



**UCD GEARY INSTITUTE
DISCUSSION PAPER
SERIES**

Mapping Specialisation and Fragmentation of Regulatory Bodies

Jan Rommel, Joery Matthys, Koen Verhoest (Katholieke Universiteit Leuven)

Jan.Rommel@soc.kuleuven.be

Koen.Verhoest@soc.kuleuven.be

This paper was presented at an international workshop entitled
Mapping State Administrations: Towards a Common European Research Agenda,
held on 20 April 2009

This paper is an output of the Mapping the Irish State project <http://geary.ucd.ie/mapping> funded by the IRCHSS, and based at UCD Geary Institute. The views expressed here do not necessarily reflect those of the Geary Institute. All errors and omissions remain those of the author.

Mapping specialisation and fragmentation of regulatory bodies

ABSTRACT

The objective of the Flemish database is to determine the current level of proliferation of regulatory bodies and to map how regulatory regimes are structured (i.e. what kind of organizations are involved and what are their characteristics?). This paper explores whether there are ‘groups’ of regulators who share certain characteristics with other members of the same group, but differ from other groups. In specific, we test whether the sector in which a body is active and the level of government to which it belongs, have an impact on the organisational form of the body and the tasks it performs. We find that economic regulators differ significantly from other areas. They are more insulated from politicians, are more specialised and seem to have a relatively strong legal mandate. The level of government seems to be a relevant explanatory factor as well. Federal bodies are more insulated from government than other levels. In addition, they are more specialised in regulation and have a rather limited legal mandate. The results confirm the relevance of comparing different regulatory areas and levels of government.

INTRODUCTION

In recent years, the regulation literature has reported a marked increase in the complexity of regulation. New regulatory organizations have emerged, out of a hiving off of tasks from existing organizations. These have not entirely replaced the old ones, leading to an accumulation of institutions. *First*, in order to cope with a higher multifacetedness of policy areas, sectors have been split up into smaller parts. Specialized sectoral regulators have been created in certain liberalized sectors (e.g. utilities) (Laffont and Martimort, 1992). As a result of specialization, the number of fields or subsectors has increased substantially. Regulation has spread across three areas: economic, social and general legal regulation. *Second*, authority has been dispersed from central states towards multiple levels of government. National states have delegated authority to both supranational (EU) and subnational (e.g. regions) levels.

As a result, regulation now involves multiple, highly-specialized organizations, each with their own legal mandates and goals (Jordana & Sancho, 2004: 296). Actors become interdependent as almost all actors have some capacity to intervene. When regulation is no longer shaped by single institutions, it becomes necessary to study entire multi-actor multi-level ‘institutional constellations’ (Jordana & Sancho, 2004) or regulatory ‘regimes’ (Doern et al., 1999; Hood et al., 2001). However, it remains unclear how the area and the level on which the organisation operates, affects some central features of regulators. Do regulators in one area (level) differ significantly from regulators in other areas (levels)? This paper compares bodies on different regulatory areas and governmental levels (*independent variables*), in order to check for certain effects that have been associated with proliferation, such as specialization and fragmentation (*dependent variables*).

The thesis of credible commitment has been used before to differentiate economic regulation from other areas, predicting that economic sectors will be more specialized and fragmented than others. Multi-level governance has been used to compare levels of government. The data comes from a mapping of regulatory bodies on the regional (Flanders), federal (Belgium) and supranational (EU) level.

The next section introduces some central concepts. Afterwards, the hypotheses are derived from the theoretical frameworks. The next sections describe the methodology and the main findings. We end with a discussion of the findings and draw conclusions.

SPECIALIZATION AND FRAGMENTATION

Proliferation, which is the increase of public sector organizations, is associated with specialization. The core of specialization in the public sector is the creation of new organizations with limited objectives and specific tasks, out of traditional core-administrations which had many tasks and

different, sometimes conflicting objectives (Pollitt and Bouckaert 2000). Specialization seems to emerge in two forms. *Vertical specialization* is “differentiation of responsibility on hierarchical levels, describing how political and administrative tasks and authority are allocated between forms of affiliation” (Laegreid et al. 2003: 1). The extent to which a public sector system has a high level of vertical specialization depends upon *the extent to which tasks and policy cycle stages are transferred from the core administration to the more peripheral parts of the public sector*. This transfer is labelled as decentralisation, devolution, delegation, agencification (Pollitt et al. 2001; Greve et al. 1999), outsourcing and even privatisation.

Secondly, functionally homogeneous organizations responsible for a whole policy field are divided into different organizational units, which are responsible for subparts of the domain. This trend is induced by, among others, the growing complexity and multi-facetedness of policy areas. This process is what Laegreid et al. call *horizontal specialization*, or “splitting of organizations at the same administrative and hierarchical level... and assigning tasks and authority to them” (Laegreid et al. 2003: 1). An historical example is the separation of the ministry of environment out of the ministry of health, as environmental policy was growing in importance.

As a result, autonomous organizations are created, specializing in a small number of tasks. They have smaller fields of competencies, to the extent of being single purpose agencies or *task homogeneous* bodies (Verhoest & Bouckaert, 2005). Moreover, within a policy (sub)domain, the different stages of the policy cycle (policy design, development and preparation, policy implementation, policy evaluation and audit) are separated and assigned as specific tasks to different organizations. However, splitting up closely connected policy stages within an administration will lead to *fragmentation*, meaning that tasks are spread over a variety of organizations. In turn, fragmentation is associated with ‘*siloization*’, meaning that organizations become confined within their own boundaries and ignore whole-of-government issues that have links with other policy fields (Christensen & Lægheid, 2006a; Gregory, 2006).

LITERATURE AND HYPOTHESES

Area of regulation

Regulatory fields can be grouped into different areas. Economic regulation focuses on the direct government intervention in corporations and market decisions in order to stimulate competition (e.g. pricing, market entry/exit). Social regulation is aimed at the protection of social values such as health, the environment and social cohesion (Baldwin et al., 1998; Meier, 1985; OECD, 1998). Finally, general legal regulation refers to the protection of individual rights such as human rights, security and immigration (Christensen & Yesilkagit, 2006). Although these categories are often distinguished, it is

unclear whether and how they differ from each other.

A first theoretical argument for an increase in the number of regulatory bodies is the thesis of credible commitment. An important condition for economic growth is that rational investors can anticipate future moves of policy makers (Gilardi, 2002; Henisz, 2000; North & Weingast, 1989). This can only be reached when they are certain that politicians are committed to displaying the same behaviour in the future (Shepsle, 1991). Thus, if governments want to attract new investors, they have to credibly signal their commitment to a certain policy, i.e. to bind themselves to a fixed and pre-announced course of action. However, politicians have a short time horizon, since elections may incline them to suddenly change their preferences. This makes it very difficult for politicians to be credible (Gilardi, 2002). The credibility problem can be solved when “political sovereigns are willing to delegate important powers to independent experts” (Majone, 1997, 139-140). Such experts do not suffer from the short time horizon that constrains politicians (Gilardi, 2002).

It has been argued that credibility matters more in sectors that are internationally interdependent or that have been subject to market opening (e.g. utilities, transport) (Elgie & McMenamin, 2005; Thatcher, 2002). More generally, Gilardi (2002; 2004) has argued that credibility problems arise in *all* fields of economic regulation. He asserts that credibility is less necessary for social regulation, because consumers, instead of investors, are the main target of these policies.

Area and vertical specialization

Credibility has previously been tested as a predictor of the creation of independent agencies. Since economic regulators need to credibly commit themselves, they are assumed to be more insulated from politicians (i.e. more independent) than other regulators (Elgie & McMenamin, 2005; Gilardi, 2002; Roness et al., 2007). However, Yesilkagit and Christensen (forthcoming) do not find any significant effect on the independence of agencies. Similarly, Roness et al. (2007) find no evidence that agencies in an economic policy area have more policy autonomy or financial management autonomy than other agencies.. One explanation for this poor empirical support may be that focussing on delegation to agencies alone is too narrow. Elgie and McMenamin (2005, p.548) call ‘to include a wider set of non-majoritarian institutions than has usually been the case’. Christensen and Yesilkagit (2006) point to a high number of collegiate boards to which authority has been delegated. These boards have a legal mandate that grants them some degree of autonomy and decision-making power.

Assuming that credibility is more important for economic regulators (Gilardi, 2002; 2004), we should find concerning the level of *vertical specialization* that they will be organized in different organizational forms than other regulators. More precisely, if we define a range of organizational forms at different distances from government (ranging from government departments, to different forms of agencies, over collegiate boards to private sector regulators) we expect economic regulators to have an organizational form that is further away from government, and hence is more located

towards the end of this range. Therefore, we formulate the following hypothesis:

H1: Economic regulation will be allocated to organizational forms that are at a larger distance from government than social and general legal regulation.

Area and task specialization

General tasks

Specialization also refers to the splitting of policy cycles into separate tasks, and assigning a small number of general tasks to single purpose or task homogeneous bodies (Verhoest & Bouckaert, 2005). In order to signal credibility, the 'regulatory state' involves the separation of operational tasks from regulatory activities in some policy areas (sometimes linked to privatization). In addition, policy tasks are separated from operational tasks, where the former are allocated to ministerial departments and the latter are allocated to independent agencies (Scott, 2004: 148). Especially for economic regulation, governments need to separate regulation from service delivery, in order to signal their credible commitment that they will not regulate in favour of the incumbent. Hence, if we define a number of general tasks (e.g. policy formulation, regulation, subsidies, service delivery), then we expect to find a separation of tasks, particularly in economic regulation:

H2: Economic regulators will perform less other general tasks besides regulation than social and general legal regulators.

Regulatory tasks

An additional solution to increase the credibility of commitments is to disperse regulatory authority over multiple actors. Institutional fragmentation makes regulators more interdependent, so that the capacity of a single actor to revise an entire arrangement is substantially restrained. When authority is more fragmented, the commitments made by governments are more credible, because the fragmentation makes future policy changes more difficult. Thus, fragmentation de facto increases the time-consistency of policy (Gilardi, 2002; Henisz, 2000; Levy & Spiller, 1996).

If regulation is operationalised as a bundle of specific regulatory tasks, fragmentation implies that these are unbundled and allocated to different bodies. Hood et al. (2001) define three components in a regulatory regime: rule-making, monitoring and enforcement. A regulatory regime should normally have all components, although the functions can be spread across several bodies within a sector. For instance, it is possible that a body is active in rule-making but has no competencies in monitoring or enforcement. If credibility is more important in economic regulation, then we should find more fragmentation than in other areas. We can derive the following hypothesis:

H3: Economic regulators will perform less regulatory tasks than social and general legal regulators.

Level of government

The second theoretical argument for an increase in the number of regulatory bodies refers to the increasing number of levels of government that are involved in regulation. National states have increasingly delegated tasks to other levels of government, both upward and downward. Upward, national governments have delegated entire bundles of competencies to the supranational level, of which the EU is the most notable example (Hooghe and Marks, 2003). The role of the EU as a supranational regulator has grown substantially, and it has become active in almost all policy areas (Lodge, 2008). Downward, national governments have decentralized tasks to the subnational level. The most notable examples are found in federal states, where decentralization is assumed to increase competition between subnational levels. In turn, this may spur innovation and competitiveness. Furthermore, decentralizing service delivery can increase the legitimacy of actions (Peters & Pierre, 2005).

There are two different ways to delegate tasks to other levels of government. The first option is to transfer competencies only partially to another level, so that multiple levels have some authority in the same field. The concept of multi-level governance emphasizes that competencies are *shared* by multiple levels (Bache & Flinders, 2004; Hooghe & Marks, 2001). Doern and Johnson (2006: 3) define multi-level regulatory governance as a deliberative form of governance that involves ‘interacting, reinforcing, and colliding rule-making and governance’ at the various governmental levels (Doern & Johnson, 2006: 3). For instance, the EU has been described as a multi-layered system of governance where supranational, national and sub-national authorities interact regularly with no centre of accumulated authority (Benz & Eberlein, 1999). Relations are characterized by mutual interdependence on each others’ resources (Hooghe, 1996), and sovereignty is predominantly divided or shared with other levels (Börzel and Risse, 2000).

The second option is to transfer competencies entirely from one level to another. In this case there is still only one level *exclusively* active in the field and the governmental levels remain separated. For instance, dual federalist systems (e.g. Belgium) emphasize the institutional autonomy of the different levels of government, aiming a clear vertical separation of powers. Competencies are allocated to either the federal or regional level. Once a competence is allocated to a level, both the legislative and executive powers for these fields rest within this level (Börzel & Risse, 2000).

We expect to find both options in our data set. On the one hand, we expect that the EU will be present in most policy fields but competencies will be shared with the national level, reflecting a multi-level governance system. On the other hand, we expect that the regional level (Flanders) and the federal level will resemble a dual federal system, so that one level has almost exclusive competencies in a certain sector.

Although previous theoretical and empirical research is scarce, it seems logical that the extent to which a competence is transferred, has an impact on the regulatory regime. For instance, when multiple levels of government are active in the same policy field, they may each specialize in different regulatory tasks. In certain federalist settings, the task of the higher level is to avoid that lower levels develop competing norms. The federal level will then be responsible for securing harmonization of rules, through the development and enforcement of equal standards. The implementation of those rules is usually left to the lower level (Geradin & McCahery, 2004; OECD, 2005). The EU has been active in harmonizing national regulations to increase consistency, by providing a framework within which national regulators must work (Baldwin & Cave, 1999). Hence, it is likely that EU regulators will be more involved in tasks such as rule-making or information-gathering, but less involved in applying these norms through individual authorization. To the extent that different tasks are allocated to different organizational forms, this task specialization may also result in a different extent of delegation to autonomous bodies.

Furthermore, when tasks are transferred entirely to another level (e.g. dual federalism), we can anticipate that levels will increasingly diverge and develop different objectives of regulation (Doern et al. 1999; Doern & Johnson, 2006). Each level may develop its own unique characteristics as a result of its autonomy, leading to different opinions between levels regarding the optimal level of (vertical and task) specialization of regulatory bodies.

Hence, there are some theoretical reasons to expect significant differences between levels of government, but it is not possible to predict which level will be more specialized. Hence, we formulate the following hypotheses without a direction:

H4 Bodies on different levels of government will differ with respect to the organizational forms to which regulatory tasks are allocated.

H5 Bodies on different levels of government will differ with respect to the number of general tasks they perform

H6 Bodies on different levels of government will differ with respect to the number of regulatory tasks they perform

METHOD

Data collection

Several sources were used to construct the database. First, the *Gids der Ministeries* is a handbook that contains all governmental organisations in Belgium. This handbook provides basic information such as the name of the organisation, contact information, level of administration, and internal structure of the organisation. In addition, it provides information on the composition of boards of directors and advisory boards of agencies. We used an online version of this handbook (www.gdm.be), which is updated almost daily. Second, the *Instellingenzakboekje 2008* is a yearly updated handbook containing all organisations on the federal and the Flemish regional level that are involved in public tasks and that have been recognised by law. These include administrations and agencies, as well as boards or commissions and private professional organisations that are involved in public decision-making. This source provides information on the year of establishment, the legal basis and the internal structure. In addition, it provides a task description of each organisation. Third, we used the legal documents that formally establish an organisation, in order to acquire a more comprehensive picture of its tasks. Fourth, we used information on the websites of the organisations. Using multiple sources of information may create concerns of reliability. However, in most cases, the information was consistent and complementary over the different sources. In the cases where the data sources contradicted each other, we looked at the date on which the information was produced and selected the most recent source.

The data was collected in two phases. We first made a list of all possible institutions on the federal and the Flemish regional level, that perform public tasks and have a legal recognition. Hence, the scope of this first phase was very broad, as it was not limited to regulatory bodies. We collected only basic information such as the name of the organisation, level of administration and task description. This database consisted of 940 bodies. Next, the tasks of these organisations were coded into five categories: (1) policy preparation; (2) regulation; (3) other kinds of exercising authority; (4) general public services; (5) business services. For each organisation, up to three tasks may be selected, based on the task description. We did not distinguish between major and minor tasks, so that an organisation is defined as a regulatory body as soon as one of its tasks are coded as regulation (value 2 for this variable). In the second phase of the data collection, we selected only the regulatory bodies from this large list and copied them into a new database. This phase of the data collection was more focused, because we only looked at regulatory bodies onwards. The database consisted of 518 cases, including the subdivisions of ministerial departments. If we only look at entire organisations, we find 353 regulatory organisations at the federal and Flemish regional level. Some cases were omitted from the analysis. First, we only included organisations with a central authority. When some tasks are performed by several provincial boards with identical tasks and structure, these boards are coded as one body. Second, some organisations belong to a 'cluster' of almost identical bodies, indicating that

they have identical tasks within a particular policy domain. For instance, in the health sector, we counted 40 different commissions that grant permits to doctors, allowing them to exercise a particular specialty. For such clusters we only counted one organisation per cluster, in order to avoid overrepresentation of these commissions. As a result, we ended up with 327 organisations.

Dependent variables

The full coding scheme can be found in annex. An organisation's *legal status* represents the extent of vertical specialization. We define this as an ordinal variable with four categories, where the categories can be ranked. Higher categories indicate more insulation from politicians than lower categories:

(1) Ministerial departments: these are under the full hierarchical control of the minister.

(2) Agencies: These organizations perform their tasks with some formal independence from the minister. The different types of agencies that we distinguished, are internally decentralized agencies (without a board of directors) and externally decentralized agencies with a board of directors (Verhoest 2002).

(3) Commissions or boards: defined as 'collegiate bodies that are composed of interest groups and governmental organizations, to which regulatory tasks have been delegated by law'. They usually have no formal structure, apart from an administrative secretariat (Christensen, 2005; Christensen & Yesilkagit, 2006);

(4) Private professional organizations: they are legally recognized and have been delegated self-regulatory competencies by law (e.g. accountants, lawyers, doctors). The extent of government oversight on these bodies is usually limited.

The organisation's general tasks were coded into five categories (policy preparation; regulation; other kinds of exercising authority; general public services; business services). Each organization could have multiple general tasks, based on the task description. The *number of general tasks* represents the extent of general task specialization: a low score indicates that the body will be more specialized in regulation. In order to distinguish regulation from other general tasks, we used a modified definition of Hood et al. (2001). Their definition distinguishes three components in a regulatory regime: rule-making, monitoring and enforcement. An initial screening of Belgian regulatory regimes indicated that many bodies are involved in licensing or individual authorization, which can be understood as applying existing norms and standards on individual cases (e.g. building permission, driver's license, permission to start a business,...). Therefore, an organization was defined as regulatory when it has at least one of the four following *regulatory tasks*:

(1) *Transition of general laws to more concrete rules, norms and standards*: This includes the setting of standards and norms. Standards indicate the acceptable levels and distributions of a specific risk (e.g. safety standards, goals in distributive justice, pollution, chemicals). This task differs from general policy preparation as it concerns the design of very specific norms and standards.

(2) *Application of rules and standards in individual cases via licenses*: This includes decisions on giving permits or licenses in individual cases, based on a set of standards and norms (e.g. building permission, driver's license, permission to start a business,...). These permits usually serve as an entry barrier to a market.

(3) *Monitoring*: Includes all actions that are aimed at gathering information on the compliance of actors to rules. Information-gathering is defined as producing knowledge about current or changing states of a system (see Hood et al. 2001). In this paper, information-gathering can occur both through desk work and on-site inspections and audits.

(4) *Enforcement*: includes all organisations that are involved in modifying the behaviour of an actor through the application of sanctions and rewards, forbidding to do an activity or demanding a reversal/change of a decision. We include those tribunals that are a part of the executive branch (e.g. administrative courts) and exclude the courts that belong to the judiciary (e.g. criminal courts).

An organisation's *number of regulatory tasks* represents the extent of regulatory task specialization. A low score indicates that an organization is specialized in only a few regulatory tasks. A high score indicates that the body is active in (almost) the entire regulatory cycle. Assuming that any regulatory regime entails all four tasks, this variable is a proxy for the extent of fragmentation of the regime. A low mean score indicates a high extent of fragmentation in the regime, because the tasks will be spread across multiple organizations. Alternatively, a high mean score indicates a little fragmentation, because tasks will be concentrated in a few organizations.

Independent variables

The *regulatory area* was taken from Christensen (2005) and Christensen and Yesilkagit (2006) This categorical variable groups all fields of regulation into three categories:

(1) Economic regulation (i.e. financial markets, competition, product standards, business conditions, utility regulation);

(2) Social regulation (labor market and employment law, environmental protection, consumer protection, worker's health and safety, social affairs, land planning)

(3) General legal regulation (penal law and policing, private law, public law, immigration and traffic law).

Finally, the *level of government* to which the body belongs was coded in three categories (supranational (i.e. European Commission), federal and regional level). Regulatory boards/commissions were allocated to the level that has representatives in the board and that provides the administrative secretariat.

EMPIRICAL RESULTS

Descriptives

Descriptives are shown in table 1. All four types of organizations are involved in regulation. Regulatory boards are the most frequently used organizational form. Agencies are the second largest form, followed by ministerial departments and private professional organizations. Consistent with Christensen (2005) and Christensen and Yesilkagit (2006), we find that regulatory administration is rather complex and that boards are a particularly prominent form. The majority of bodies have at least one additional task besides regulation, 17% even have three general tasks. ‘Policy formulation’ (97 organizations) and ‘general public services’ (90 organizations) were the most frequent additional tasks. The latter usually entails providing information to citizens, private companies, or other administrations. In some instances the regulator also produces public services, so that it performs both operational and regulatory tasks. This finding contradicts with the notion of the ‘regulatory state’ that separates operation from regulation. Regarding the spread of regulatory tasks, most organizations have two regulatory tasks and 60% perform two tasks or less, suggesting a considerable overall extent of fragmentation. Private self-regulatory bodies (3.08) and ministerial departments (2.58) have the highest mean number of regulatory tasks.

With respect to the explanatory factors, economic regulation counts the most organizations. 184 organizations in the database can be identified as economic regulators. Social regulation is the second largest group, followed by general legal regulation. Regarding the level of government, table 2 shows how many organizations each level has per policy field.

Table 1: Descriptive statistics

Variables	Categories	N	Percent
Legal status		315	
	Department	52	16.5
	Agency	79	25.1
	Board	158	50.2
	Private	26	8.3
Number of general tasks		327	
	1	157	48.0
	2	115	35.2
	3	55	16.8
Number of regulatory Tasks		323	
	1	94	29.1
	2	105	32.5
	3	54	16.7
	4	70	21.7
Regulatory area		327	
	Economic	184	56.1
	Social	84	25.6
	General	60	18.3
Level of administration		285	
	Supranational	41	14.2
	Federal	170	59.6
	Regional	74	26.0

Table 2: Distribution of policy fields over levels of government. Percentages.

	Supranational	Federal	Regional	Private self-regulation	N=100%*
General public services	21	60	19		57
Defense		100			2
public order and safety	8	80	4	8	25

Economic affairs	14	56	13	16	141
Environmental protection	26	36	33	5	39
Housing and community amenities		33	67		12
Health	7	64	18	11	72
Recreation, culture and religion	3	19	77		31
Education	18		73	9	11
Social protection	7	73	20		30

* Organizations can have multiple policy fields

The percentages reveal that one level rarely has the full authority over a certain policy field. First, the supranational level is active in almost all policy fields. Second, federalism in Belgium entails many overlapping competencies between the federal and regional levels. We find only two fields that are exclusively allocated to one (national) level: defense is *purely federal* and education is *purely regional*. In all other policy fields, competencies are shared by the federal and regional level. Social protection appears *dominantly federal*: 72% of all bodies are federal. Conversely, social sectors such as ‘housing’ (67%) and ‘culture’ (77%) are *dominantly regional*. Other fields are almost evenly *shared by all three levels* and will be characterized by complex task divisions (e.g. economic affairs, environmental protection, health). *In sum, we find that most policy fields are shared by at least two levels, although the extent varies with respect to the number of levels involved and the relative weight of each level. Contrary to what we expected, the federal and regional level also share most policy fields.*

Hypotheses testing

Ordinal logistic regression allows to test the effect of explanatory factors (i.e. regulatory area; level of administration) on categorical dependent variables, when the categories of the dependent variable can be ranked (i.e. vertical specialization; general task specialization; regulatory task specialization). In general, this technique has less stringent requirements than linear regression (e.g. does not assume

linearity of relationship between the independent and dependent and does not require normally distributed variables). We tested for multicollinearity by creating dummy variables for each category of the factors. There were no problems in the data ($VIF < 2$; tolerance > 0.40).

When the explanatory factors are nominal and consist of multiple categories, the ordinal regression analysis defines the last category as a reference category. Parameter estimates are calculated for all but the reference category of any given factor. The results are presented in table 3. Since both factors have three categories, estimates are shown for two categories of each factor. The 'Model Chi-Square' tests are likelihood ratio tests of the *overall model*. For each dependent variable, the test is highly significant, indicating that the models are well-fitting. Considering we only included two factors, the variance explained by the factors is satisfactory for vertical specialization and general task specialization. However, for regulatory task specialization, the variance explained is very low (Nagelkerke Pseudo-R²: .054).

Next, we will compare the categories of each factor. For multinomial factors, positive (negative) coefficients mean a likelihood of higher (lower) scores on the dependent.

Regulatory area

Table 3 shows that there is a significant effect on the legal status of regulatory bodies. Bodies in economic regulation are more likely to score high on legal status (positive coefficient). They are significantly more insulated than bodies in general legal regulation, which is the reference category. Social regulation scores low on vertical specialization but there is no significant difference with general legal regulation. Regarding general task specialization, we find no significant difference between economic and general legal regulators. However, social regulators are involved in more general tasks than general legal bodies. Finally, economic regulators have a significantly larger regulatory mandate, as they are involved in more regulatory tasks than general legal bodies. There is no difference between social and general legal regulation. The standard ordinal regression does not allow to compare economic and social regulation. This requires testing additional 'contrast statements', comparing the scores of category 1 and 2 of the factor on each dependent. The contrast estimates shown in table 4 suggest that economic bodies are significantly more insulated than social bodies and have significantly less general tasks. There is no significant difference regarding the extent of fragmentation, measured by the number of regulatory tasks.

In sum, we find support for the credible commitment hypothesis H1 that economic regulation will be more often performed by organizations that are more insulated from politicians. Regarding other general tasks besides regulation, economic bodies are more specialised than social bodies but not more than general legal bodies, so that H2 is only partially confirmed. Finally, economic bodies are usually involved in multiple regulatory tasks and are less fragmented than general legal bodies. Hence, H3 is rejected.

Level of administration

Table 3 shows that the level of administration has a significant effect on the extent of specialization. Supranational bodies will more often have a legal status of a department than other levels. The coefficient for the federal level is positive, meaning that it makes substantial use of insulated forms such as agencies and boards. It delegates significantly more than the regional level. Regarding the general tasks besides regulation, supranational bodies are often associated with more additional tasks. Federal regulators appear to be very specialized and have less general tasks than regional bodies. Finally, the supranational bodies have less regulatory tasks than regional regulators. Federal bodies are also specialized in less regulatory tasks than regional bodies. Additional contrasts shown in table 4 suggest that bodies on the federal level are more insulated and have less general tasks than supranational bodies. However, they also perform more regulatory tasks.

In sum, we see substantial differences between different levels, confirming H4, H5 and H6.

Table 2: Ordinal logistic regression

Variables	Legal status			General task specialisation			Regulatory task specialization		
	Est.	SE	P	Est.	SE	p	Est.	SE	P
Threshold* cat.1	-1.00	.37	.007	-1.03	.35	.003	-.99	.33	.002
Threshold* cat.2	.78	.36	.030	1.03	.35	.003	.45	.32	.166
Threshold* cat.3	4.23	.45	.000				1.29	.33	.000
Economic†	.65	.32	.041	-.48	.30	.118	.58	.28	.040
Social†	-.15	.35	.678	.69	.34	.040	.23	.32	.467
Supranational‡	-1.50	.39	.000	.76	.38	.042	-1.02	.36	.005
Federal‡	1.67	.28	.000	-1.38	.27	.000	-.49	.25	.047
N	305			316			313		
Model Chi-Square	109.56		.000	76.24		.000	16.10		.003
Nagelkerke	.333			.246			.054		

*Threshold rows contain the intercepts estimated for all but the highest category of the dependent variable. †Reference category is General Legal. ‡Reference category is Regional.

Table 4: additional contrasts

Variables	Legal status			General task specialisation			Regulatory task specialization		
	Est.	SE	p	Est.	SE	p	Est.	SE	p
Economic versus Social	.391	.114	.001	-.462	.096	.000	.214	.147	.147
Supranational versus Federal	-1.295	.125	.000	.835	.117	.000	-.405	.187	.031

Statements were tested using the glm command with /lmatrix in SPSS 16.0. (see Chen et al., 2003)

DISCUSSION

The empirical results indicate that regulatory administration is quite complex. All organizational forms were present and we found a particularly high number of boards. The data corroborates the idea that regulatory tasks are spread and involve a ‘regime’ of multiple organizations (Hood et al., 2001). If we operationalise regimes as a bundle of four tasks, we find that most actors perform one or two regulatory tasks. In addition, most sectors are governed by both the federal and regional level. In sum, most regulatory regimes involve multiple actors and multiple levels.

Regulatory area

The data confirms the relevance of comparing different regulatory areas. Based on credible commitment, we expected to find two mechanisms by which governments try to increase the credibility of economic regulation (i.e. insulating from politicians through vertical specialization and spreading tasks through task specialization). However, these hypotheses are only partially confirmed. Delegating tasks to organizational forms that are further away from government is done more frequently for economic regulation than for social and general legal regulation. Apparently, forms where regulatees are directly involved (i.e. boards and private organizations) may also be considered as insulating tasks from politicians and can increase credibility. Hence, empirical research should focus on a wider sample than agencies alone (cfr. Elgie & McMenemy, 2005).

However, the hypothesis that economic bodies will be more specialized in a few tasks was not entirely supported. Although economic bodies are generally involved in less general tasks than other bodies, the majority of bodies have an additional task. The finding that policy formulation is the most frequent additional task suggests that policy and operational tasks are not entirely separated. Moreover, economic regulators perform multiple regulatory tasks and perform significantly more tasks than general legal bodies.

This suggests that governments aim to increase the credibility of economic regulation by

creating strong regulators, with substantial independence (high extent of vertical specialization) and with a relatively wide legal mandate (moderate extent of task specialization).

However, it should be noted that the variation in the number of regulatory tasks explained by our model is very low. In addition, the time-consistency of commitments could be increased by duplicating tasks instead of spreading them. If multiple organizations are responsible for the same tasks, they may form 'checks and balances' against other regulators. We were not able to examine this with our data, further research could examine this further.

Level of government

The data confirm the relevance of comparing different levels of government. Consistent with predictions from multi-level governance, we see that most fields involve multiple layers. In fields such as public order and safety, economic affairs, environmental protection, health, recreation and culture, and social protection, all levels are involved. Considering that Belgium has a dual federal structure, we even find more sharing than expected. The absence of concurrent competencies means that all legislative and executive authority for a certain competence is allocated to one level. It does not preclude that some policy fields are only partially transferred and shared by both levels. In those fields where both levels have their own competencies and autonomy (e.g. health, energy, trade) extensive co-ordination between the levels will be necessary (Kovziridze, 2001).

Both levels seem to develop different styles of regulation. The federal level delegates competencies more frequently to autonomous bodies. Specifically, it uses a high number of boards and commissions that allow the government to consult with regulatees. However, these bodies have a more limited mandate compared to the regional level. Hooghe and Marks (2001: 71-74) have argued that national governments may have benefits in increasing institutional fragmentation. National governments have a stronger bargaining power at the international level when they can convince their international partners that they cannot unilaterally defect from an agreement. Hence, it is possible that, in order to negotiate better terms at the supranational level, the federal government signals its credibility by delegating tasks to autonomous bodies (high extent of vertical specialization) and spreading tasks across multiple bodies (high extent of task specialization).

Regulators on the regional level have a more extended mandate, as they perform more general and regulatory tasks. However, they are less independent. Finally, we find evidence that the supranational level is characterized by a high extent of fragmentation (Thatcher & Coen, 2008) as bodies specialize in a small number of regulatory tasks.

CONCLUSION

This paper looked at differences between regulators in three areas (economic, social, general legal) and on three levels (supranational, federal, regional). Based on the literature on credible commitment and multi-level regulatory governance, six hypotheses regarding the extent of vertical and task specialisation were derived. Summing up, we have found some support for credible commitment, pointing to significant differences between areas of regulation (regarding form of organization, number of general tasks, number of regulatory tasks). We also find that levels share most policy fields but differ significantly regarding the extent of vertical and task specialization. This suggests that distinguishing between different levels and areas is useful and that different styles of regulation may be observed, e.g. with respect to the importance placed on consulting with the regulatees.

Reference List

1. Bache, Ian & Flinders, Matthew (Eds.) (2004). *Multi-level Governance*. Oxford: Oxford University Press.
2. Baldwin, R. & Cave, M. (1999). *Understanding regulation. Theory, strategy, and practice*. Oxford: Oxford University Press.
3. Baldwin, R., Scott, C. & Hood, C. (Eds.) (1998). *A reader on regulation*. Oxford: Oxford University Press.
4. Benz, A. & Eberlein, B. (1999). Europeanization of Regional Policies: Patterns of Multi level Governance. *Journal of European Public Policy*, 6 (2): 329-348.
5. Börzel, T. A. & Risse, T. (2000). Who is afraid of a European Federation? How to Constitutionalise a Multi-Level Governance System. In: J.Y.Meny & J. H. H. Weiler (Eds.) *What Kind of Polity? Responses to Joschka Fischer* Florence: Robert Schuman Centre for Advanced Studies. pp. 45-59.
6. Chen, X., Ender, Ph., Mitchell, M. and Wells, Ch. (2003), *Regression with SPSS*, from <http://www.ats.ucla.edu/stat/spss/webbooks/reg/default.htm>
7. Christensen, J. G. (2005). Delegation and administrative organization: an overview of Danish regulatory administration 1950-2000. Working Paper Department of Political Science, University of Aarhus, Aarhus.
8. Christensen, J. G. & Yesilkagit, K. (2006). Delegation and specialization in regulatory administration: a comparative analysis of Denmark, Sweden and the Netherlands. In: T.Christensen & P. Laegreid (Eds.) *Autonomy and regulation. Coping with agencies in the modern state* Cheltenham: Edward Elgar. pp. 203-234.
9. Christensen, T. & Lægheid, P. (2006a). Agencification and Regulatory Reforms. In: T.Christensen & P. Laegreid (Eds.) *Autonomy and Regulation. Coping with Agencies in the Modern State* Cheltenham: Edward Elgar. pp. 8-49.
10. Christensen, T. & Lægheid, P. (2006b). The Whole-of-Government Approach - Regulation, Performance, and Public Sector Reform. In Stein Rokkan Centre for Social Studies.
11. Daintith, T. C. (1989). A regulatory space agency? *Oxford Journal of Legal Studies*, 9 (4): 534-546.
12. Doern, B., Hill, M., Prince, M. & Schultz, R. (1999). *Changing the rules. Canadian regulatory regimes and institutions*. Toronto: University of Toronto Press.
13. Doern, B. & Johnson, R. (2006). *Rules, rules, rules, rules. Multilevel regulatory governance*. Toronto: Toronto University Press.
14. Elgie, R. & McMenamin, I. (2005). Credible Commitment, Political Uncertainty or Policy Complexity? Explaining Variations in the Independence of Non-majoritarian Institutions in

- France. *British journal of political science*, 35 531-548.
15. Geradin, D. & McCahery, J. A. (2004). Regulatory co-opetition: transcending the regulatory competition debate. In: J.Jordana & D. Levi-Faur (Eds.) *The politics of regulation. Institutions and regulatory reforms for the age of governance* Cheltenham: Edward Elgar. pp. 90-123.
 16. Gilardi, F. (2002). Policy Credibility and Delegation to Independent Regulatory Agencies: A Comparative Empirical Analysis. *Journal of European Public Policy*, 9 (6): 873-893.
 17. Gilardi, F. (2004). Institutional change in regulatory policies: regulation through independent agencies and the three new institutionalisms. In: J.Jordana & D. Levi-Faur (Eds.) *The politics of regulation. Institutions and regulatory reforms for the age of governance* Cheltenham: Edward Elgar. pp. 67-89.
 18. Gregory, R. (2006). Theoretical Faith and Practical Works: De-autonomizing and Joining-up in the New Zealand state sector. In: T.Christensen & P. Laegreid (Eds.) *Autonomy and Regulation. Coping with Agencies in the Modern State* Cheltenham: Edward Elgar. pp. 137-161.
 19. Greve, C., Flinders, M. & Van Thiel, S. (1999). Quangos-what's in a name? Defining quangos from a comparative perspective. *Governance: an International Journal of Policy and Administration*, 12(2), 129--46.
 20. Hancher, L. & Moran, M. (1989). *Capitalism, Culture and Economic regulation*. Oxford: Clarendon Press.
 21. Henisz, W. J. (2000). The Institutional Environment for Economic Growth. *Economics & Politics*, 12 (1): 1-31.
 22. Hood, C., Rothstein, H. & Baldwin, R. (2001). *The government of risk. Understanding risk regulation regimes*. Oxford: Oxford University Press.
 23. Hooghe, L. (1995). Subnational mobilisation in the European Union. *West European Politics*, 18 (3): 175-198.
 24. Hooghe, L. (Ed.) (1996). *Cohesion Policy and European Integration: Building Multi-Level Governance*. Oxford: Oxford University Press.
 25. Hooghe, L. & Marks, G. (2001). *Multi-level Governance and European Integration*. Lanham, MD: Rowman and Littlefield.
 26. Hooghe, L. & Marks, G. (2003). Unraveling the Central State, but How? Types of Multi-level Governance. *American Political Science Review*, 97 (2): 233-243.
 27. Jordana, J. & Sancho, D. (2004). Regulatory designs, institutional constellations and the study of the regulatory state. In: J.Jordana & D. Levi-Faur (Eds.) *The politics of regulation. Institutions and regulatory reforms for the age of governance* Cheltenham: Edward Elgar. pp. 296-319.
 28. Kamer van Volksvertegenwoordigers (2000). *Parlementair onderzoek naar de Belgische vlees-*

- , zuivel- en eierproductie en naar de politieke verantwoordelijkheden in het licht van de zogenaamde dioxinecrisis. Verslag van de onderzoekscommissie (Rep. No. 0018/007). Brussel: Kamer van Volksvertegenwoordigers.
29. Kovziridze, T. (2001). Federalisme, multi-level governance en twee types van hiërarchie. *Res Publica, Tijdschrift voor Politologie*, 1 (43): 15-36.
 30. Læg Reid, P., Rolland, V. W., Roness, P. G. & Agotnes, J.-E. (2003). *The structural anatomy of the Norwegian state 1947-2003* (Rep. No. Working paper 21). Stein Rokkan Centre for social studies.
 31. Laffont, J.-J. & Martimort, D. (1999). Separation of regulators against collusive behavior. *RAND Journal of Economics*, 30 (2): 232-262.
 32. Levy, B. & Spiller, P. T. (1996). *Regulations, Institutions and Commitment: Comparative Studies of Telecommunications*. Cambridge: Cambridge University Press.
 33. Lodge, M. (2008). Regulation, the Regulatory State and European Politics. *West European Politics*, 31 (1): 280-301.
 34. Majone, G. (1997). Independent Agencies and the Delegation Problem; Theoretical and Normative Dimensions. In: B.Steunberg & F. Van Vught (Eds.) *Political Institutions and Public Policy: Perspectives on European Decision Making* Dordrecht: Kluwer. pp. 139-156.
 35. Marks, G. (1993). Structural Policy and Multilevel Governance in the EC. In: A.Cafruny & G. Rosenthal (Eds.) *The State of the European Community* Boulder, CO: Lynne Rienner. pp. 391-411.
 36. Marks, G., Hooghe, L. & Blank, K. (1996). European Integration from the 1980's: State-centric v. Multi-level Governance. *Journal of common market studies*, 34 (3): 341-378.
 37. Meier, K. J. (1985). *Regulation. Politics, Bureaucracy, and Economics*. New York: St Martin's Press.
 38. Mitnick, B. (1980). *The Political Economy of Regulation*. New York: Columbia University Press.
 39. North, D. C. & Weingast, B. R. (1989). Constitutions and Commitment: the Evolution of Institutions Governing Public Choice in Seventeenth Century England. *Journal of Economic History*, 69 803-832.
 40. OECD (1998). *Regulatory Reform: Overview of OECDs Work* Paris: OECD.
 41. OECD (2005). *Multilevel Regulatory Governance*. *OECD papers*, 5 (2): 80-163.
 42. Peters, B. G. & Pierre, J. (2005). Swings or roundabouts? Multilevel governance as a source of and constraint on policy capacity. In: M.Painter & J. Pierre (Eds.) *Challenges to state policy capacity* Basingstoke: Palgrave MacMillan. pp. 38-51.
 43. Pollitt, C., Bouckaert, G. (2000), *Public management reform: A comparative analysis*. Oxford: Oxford University Press.
 44. Roness, P. G., Rubecksen, K., Verhoest, K., Verschuere, B. & MacCarthaigh, M. (2007).

Explaining autonomy of public sector agencies in Norway, Ireland and Flanders. In 'EGPA Annual Conference, Study Group 'Governance of public organizations', 19-22 September 2007' .

45. Scott, C. (2004). Regulation in the age of governance: the rise of the post-regulatory state. In: J.Jordana & D. Levi-Faur (Eds.) *The politics of regulation. Institutions and regulatory reforms for the age of governance* Cheltenham: Edward Elgar. pp. 145-174.
46. Shepsle, K. A. (1991). Discretion, Institutions, and the Problem of Government Commitment. In: P.Bourdieu & J. S. Coleman (Eds.) *Social Theory for a Changing Society* Boulder, CO: Westview Press. pp. 245-263.
47. Thatcher, M. (2002). Delegation to Independent Regulatory Agencies: Pressures, Functions and Contextual Mediation. *West European Politics*, 25 (1): 125-147.
48. Thatcher, M. & Coen, D. (2008). Reshaping European Regulatory Space: An evolutionary Analysis. *West European Politics*, 31 (4): 806-836.
49. Verhoest, K. (2002). Resultaatgericht verzelfstandigen. Een analyse vanuit een verruimd principaal-agent perspectief. Katholieke Universiteit Leuven.
50. Verhoest, K. & Bouckaert, G. (2005). Machinery of government and policy capacity: the effects of specialization and coordination. In: M.Painter & J. Pierre (Eds.) *Challenges to state policy capacity : global trends and comparative perspectives* Basingstoke: Palgrave Macmillan. pp. 92-111.
51. Verhoest, K., Bouckaert, G. & Peters, B. G. (2007). Janus-faced reorganization: specialization and coordination in four OECD countries in the period 1980–2005. *International Review of Administrative Sciences*, 73 (3): 325-348.
52. Yesilkagit, K. & Christensen, J. G. Institutional Design and Formal Autonomy: Political versus Historical and Cultural Explanations. *Journal of Public Administration Research and Theory*, forthcoming.

Appendix 1: Coding scheme – list of variables

Name of variable	Definition	Coding
Case number (CASE_NO)	Gives the unique id number of each case	
Name (NAME)	Gives the name of the organisation	
Case number of parent department (NOPAR)	Gives the name of the parent department of the organisation, if relevant (for commissions: departmental portfolio to which the organization belongs)	
Level of government (LEV_ADM)	Gives the level of government to which the organization belongs (for commissions based on the parent department)	1: Supranational 2: Federal 3: Flemish Community
Contact details (CONTACT)	Gives the contact details of the organisation (contact person, address, website)	
Setup year (SETUP_YR)	Gives the year in which the organisation is formally established	
Legal Basis (LEG_BAS)	Gives the legal basis of the document that formally establishes or recognizes (in the case of private) the organisation	1: Law or Decree 2: Royal Decision or Decision of the Flemish Government 3: ministerial decision
Name of Legal basis (LEG_NAME)	Gives the name and reference of the document that formally establishes or recognizes the organisation	

Legal status (LEG_STAT)	Gives the Legal status of the organisation	<ul style="list-style-type: none"> 1: Ministerial departement 2: Agency (internally decentralised, no Legal entity) 3: Agency (internally decentralised, Legal entity) 4: Agency (externally decentralised, public law) 5: Externally decentralised, private law 6: Commission/board 7: Private organisation
Recode of Legal status (RLEG_STAT)	Agencies recoded to one Category	<ul style="list-style-type: none"> 1: Ministerial department 2: Agency 3: Commission/board 4: Private organization
Policy field (POL_FIELD):	Indicates in which policy field the organization is active (based on COFOG). Each organisation can have 3 policy fields	<ul style="list-style-type: none"> 1: General public services 2: Defense 3: Public order and safety 4: Economic affairs 5: Environmental protection 6: Housing and community affairs 7: Health 8: Recreation, culture and religion 9: Education 10: Social protection
Number of policy fields (NUMB_POL_FIELD)	Counts the number of policy fields in which the organisation is active (based on POL_FIELD)	

General task description (TASK_DESCR)	Gives an extended description of general tasks, based on legal statutes	
General task (GEN_TASK)	Gives the general task. Each case can have 3 tasks	1: Policy formulation, preparation and advice 2: Regulation 3: Other forms of public authority 4: General public services 5: commercial and industrial activities
Number of general tasks (NUMB_GEN_TASK)	Counts the number of general tasks an organisation performs (based on GEN_TASK)	
Regulatory field (REG_FIELD)	Gives the regulatory field in which the organisation is active. Multiple fields are possible	1: business conditions 2: competition 3: financial markets 4: product standards 5: utility regulation 6: labor market and employment law 7: social affairs 8: workers health and safety 9: environmental protection 10: land planning 11: consumers' protection 12: penal law, judicial sector and proceedings, police and intelligence 13: immigration, foreigners' status, and naturalization 14: private law 15: public law and the regulation

of individual rights and obligations
16: traffic laws

Regulatory area (REG_AREA)	Gives the regulatory area in which the case is active (recode of regulatory field)	1: Economic (recode reg_field 1-5) 2: Social (recode reg_field 6-10) 3: General legal (recode reg_field 11-15)
Regulatory task info	Gives descriptive information on the regulatory tasks	
Regulatory task (REG_TASK)	Gives the regulatory task that the organisation performs. Each organisation can have up to 4 tasks.	1: translating rules into specific norms and standards 2: application on individual cases through licensing 3: monitoring 4: sanctioning
Number of regulatory tasks (ENCOMP)	Counts the number of regulatory tasks or the encompassedness of the regulatory mandate (based on REG_TASK)	

Regulation inside government (REGGOV)	Indicates the target group of the body	1: Regulation is targeted on citizens and private companies 2: Regulation is targeted on both citizens/private companies and governments 3: Regulation is targeted on other Governments
Decision-making competence (COMP)	Gives the extent of decision- making competence	1: Only decision-making 2: mostly decision-making, with some advisory 3: Mostly advisory with some decision-making 4: Only decision-making
CLUSTER	Indicates whether the organisation belongs to a cluster of similar organisations	0: no 1: yes