permits a certain limited generalization, we consider that our findings will constitute a valid starting point for the study of other cases presenting similar features.

5.1 The de facto independence from the political decision-makers

Table 4: Truth Table

case	Independent variables				Dependent variable			tot
	formalind	age	Sectorpath	coord	indefpdm			
					outcome: low	outcome: medium	outcome: high	
belgbk	0	1	1	1	0	0	1	2
finbk,swebk	0	0	1	1	1	0	0	0
swibk	0	1	1	0	0	1	0	1
austc,itatc	2	0	0	1	0	0	1	2
nortc	0	0	0	1	1	0	0	0
swetc	1	0	0	1	1	0	0	0

1) Outcome: low independence (no contradictions):

$$\mathbf{formalind\{0\} * age\{0\} * coord\{1\} + formalind\{1\} * age\{0\} * sectorpath\{0\} * coord\{1\}}$$

(finbk,swebk + nortc) (swetc)

2) Outcome: medium independence (no contradictions):

$$\mathbf{formalind\{0\} * age\{1\} * sectorpath\{1\} * coord\{0\}}$$

(swibk)

3) Outcome: high independence (no contradictions):

$$\mathbf{formalind\{2\} * age\{0\} * sectorpath\{0\} * coord\{1\} + formalind\{0\} * age\{1\} * sectorpath\{1\} * coord\{1\}}$$

(austc,itatc) (belgbk)

Following the MVQCA analysis, we obtain two distinct paths of conjunctural causation (Ragin 1987) leading to the outcome of high de facto independence from the political decision-makers. The first one concerns agencies regulating the telecommunications, a long-standing public sector, newly privatized in all investigated countries. Here, a high level of de facto independence from the political decision-makers is related to high formal independence

and to early life of agencies. Age is then crucial, because agencies must have been recently created in order to implement their high formal independence. Otherwise, agencies are possibly likely to be taken over by the political decision-makers. This effect is only observed in this former public sector, possibly because the public administration possesses the appropriate technical expertise and it is still holding informal ties with the relevant actors. Hence, sectoral path dependence also matters.

The second path concerns the banking and financial sector, a well-established private and liberalized sector. Here, the effect of formal independence and age is also leading to the outcome of high de facto independence from the political decision-makers, but following another causal combination. Indeed, agencies are de facto highly independent when they are old and not much formally independent. This means that agencies enjoyed a process of autonomisation when ageing. This finding is clearly in line with the hypothesis about life cycle of agencies. Furthermore, low independence appears to be merely in a constitutive relationship (Wendt 1998) with the outcome, probably because agencies settled a long time ago in the banking and financial sector were inherently less formally independent than recent ones.

Finally, findings concerning varieties of capitalism deserve a special consideration. This hypothesis is indeed not confirmed. In contrast to our theoretical expectations, the presence of a coordinated economy come out as a necessary condition for each causal combination leading to high de facto independence from the political decision-makers, and, as we will see below, from the regulatees as well. This is quite surprising, as we may reasonably expect that in a coordinated economy the networks of relationships among the political decision-makers, the regulators and the private actors will be denser, suggesting rather a lower de facto independence of agencies. Moreover, coordination appears to be a condition for low independence as well: the effect of this condition seems therefore ambiguous, probably due to the small number of investigated cases. However, an alternative hypothesis could be as follows. Since the presence of a coordinated economy predicts the outcome of low de facto independence when formal independence is low or medium, and the outcome of high de facto independence when formal independence is high, we may suppose that it represents a concomitant condition for a consistent implementation of formal prescriptions. The explanation would be that strong and persistent interactions among the relevant actors, as typical of a coordinated economy, come out onto a reciprocal control implying that no one can reroute the formal prescriptions of the agency.

5.2 The de facto independence from the regulatees

Table 5: Truth Table

case	<i>Independent variables</i>				<i>Dependent variable</i>			tot
	age	sectorpath	coord	inddefpdm	inddefreg			
					outcome: low	outcome: medium	outcome: high	
belgbk	1	1	1	2	0	1	0	1
finbk,swebk	0	1	1	0	0	0	1	2
swibk	1	1	0	1	1	0	0	0
austc,itatc	0	0	1	2	0	1	0	1
nortc,swetc	0	0	1	0	0	0	1	2

1) Result for low independence (no contradictions):

$$\mathbf{age\{1\} * sectorpath\{1\} * coord\{0\} * inddefpdm \{1\}}$$

(swibk)

2) Result for medium independence (no contradictions):

$$\mathbf{age\{1\} * sectorpath\{1\} * coord\{1\} * inddefpdm \{2\}} + \mathbf{age\{0\} * sectorpath\{0\} * coord\{1\} * inddefpdm \{2\}}$$

(belgbk) (austc,itatc)

3) Result for high independence (no contradictions):

$$\mathbf{age\{0\} * coord\{1\} * inddefpdm \{0\}}$$

(finbk,swebk+nortc,swetc)

Here we obtain a single sufficient combination of causal conditions. Agencies are de facto highly independent from regulatees if they are young, and if the de facto independence from the political decision-makers is low (the role of the coordination of economy has been already discussed). The first condition confirms once again the pertinence of the notion of life cycle of regulatory agencies. New agencies are indeed very independent, and then they may gradually become routinized and protective of the interests of the private actors. The second condition is in line with the conceptualisation of IRAs as intermediary agencies. The relationship between an agency and the political decision-makers and the relationship between an agency and the regulatees are mutually influential. To be precise, it appears that an agency cannot be a servant of two masters: if it is scarcely independent from the political decision-makers, then it must be highly independent from the regulatees. Finally, note that here the path dependence from the prior mode of sectoral regulation does not matter.

All in all, we may say that our results, even though they are somewhat too much “individualized” (because of the suboptimal ratio cases/variables), are very interesting, at least for exploratory research, because we were able to isolate some relevant and even surprising “causal paths” that deserve further attention.

6. Conclusion

Independent regulatory agencies (IRAs) are the increasingly worldwide diffused institutional tool for the management of uncertainty and social complexity, representing a crucial feature of the new global order of regulatory capitalism (Levi-Faur 2005). In this paper, I have addressed the question of the functioning of IRAs, namely from the point of view of their de facto independence. Since neither reliable data nor satisfactory conceptualisation of de facto independence exists, I developed a framework to assess it through two distinct dimensions, the relationship between the agency and the political decision-makers and the relationship between the agency and the regulatees.

Then, starting from the hypothesis that formal independence alone cannot explain the variation of de facto independence, I have investigated some others theoretical explanations, in terms of: life cycle of agencies, path dependence, varieties of capitalism, intermediary

agencies. The selected cases are eight formally independent regulatory agencies, in seven countries (Austria, Belgium, Finland, Italy, Norway, Sweden, Switzerland) and two sectors (financial and banking, telecommunications). Hypotheses are then tested with a multi-value qualitative comparative analysis (MVQCA), i.e. an extension of Ragin's QCA, allowing to include some multi-value variables into the analysis (Cronqvist 2005a). This approach is either consistent with the comparative design including a small-medium number of cases, while permitting a limited generalization of results, and with the ontology of complex causation underlying our theoretical expectations about the relations among variables (Ragin 1987).

Empirical results show that *high de facto independence from the political decision-makers* can be explained by two distinct combinations of conditions. The first concerns the telecommunications sector, where agencies must be highly formally independent, and recently created. The second path concerns the banking and financial sector: agencies enjoyed a process of autonomisation when ageing, becoming de facto independent especially when they are old. This finding is clearly in line with hypothesis about life cycle of agencies. Conversely, findings concerning varieties of capitalism are in contrast to our theoretical expectations. In spite of predicting a clear-cut lower de facto independence from the political decision-makers and from the regulatees, the presence of a coordinated economy predicts low de facto independence when formal independence is low or medium, and high de facto independence when formal independence is high. It seems therefore that a coordinated economy represents a concomitant condition for a consistent implementation of statutory prescriptions.

Concerning *high de facto independence from regulatees*, we obtain a single sufficient combination of causal conditions. Agencies are de facto highly independent from regulatees if they are young, and when de facto independence from the political decision-makers is low. The first condition confirms once again the pertinence of the notion of life cycle of regulatory agencies. The second one is in line with the conceptualisation of IRAs as intermediary agencies, showing that an agency cannot be the servant of two masters.

To sum up, we can explain a large amount of the variation of agencies' de facto independence, without contradictions in the outcomes. So, from a theoretical point of view, we believe that this paper may contribute to a better understanding of the functioning of independent regulatory agencies, showing that de facto independence matter, and discrepancies are due to a significant range of causal conditions. Our methodological goal is also accomplished, since we illustrated the heuristic power of a technique, MVQCA, which allows applying an ontological framework of complex causation to empirical research concerning a small-medium number of cases. However, given that results are still fairly singularized, and the interpretation of outcomes remains exploratory, further research call for the inclusion of more cases and the development and test of alternative hypotheses, in order to build up a more general set of theoretical explanations.

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ⁱ Note that it is however accepted that delegation to IRAs should be considered through the fiduciary principle rather than the principal-agent model (Majone 2001).

ⁱⁱ This index summarizes many different statutory features, such as the formal status of the agency head, the formal status of the members of the board, the formal relationship with government and parliament, the statutory financial and organisational autonomy, the constitutional extent of regulatory competencies (Gilardi 2002).

ⁱⁱⁱ The connection between actors' active participation and their influence is acknowledged by several scholars interested in Social Network Analysis (Diani 2003; Knoke 1990), and especially by the developers of the Actor-Process-Event Scheme (Serdült, Hirschi and Vögeli 2004).

^{iv} Sources of data concerning the dependent variables are as follows.

(1) Semi-directive exploratory interviews: interview with a former agency's board member, 29 August 2005; interview with an agency's director, 24 October 2005; interview with an agency's vice-chairman, 20 January

2006; interview with an agency's board member, 22 June 2006; interview with an agency's board member, 23 June 2006; interview with an agency's board member, 29 June 2006.

(2) Very detailed questionnaires sent to the chairmen of the investigated agencies: survey inquiry addressed to the Banking, Finance and Insurance Commission (CBFA) of Belgium, received the 26 June 2006; survey inquiry addressed to the Rahoitustarkastus of Finland, received the 26 June 2006; survey inquiry addressed to the Finansinspektionen of Sweden, received the 10 July 2006; Survey inquiry addressed to the Swiss Federal Banking Commission of Switzerland, received the 27 July 2006; survey inquiry addressed to the Runfunk und telekom regulierungs of Austria, received the 20 July 2006; Survey inquiry addressed to the Autorità per le garanzie nelle telecomunicazioni of Italy, received the 6 August 2006; survey inquiry addressed to the Norwegian Post and Telecom Authority of Norway, received the 5 August 2006; survey inquiry addressed to the National Post and Telecom Agency of Sweden, received the 5 August 2006.

(3) Written and electronic documentation: annual reports of agencies; agencies' websites.

^v Note that, in order to improve the reliability of results, I have decided to exclude from the MVQCA analysis the minimization through logical remainders, even this might lead to a certain "individualisation" of formulas.

V_1.0