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Coherence and incoherence in the multi-level governance of economic sectors

1. The analytical frame

The topic of this workshop, the multi-level governance of economic sectors, is a new field of investigation that lies at the intersection of several different research lines. New is, for one thing, the focus on governance of economic sectors instead the economy as a whole, the approach also taken in research on the Varieties of Capitalism (VoC), and used by Colin Crouch in his book on *Capitalist Diversity* (Crouch 2005a). New is also the focus on multi-level governance. In the VoC research tradition as in the related research on national innovation systems, governance is not perceived as a multi-level phenomenon. Multi-level governance is a concept originating in political science analyses of policy making and implementation in vertically differentiated political systems, in particular in federal states and the European Union (EU) (see Benz 2004, 127-130). The increasing expansion of markets and production systems beyond national boundaries directed attention to the parallel increase in international regulatory efforts on the part of the Bretton Woods institutions and of the EU, i.e. to multi-level governance. In International Political Economy, however, concern is with policies that touch on general features of the economy, such as for instance tax competition, control of environmental effects, or compliance with the principles of the International Labour Office, but rarely with the regulation of specific economic sectors.

An analytical frame for the study of multi-level governance of economic sectors must start with the concept of sector. While there are case studies of the development and structural features of specific industrial sectors, the dominant understanding of "economic sector" follows even today the classification by type of output into primary, secondary, tertiary, etc., introduced in 1940 (Wolf 1955). While successively more refined classifications of economic sectors by economic output have been developed, an "architectural" concept of economic sector that highlights its internal differentiation and organization is not prevalent even in economic sociology. An architectual sector concept can, however, be found in the analysis of sectoral innovation systems. These are seen to be " … composed of a set of agents carrying out market and non-market interactions for the creation, development and diffusion of new sectoral products. These agents are individuals and organisations at various levels of aggregation…. They interact through processes of communication, exchange, cooperation, competition and command." (Malerba 2005, 65-66) While a sectoral system of *innovation* includes, in addition to firms, also universities, banks, state agents, unions, and business associations, the core components of a sectoral *production* system would be firms of different types, arranged in value production chains that cover supply, production, and marketing. This is the concept pertinent to a study of multi-level governance of economic sectors.

Economic sectors can be defined either in the narrow sense of a sectoral production system, or in a wider sense which includes the regulation of the production system by agents external to it as well as by institutions of economic self-regulation in the definition. I shall be using the term economic sector in the narrow sense of a production system, distinguishing it analytically from the sectoral governance

structure. The term governance is accordingly used in the political science sense, where governance refers to all institutions designed for the deliberate solving of collective problems, irrespective of the private or public character of the actors involved and the hierarchical or horizontal mode of their (purposive) interaction (Mayntz 2004). This definition of governance excludes spontaneous market coordination (and, for that matter, all forms of spontaneous, non-intentional coordination, or self-organization in the understanding of the natural sciences). The analytical distinction between economic production system and governance structure is, however, a functional not a structural one: To the extent that they are involved in regulation, whether in mixed public/private policy networks or in institutions of self-regulation, economic actors, i.e. firms or corporations are also part of the governance structure.

The functional distinction between production system and governance is consonant with Glenn Morgan's distinction between the level of firms and the level of institutions in the analysis of national economic systems (Morgan 2005). Morgan insists that in VoC research, attention be not only paid to the complementarity between institutions, but also to the strategies of the lower level units, i.e. firms, which – together with pressure from consumers – lead to changes in existing institutions and the formation of new ones. This dynamic perspective is equally important in the analysis of the multi-level governance of economic sectors. Thus the three key questions Morgan wants to address to the VoC can also be asked about multi-level governance. These questions refer to the "political" nature of institutions evolving out of conflicts between diverging interests; to the complexity and variety of functional relations between institutions, and between them and firms; and to the historically contingent emergence and change of institutions (Morgan 2005, 416).

The concept of institution can refer both to agents (corporate actors or organizations), and to regimes, understood as sets of norms. This double perspective is reflected in governance theory in the distinction, rarely made explicitly, between the architecture, and the instruments of governance. The architecture (or structure) of governance focuses on the constellation of actors (public or private) involved in governance and their (hierarchical or horizontal) relations, while governance instruments refer to the type of intervention chosen to achieve policy goals. Even if governance is defined in the narrower political science sense, governance instruments can include the deliberate use of market mechanisms. While analytically distinct, governance architecture and governance instruments are empirically related; by and large, binding norms backed up by sanctions can be more easily used in hierarchical governance arrangements, while both compulsory and voluntary negotiation are more likely to produce "soft" law dependent on voluntary compliance.

An important dimension of the governance architecture is its vertical differentiation. In the concept of multi-level governance, levels are defined in a spatial or territorial sense, ranging from local over national and regional to global, and not by relations of command and obedience as in a hierarchy. Levels in the governance structure refer to the spatial scope of the regulatory competence of agencies, or of normative regimes. To extend the concept of multi-level governance to the global level is not generally considered fruitful (e.g. Hartenberger 2007); Grande et al. (2006) prefer to speak of transnational regimes. But "regime" suffers from similar conceptual problems as "governance", and glosses over the important fact of vertical differentiation which the

concept multi-level governance highlights. The crucial issue in the analysis of MLG is the relationship between levels.

Though there is agreement that multi-level governance (MLG) does emphatically not imply a hierarchical command-and-compliance relationship, the concept is often taken to imply that decisions are being coordinated between levels (e.g. Benz 2004, 127). In the case of an institutionalized division of regulatory competences between levels, as in a federal constitution, such coordination may in fact exist. But agencies at different territorial levels are sometimes only related by the fact that they are directed at the same economic sector, without explicit coordination between them. Beyond the nation state, MLG tends to be described as unevenly developed, unstable tangled hierarchies (Cerny 2006), as regulatory patchworks (Héritier 1996) beset by coordination problems, or as orders of "competing institutions, overlapping jurisdictions, multiple identities <and> territorial flux" (Cerny 2006, 694). These descriptions suggest strongly that MLG can be more or less incoherent. Coherence is a widely used concept. It refers to the interrelationship of the components in a whole, and is applied to meaning (of an utterance, a text), to strategy, and to systems of different kinds. Coherence is thought to make for stability, but it can also make for performance by relating different factors (or contributions) in such a way that they jointly produce a better result. In this sense, coherence also plays a role in the study of VoC and national systems of innovation, where the dependent variable is system performance, i.e. economic performance and technological innovation, respectively. Could this perspective be meaningfully applied to the MLG of economic sectors? This question guides the following enquiry.

In VoC, coherence is closely connected with complementarity.[1] The core assumption of the VoC school is that institutional complementarity, whether based on mutual functional enhancement or on value homogeneity (i.e. the sameness of normative orientation), makes for superior economic performance (see the discussion in Crouch 2005a, 2005b). The notion of complementarity "….is at the core of most analyses that try to identify coherent national models, systems of innovation and/or production, varieties of capitalism or models of *regulation*…These approaches … stress that the pattern of interrelationships between the different elements of the institutional structure defines the coherence of this structure." (Amable 1999, 20). However, the relationship between coherence, complementarity, and performance is ambivalent: if complementarity is defined as mutual functional enhancement of institutions (Streeck 2004, 114; Amable 2003, 6), it can stabilize institutions, but need not increase system performance. Nor does coherence necessarily presuppose either functional complementarity or value homogeneity. The atoms in a molecule cohere not because they complement each other functionally, nor because of some ulterior sameness, but as a result of interacting forces of attraction and repulsion. Coherence, if used in the analysis of multi-level governance, should therefore not be taken to imply functional complementarity.

Research on VoC is not phrased in terms of governance.[2] However, the study of VoC and governance theory have in common the interest in outcomes. In the case of VoC this is economic performance; in the case of governance theory, it is collective

[1] For an extended discussion of the connection see Mayntz (2006).
[2] Only the approach of Hall and Soskice who focus on competition and coordination as alternative structuring principles involves something akin to governance modes.

problem solving, or the production of collective goods. However, the effectiveness of governance is notoriously difficult to define, let alone measure empirically. Theoretically, governance of economic sectors could be called effective if it leads to the economically sustainable, cost-effective supply of a product or service of high quality while avoiding (or internalizing) negative externalities. But it is singularly difficult to devise theoretically uncontested, measurable criteria of governance effectiveness thus defined. The following analysis pursues much more modest goals. The main questions are to what extent and in what sense the MLG of economic sectors can be called coherent, and what shapes its architecture and regimes.

2. The cases

Making use of the specialized knowledge present at the Max Planck institute in Cologne, I have looked at the MLG in three manifestly trans-national (if not "global") economic sectors: International tourism, telecommunication, and the pharmaceutical industry. Though chosen for pragmatic rather than systematic reasons, these three cases offer a significant amount of variance in terms of the features of the economic sectors and their governance. In this section, the three cases will be briefly described, highlighting features of the economic sector and of its MLG – the kind of agencies involved at different territorial levels and the nature of the operative regimes. These descriptions will be briefly summarized in the third section of the paper, where they serve as background for the theoretical discussion.

2.1 International Tourism[3]

a) Sector characteristics.

Tourism is a huge service industry that has greatly expanded beyond national borders with the increasing legal, technical (transport) and economic opportunities of transnational mobility. Tourism crossing national borders can be counted; in global trade statistics as supplied by the World Bank it is considered as service export (because it involves the influx of foreign currency). International tourism (iT) accounted for nearly one third of global service exports in 2003. In national accounts, national tourism figures, too, but cannot be clearly separated from iT; in the EU, the sector comprises about 1,5 million enterprises[4] . The service producers involved in iT are travel agencies, travel companies, global reservation systems, hotels, and airlines. None of the producers are dealing only with tourism, let alone iT; the sector iT is closely intertwined with related service sectors. Large co-producers like hotel chains and airline alliances are themselves multi-level systems.

b) Regulatory institutions.

All national regulations that apply to economic activities also apply to hotels and to travel companies; this holds especially for tax norms and liability norms. Most countries have a minister responsible for tourism, some even a special ministry; in Germany there is only a special agency (Bundeszentrale für Fremdenverkehr) that cooperates with the economics ministry (BMWi). National business associations (e.g. Hotel- und Gaststättenverband) fulfil partly self-regulatory functions, partly they

[3] The following case description is based on information and material collected by Lothar Krempel in the course of an ongoing project.

[4] Press release of a speech by Commissioner Verheugen 10.02.05

pursue promotional activities. In developed and in developing countries alike, iT is also promoted by national development organizations.

The EU has only very limited competences in the area of tourism. The sector is subject to the general EU provisions concerning economic competition, but there is no special unit dealing with it, and only two EU directives addressing this sector specifically are known. One directive regulates the liability of travel companies for prospectus information, the other directive concerns questions of liability in air travel. The European Investment Bank EIB supports investment in developing countries; this includes iT. Other regional institutions besides the EU are similarly involved in promoting iT, for instance the South African Development Community SADC. In addition to the business associations formed by European travel agents and tour operators (ECTAA), European camping sites and holiday parks (EFCO&HPA), and European hotels, restaurants and cafés (HOTREC), there is an association especially for tour operators bringing tourists to Europe (ETOA). Aside from representing the interests of the sector, these associations may serve some self-regulatory functions.

At the international level, both public and private institutions are involved in iT governance. The World Tourism Organization (UNWTO) is a United Nations agency, located in Madrid. It represents public sector tourism bodies from most countries, i.e. national representatives; firms and business associations participate in its regional sub-units. UNWTO is also the most important international body collecting statistical information on iT from national agencies, using the Tourism Satellite Account (TSA), a standard to measure tourism formulated in negotiations among Eurostat (EU), OECD, and UNWTO, and accepted by the Statistical Commission of the UN. In addition, UNWTO encourages compliance with the Global Code of Ethics it has formulated, aiming to ensure that tourist destinations and businesses maximize the positive economic, social and cultural effects of tourism while minimizing its negative social and environmental impacts.

The World Travel and Tourism Council (WTTC) is a private organization composed of the presidents, chairs and CEOs of 100 of the world's foremost companies involved in tourism, including airlines, hotel chains, travel companies, banks, credit card companies, and car rental firms. Its mission is to raise awareness of the economic impact of the sector, and lobbies governments to adopt the Council's "Blueprint for New Tourism", a programmatic statement and recommendation for the sustainable development of IT. The WTTC undertakes TSA-based country studies and translates them into recommendations on policies to ensure a profitable and sustainable development of iT.

The World Trade Organization (WTO) also belongs to the iT governance structure. The General Agreement on Trade in Services (GATS) will contain a special section on transport, and one on tourism, which is still being negotiated. Objects of regulation are different aspects of service transaction between countries (e.g. cross border trade, commercial presence in other countries), but also employment. These questions have so far been regulated in bilateral agreements. The rules apply to hotels and travel companies, but touch also on airlines, which are subject to regulation by other specialized international bodies as ICAO and IATA.

Involved in iT regulation is also the International Monetary Fund (IMF) with its Structural Adjustment Programs (SAP) and the Poverty Reduction and Growth Facility (PRGF). The conditionalities attached to loans from the IMF, basically designed to get receiver countries to open their economies to foreign investments and multi-national corporations (MNC) while eliminating subsidies and protective measures, promote iT as a means for Third World countries to repay their debts. This goal is also pursued by the World Bank. Several organizations in the World Bank Group are involved in tourism promotion: they facilitate market expansion by liberalization, but also by giving incentives for investment, while the Multilateral Investment Guarantee Agency (MIGA) tries to alleviate the financial risks connected with political events in developing countries. The International Bank for Reconstruction and Development (IBRD) serves middle-income countries with capital investment and advisory services, while the International Development Association (IDA) provides interest-free credits and grants to the poorest developing countries, part of which goes into tourism, or infrastructure build-up related to the development of tourism.

2.2 Telecommunication[5]

a) Sector characteristics.

Telecommunication (Tc), traditionally a state monopoly in developed countries, has been successively privatized and liberalized for political reasons, forming today a publicly regulated infrastructure system of near to global scope. The sector structure changed with privatization: producers became separated from regulators, and many providers, suppliers etc. previously linked to the monopoly as focal organization now constitute a more open market. In 2000 there were more than 305 licensed telecommunication companies active on the German Tc market (Hartenberger 2007).

The sector has also changed with technological development. At first it comprised only the telephone network and the services based directly on it; later mobile telephony was added. The Tc sector used to be separate from postal services, and from the (print and broadcasting) media. With digitization and the related advent of electronic media such as TV and the Internet, Tc and information technology started to merge, and encroached upon the postal services (email); convergence in one encompassing technical system became a realistic option. Internet expansion and regulation was driven and guided by private actors. The global nature of the Internet called for a global regulatory regime from the start: here governance was largely transnational, and largely private, from the very beginning. While Tc regulation is now closely integrated with the regulation of information technology, the Internet remains a distinct component of the regulatory regime; in fact, Internet standardization is completely detached from any official standardization (Werle 2002, 255).

b) Regulatory institutions.

At the national level, hierarchical control of public Tc used to be very detailed; it aimed at performance, not profit. When Tc was privatized, independent regulatory agencies became the major national actors; supervised by a ministry, these agencies control market access and prices and have sanctioning power. Competition law also

[5] The following case description is based on Werle (2002), Schneider and Werle (2007), Hartenberger (2007), and oral communication by Raimund Werle

applies to Tc; antitrust agencies monitor, and can intervene in Tc operations. The formally independent national standardization agencies such as the German DIN, the British Standards Institute BSI and French AFNOR have Tc-specific subunits. With the growth in international standardization, national standardization has decreased, and national agencies now mainly transpose regional and international standards to the national level. Private corporate actors are involved in technical, but not in economic regulation at the national level. Firms as well as unions lobby national governments and regulatory agencies, but such private initiatives aim increasingly at the global level (Schneider/Werle 2007, 275-76); industry has in fact become a driving force of transnational regulation.

At the level of the EU, a special Tc policy domain evolved in the 1980s with the advent of commercial TV. Tc policy is the domain of the DG Information Society, but occasionally the DG Competition, too. In 1988 a first Commission directive sought to liberalize the equipment market; soon after the focus became the liberalization of Tc networks and services. A 1990 directive required the deregulation of state monopolies, and in the following decade, various steps to promote the opening of national markets were undertaken. Attempts to establish an EU regulatory agency for Tc failed. Instead national agencies have formed in 2002, upon the initiative of the Commission, the European Regulators Group, a regulatory clearing house working towards the harmonization of national regulation. Today EU policy covers all aspects of communication policy (in the inclusive sense), and some attention is also paid to the possible negative effects of market extension on service quality and security. There is now also a European Internet policy, promoting a European e-commerce regime and trying to protect it against globalization pressures.

Technical standardization is a necessary complement of Tc liberalization, diverging national standards obviously being a trade barrier. Already in 1988, the Commission established the European Telecommunications Standards Institution ETSI. The agency is composed of national representatives and private Tc companies, and its goal is to develop European standards to replace national standards. In the US and Japan, the corresponding agencies are formally national, but de facto of regional significance. The EU has accredited the European Committee for Standardization CEN and the European Committee for Electrotechnical Standardization CENELEC; these public, non-governmental organizations are the European counterparts of the international standardization organizations ISO and IEC. These committees are, however, not specialized on Tc standardization. Outside the EU framework there is the European Conference of Postal and Telecommunication Administrations CEPT, established 1956 by national governments; CEPT is the regional counterpart of the International Telecommunications Union ITU. Since 1997, the Independent Regulators Group comprising representatives of 29 national regulatory agencies has partly taken over the functions of CEPT.

At the European level, MNCs and sectoral interest organizations push for liberalization, harmonization, and compatible technical standards. Numerous business and trade associations, industry consortiums and forums are involved in standardization; the European Computer Manufacturers Association ECMA has achieved quasi-official status and maintains stable links to ITU, ETSI, CENELEC and other private forums.

At the global level, the WTO is a relevant, but not very forceful actor. Within the WTO General Agreement on Trade and Services GATS, the special Agreement on Basic Telecommunications Services (ABTS) of 1997 and the Agreement on Basic Telecommunication (ABT) of 1998 are mainly directed at opening markets, among other things by avoiding standards that are obstacles to international trade. These agreements provide only a loose and highly general framework; their impulse is promotional rather than regulatory. The Agreement on Technical Barriers to Trade (ATBT) of 1996 contains a Code of Good Practice that can also be applied to Tc; it is binding only for countries who accede to it.

The International Telecommunications Union, established already in 1865 to facilitate international Tc in the age of national telephone monopoly, with its standardization branch ITU-T, formulates Tc standards. The ITU is a classical international organization, composed originally of representatives of national monopolies; today it joins together representatives of national governments and national standards organizations. In 1990 it has opened membership also to Tc firms. With the growing importance of private MNCs, the ITU has lost importance; it tries to extend its domain to the Internet and occupies itself with Tc in developing countries.

2.3. Pharmaceuticals[6]

a) Sector structure.

The boundary between medicines for human use and products classified as foodstuff (e.g. teas) is a matter of definition and difficult to establish. Pharmaceutical firms range from very small (individual pharmacies) and local over national companies to MNCs. In Germany there are roughly 1.200 registered drug manufacturers; ca. 40 among them are MNCs. The industry is internally differentiated by size, by research intensity, and by type of product - innovative medicines, generic drugs, and prescription-free drugs. Many national companies are only marketing organizations for firms headquartered elsewhere.

The business associations of the pharmaceutical industry are powerful. In Germany there are separate organizations for the pharmaceutical industry at large (Bundesverband der Pharmazeutischen Industrie BPI), for research intensive companies (Verband der forschenden Unternehmen VFA), for firms producing generic drugs and for and firms producing prescription-free drugs. National associations representing research intensive firms are organized in the European Federation of Pharmaceutical Industry Associations (EFPIA). Professional associations present expert views, but are not involved in licensing. Consumer protection organizations are not specialized on pharmaceutical issues, but may occasionally deal with risks from certain medicines. They have only recently become more influential actors in this field. Particularly in the US, specialized patient organizations and public health advocacy groups can play a role as watchdogs.

b) Regulatory institutions.

Public health has always been of concern to national governments. In the US, a law dealing with food and drug safety dates already back to 1906; in 1927, the Food and Drug Agency FDA was established. In imperial Germany, public health was the

[6] The following case description is based on Feick 2000, 2002, 2005, Abraham and Lewis 2000, and oral communications from Jürgen Feick.

competence of the Reichsgesundheitsamt, local health agencies, and special branches of the police and the trade inspectorate. Professional associations of doctors and pharmacists formulated standards for their members and evaluated medicines, functioning as private governments. Licensing, i.e. mandatory marketing approval for new medicines was introduced in Scandinavian countries earlier than on the continent, where regulation was mainly spurred by the thalidomide affair. In Germany, at first manufacturer had to be licensed; after 1961, registration of new medicines with the federal health agency (Bundesgesundheitsamt BGA) became mandatory and was tied to providing information; sera and blood products had to be registered with the Paul Ehrlich Institute; from 1978 on medicines required marketing-approval. In the UK, the Commission on Safety of Drugs had to approve new drugs from 1970 onwards. National licensing agencies are co-financed to varying degrees by the fees of applicants. Everywhere registration and later on marketing authorization (licensing) became tied to increasingly exacting prerequisites in terms of pre-marketing testing. "Practically every detail of the product itself, substantial parts of research, development, production, commercialization and medical utilization are regulated…" (Broscheid/Feick 2006, 7). Market entry control is complemented by monitoring utilization (pharmacovigilance). While previous market entry controls had left old drugs on the market, a 1975 EU directive with which national governments eventually complied required all medicines to be assessed according to "modern licensing standards". In consequence, many traditional medicines disappeared from the market.

In the EU, pharmaceuticals are the domain of a special unit in the DG Enterprise (also called DG Industry). Health policy is basically a national prerogative. The first pertinent EU directive came only in 1965 after the thalidomide disaster, followed in 1975 by the directive requiring review of all drugs already on the market before licensing became mandatory. In the same year, the inter-agency Committee for Proprietary Medicinal Products (CPMP) and the Pharmaceutical Committee, an intergovernmental network of national bureaucrats involved in policy formulation, were set up. EU policy aims at creating the single market for pharmaceuticals, safeguarding public health, and fostering innovation. In the beginning the EU supported legal harmonization in order to facilitate the mutual recognition of national marketing authorization. This was followed by attempts to centralize authorization at EU level. In 1995, the European Medicines Evaluation Agency EMEA was established; CPMP became its scientific committee and regulatory corner-stone. EMEA is not a genuine independent regulatory agency but mainly coordinates the evaluation procedure; the final decision is taken by the Commission. The members of the crucial scientific committee CPMP are mainly representatives of national regulatory agencies. A centralized procedure grants EU-wide authorization for biotechnology-derived and other innovative medicines; it is mandatory for all such products. EMEA receives the application, CPMP assesses and makes a recommendation, and the Commission makes the final decision after going through a comitology procedure. For all other new medicines not restricted to the national market there is a Mutual Recognition Procedure that involves negotiation between national agencies, but requires mandatory arbitration by the Commission in case disagreement arises. Though Mutual Recognition is complicated and time-consuming, this procedure outweighs the Central Procedure in terms of number of applications/cases; in some EU countries, purely national licensing procedures still account for the largest part of applications. If recognition in countries outside the EU is sought, application must be made directly to their national agencies. However, by

the fall of 1999, the EU had signed Mutual Recognition Agreements with the US, Canada, Australia and New Zealand.

Pharmacovigilance is basically a national responsibility; however, for medicines approved in the Central Procedure, EU is responsible. EMEA tries to coordinate national measures, but is not actively involved. The national agencies are linked in an electronic network (EudraNet). In many countries several different agencies are involved in pharmacovigilance; there is a special EU service for the transmission of reports (EudraWatch).

Governance of pharmaceuticals at the international level concentrates on harmonization rather than regulation. The International Conference on Harmonisation ICH deals with the technical requirements for the registration of pharmaceuticals. ICH is not an agency, but a regime established by national agencies and the International Pharmaceutical Association, which hosts the ICH secretariat. ICH was launched in 1990, and by its own account has served to harmonize "almost fully" the standards for demonstrating the quality, safety and efficacy of new medicines throughout the EU, the US, and Japan. Testing standards are defined by detailed technical guidelines, and test-results are to be presented in standardized form in marketing application. However, the three regulatory institutions (EU, USA, J) who have negotiated the agreement with industry do not always comply with these standards, which are legally only recommendations. Within the WTO, the TRIPS regime only deals with patenting new substances and testing procedures. Of course licensing could be a trade barrier, but since the national health policy prerogative is generally accepted, WTO does not try to intervene, except in the unlikely case that a country bars entry to all foreign medicines.

3. Discussion

Comparison of the three cases shows that multi-level governance differs significantly between economic sectors. The main differences that can be identified concern (1) the prevalent purpose, or goals of governance, (2) the prevalent governance instruments, (3) the relative importance of governance agencies at different levels, and (4) the prevalence of public, private, or mixed forms of governance.

International tourism is the least regulated of the three sectors compared; it is largely left to market forces and private initiatives. Promotion of the industry is the dominant goal of governance specifically directed at iT on all levels. A few regulatory measures are directed at service quality and consumer protection, while mainly lip service is paid to the prevention of negative externalities, i.e. damage to the environment. Governance thus addresses preferably (profitable) service production. There is little by way of regulation targeted especially at iT. What there is occurs mainly at the national level, where iT is subject to the regulation of national general-purpose agencies, such as tax offices, customs and border control agencies, and trade inspectorates. The regional level of the EU is only marginally involved, but there are specialized international organizations, both public and private, serving primarily iT development. To the extent that governance is specifically directed at iT, it uses mainly positive incentives, information, and brokerage as instruments. Measuring iT activities and generating information plays an important role as precondition for

assessment, and for giving promotional advice. At all levels, from the sub-national over the national and regional to the international, representatives of the industry are actively involved in attempts to develop iT.

In contrast to the relatively new sector of iT, Tc is a very old sector that has been a public service until recently. As a public service, it used to be tightly regulated by national governments; service quality and cost efficiency were the dominant goals. Privatization and liberalization policies pursued at the national, the EU and the international levels (i.e. WTO) have changed Tc governance significantly. Service quality is still an important goal, but with privatization, economic profitability has supplanted the goal of simple cost efficiency. Since the use of mobile phones for criminal purposes has become a significant threat, there have been some efforts to control this negative externality. Market access, prices, and service quality are regulated at the national level, while further liberalization is still the dominant goal at the EU and international levels. Parallel to the change in the functional orientation of governance, there is a shift in the nature of the regimes as we move from the national to the international level. At the national level, Tc governance is highly legalized; all EU member states have sector specific, national Tc laws. At the regional (EU) and the international level, technical coordination carried on in the spirit of problem-solving predominates. Technical coordination through the development of standards has always been a prevalent instrument of Tc governance, and is a precondition of liberalization. Standardization now shifts from the national to the regional and the global level, and from public to private actors (Werle 2002, 256). At all levels, standardization is the task of special agencies or specialized units within non-governmental organizations. Representatives of public regulatory and standardization agencies still predominate at all levels, but producers participate increasingly in standardization. With Ute Hartenberger (2007), Tc governance can be described as a closely integrated, transnational regime that subjects a liberalized, internationalizing economic sector to collective regulation.

Medicines for human use are the oldest economic sector of the three, and it is the most strictly regulated. As in Tc, there are sector-specific laws, but in pharmaceuticals they address not simply the provision of a service but above all the quality of the product. The primary goal of regulation has traditionally been the safety of medicines, but as the pharmaceutical industry and public health organizations (hospitals, health funds etc.) grew, industrial policy and budgetary concerns became additional goals. At the regional and international levels, market expansion (e.g. creation of a single European market in pharmaceuticals) and fostering innovation are the major goals; safety and lately also budgetary concerns (health costs) serve as limiting conditions to the goal of market expansion. Private self-governance, which in the past dominated, has in time given way to increasingly tight public regulation; in fact, medicines are today among the most regulated products on the market (Feick 2005, 3). A host of public agencies, both general purpose and specialized, deal with the control of pharmaceuticals at the national level. The major instrument is to make market access conditional upon proven quality, complemented by monitoring utilization and health costs. Beyond the national level, regulatory norms are largely arrived at by negotiation and voluntary agreement. At the level of the EU, market access of new medicines is partly subject to a centralized procedure that, however, includes strong elements of intergovernmental negotiation. In addition there is procedurally regulated voluntary coordination (in the Mutual Recognition Procedure). International

governance in this sector is weak, being largely limited to legal harmonization. At all levels, business associations and large MNCs play an important role as pressure groups. Different from iT, and more pronounced than in the case of Tc, scientific experts are integrated into the regulatory procedures and agencies, especially at the national and regional levels.

Table 1 crudely summarizes the sectoral governance features.

Sectors **Governance features**	**International Tourism**	**Telecommunication**	**Pharmaceuticals**
Governance goals	Development of industry	Quality of service	Market expansion, product safety
Relation of public/ private actors	Private involvement high	Balanced public/ private involvement	Dominantly public
Relative importance of levels	All three equal	Regional and international	National and regional
Scope and density of regulation	Low	Medium	High

Table 1: Multi-level Governance features

Evidently the shape of governance is closely related to the specific character of the sector itself, i.e. the production system. Structural properties such as the degree of internationalization, the boundedness, and the internal differentiation of a sectoral production system are important factors, but the crucial determinant is the quality of the product or service itself, its potential profitability for the producers, its more or less vital importance for consumers, and the risks associated with its consumption. Where potential profits, benefits, and risks are all high, there is a tendency toward tight public control. Turning to structural properties, economic sectors generally vary considerably in the degree of internationalization, but for this study I have chosen only sectors with an appreciable degree of internationalization. Even so there are differences among our cases. Internationalization can refer to the service itself, as in iT, it can be part of service quality, as in Tc, and it can refer to the market for a product, as in pharmaceuticals. If a service is international in nature from the start, higher level governance institutions develop and assume importance more quickly; this, for instance, has also happened in the case of the Internet. As for the scope of the market, it makes a difference whether internationalization is wanted by producers (i.e. bottom-up as in pharmaceuticals), or imposed upon them politically, in which case the development of international regimes meets with more resistance. As for the property of boundedness, a clear functional separation of the sector from neighbouring sectors favours the development of specialized governance agencies and regimes, while vaguely bounded sectors (such as iT) are more subject to governance by general-purpose agencies. But as the case of Tc shows, the boundedness of a sector can change with technological development. Internal differentiation, finally, refers to the size distribution of firms, and to the development of sub-categories of a given product or service, as observed in the production of pharmaceuticals and in Tc services. The latter kind of differentiation has consequences both for the structure of sectoral interest representation, and for the emergence of specialized regulatory regimes. Yet

another kind of internal differentiation is represented most visibly by iT, where producers belonging to several different sectors are involved in the production of a given service. This kind of differentiation appears to militate against the development of specialized regulatory regimes targeted at the service.

Sector structures are subject to historical change, and this is reflected in changes in MLG. Thus the prevalence of public agencies, both governmental and non-governmental[7], in the present governance of Tc is a path-dependent effect of the former public status of the service. In pharmaceuticals, the growing power of producers as a result of the market dominance of big corporations, together with the development of a growing, and increasingly costly public health system, have motivated governments to tighten their regulatory grasp. These observations attest to the importance of a historical perspective in the analysis of MLG.

A comparison of our three cases suggests also some tentative generalizations concerning the interrelation between different governance features, especially between the goal of governance, the density of regulation, the level, and the public, mixed, or private character of governance agencies. Control as goal of governance, regulatory density, prevalence of public agents, and dominance of the national level appear to be connected in a closely linked causal chain. As noted, the goals of governance differ between sectors, concentrating on different parts of the production chain: in iT governance is about the development of production, in Tc it revolves about a crucial part of service quality (i.e. the territorial scope of communication), and in pharmaceuticals product safety is the paramount concern. The control of negative externalities (i.e. risk to public health) is most palpably a concern in the governance of pharmaceuticals, and least so for Tc. Across sectors, the goals of governance differ characteristically by level. In all three sectors, legal regulation aimed at the control of product or service quality and backed by sanctions takes place mainly at the national level, where the notion of public service connected with statehood prevails and a sanctioning apparatus is in place. At the level of the EU, regulation serves primarily, but not exclusively the creation of the Single European market. At the international level, finally, market expansion beyond national and regional boundaries is the predominant goal. These differences reflect the tasks assigned to the EU and the Bretton Woods institutions by their founders, i.e. they are the historical result of a political process. Where product safety is the dominant goal and regulation backed by sanctions the predominant instrument, governance by specialized agencies and legal regimes is more intense than where governance aims primarily to develop a service. The balance of public and private involvement in governance is similarly related to the governance goals pursued, and correspondingly differs between levels. In iT, where promotion rather than regulation is the predominant goal of governance specifically targeted at the sector, private economic actors are heavily involved at all levels. In Tc, private economic actors play a lesser, though increasing role in governance at all levels ever since state monopolies were privatized. Since public authorities have tightened safety control, industry and business associations participate least directly in the governance of pharmaceuticals; in this sector, private actors act today mainly as pressure group. Involvement of private actors giving rise to mixed public/private forms of governance that function as negotiating systems differs

[7] By non-governmental public agencies we understand private law organizations serving public functions, such as technical standardization.

more by sector than by level. At the regional and international levels, mixed public/private negotiating systems are particularly complex, since producer representatives meet with agents not of one but of several different governments who often pursue divergent interests.

The significant differences existing between the MLG of different economic sectors raise the question whether the inter-sectoral variation is so large as to invalidate attempts to make general statements about the governance of economies as a whole, statements of the sort that are the basis for distinguishing varieties of capitalism. Though this paper is far from the systematic two-dimensional comparison of the multi-level governance of different economic sectors in different types of national economies that would be needed to answer this question, it nevertheless suggests that differences between sectors within a given country are larger than differences in the MLG of the same sectors in OECD countries with different types of capitalist economies. At the regional level, there is a pronounced difference in the architecture of MLG between members and non-members of the EU. For non-members of the EU, a regional governance level hardly exists, which gives international institutions relatively more weight. At the global level, finally, there should exist a difference in governance between OECD countries and developing countries, last not least the so-called weak or failing states preferably addressed by international organizations as the UN in its function of peace-keeping, by the World Bank, and the IMF.

To turn, finally, to the guiding question of this paper, in what sense can it be said that the MLG of the three sectors is more or less coherent? In a legal perspective, the vertically and horizontally differentiated European body of public law is called coherent if there are no gaps in the protection of substantive rights, and if its component regimes are systematically coordinated (Schmidt-Aßmann 2006, 274-275, 288). A political science counterpart of the first of these two legal criteria of coherence, i.e. absence of gaps, might be the complete regulatory coverage of a given process of production and utilization of a given product (good or service). In fact the case studies point to some regulatory gaps in areas where regulation was a goal, as for instance in the technical standardization of Tc and in the safety control of medicines not subject to licensing. But regulation per se is functional only if profitable production, high product or service quality, and avoidance of negative externalities are not achieved without (public and/or private) regulation. Dense regulatory coverage is therefore no meaningful criterion of coherence in MLG. This leads us back to the criterion of coordination, not as defining property of MLG but as analytical dimension. What then is the essence of coordination in MLG?

Coordination in MLG does not take the form of complementarity between functionally distinct institutions which mutually enhance each other's ability to contribute to system performance.[8] For one thing, and as already pointed out, it is hardly possible to define a performance measure for MLG that would permit to measure the effect of different sectoral governance arrangements. In VoC, the performance of the economy is an outcome of the activities of the component institutions as measured by an outside observer. Even an outside observer, however, would be hard put to define a single effectiveness measure for the MLG of different

[8] Mutual enhancement and contribution to system performance are two different aspects of complementarity that are usually not distinguished in VoC, and that may but need not be empirically related.

economic sectors, because such a measure would have to take into account several potentially conflicting criteria.[9] Even if we relate functional complementarity between institutions not to system performance, but only to the stability of an institutional arrangement, it can hardly be said that the component institutions of a given MLG enhance each other's functioning mutually. While the agencies and regimes of sectoral governance do fulfil different tasks, they do not appear to assist and stabilize each other, but rather to accommodate to each other as best they can. This even holds where, as in the licensing of medicines, a functional division of labour has been established between the EU Central Procedure, and national authorities.

If it is not based on functional complementarity, coordination in MLG might be based on subsidiarity, the normative principle for the vertical distribution of government tasks in a polity. Subsidiarity means that at each government level, only those problems shall be addressed that can best be solved at that particular level, 1) because of scale economies, 2) because the means are available only at this level, 3) because of the scope of the problem and hence the nature of the causal structure to be targeted. In discussions of European integration and international institutions, particularly the third criterion is often given as reason for the emergence of the EU, and of global governance. Functional considerations do in fact suggest that the development of iT, technical standardization of international Tc, and the control of access to an international market for medicines be assigned to international agencies. Market expansion, however, the prevalent goal of the EU and of international institutions involved in economic governance, has been a political choice rather than a functional response. Functionalist theory would require that at higher levels of governance, priority be given to the control of negative externalities of cross-border movements and transactions. But this is clearly not what we found.

Multi-level governance differs from a vertical division of labour and of powers in which "higher" level agencies are constituted by the transfer (or the successful pretension) of competences that are executed by its own personnel, and that are related to lower level agencies by social interaction. In MLG, in contrast, levels are in good part linked by interpenetration, i.e. they form Putnam's famous two-level games, where the members of a higher level agency represent at the same time a lower level unit to which they belong. This dual membership leads to dual loyalties. Interpenetration is a special mode of organizational coupling, studied mainly in horizontal relations as in inter-firm networks. Interpenetration between levels in MLG constitutes a specific type of regional and international agencies, namely hybrids of intergovernmental negotiation systems and corporate actors (Mayntz 2002). Public non-governmental organizations fulfilling a given function at successively higher levels, such as the standardization organizations DIN (national), CEN (regional), and ISO (international), are linked by interpenetration in a similar way in which national representatives link individual governments to regional and international institutions. The same holds again for vertically differentiated sets of business associations and private organizations. Where regional governance exists, linkage between the national and the international level can still be direct; thus the German DIN sends delegates both to the regional organization CEN and the international ISO.

[9] Economic profitability, service quality, and the avoidance of negative externalities are criteria defined from three different perspectives: the perspective of producers, of users, and of the system as a whole.

Interpenetration may give the MLG of economic sectors an appearance of coordination and hence coherence, but it is a kind of coherence far from functional complementarity in the production of a specific system effect. Instead, the MLG of concrete economic sectors appears as the transient crystallization of interactions characterized by two fundamental kinds of conflict: conflicts between governance agents and governance addressees, and conflicts among different agencies.

The most intense conflicts between governance agents and producers result where producers seeking profit are to be disciplined in the service of public interest. However, producers can also be in favour of regulation, for instance to restrict competition, or to serve the expansion of markets by the international harmonization of standards. Sometimes not regulation per se but the time-consuming and complicated regulatory procedures involved incite opposition, as in the case of pharmaceuticals. Conflicts between producers and regulators are not pronounced or may even remain latent where governance promotes production rather than regulating it, as in the case of international tourism. Pharmaceuticals, the most densely regulated of our three sectors, is beset by the most intense conflict, as producers wanting to put medicines on the market are confronted by regulatory agencies at the national and EU levels who regulate the market access of products in the interest of public health. The fact that firms – very much so in Germany, but depending on legal opportunities in other countries as well – even go so far as to challenge regulatory decisions in court, attests to the acuteness of this conflict. In Tc, a conflict line between producers and regulators evolved after the service became privatized; in this sector, too, decisions of the regulatory agency are occasionally challenged in court – at least in Germany where this is legally possible. In general, however, MLG in Tc is not very conflict-ridden. There are some conflicts involving economic issues (e.g. price regulation, or market access granted to competitors) and some competition between private and official standardization organizations, but by and large technical standardization is characterized by the "peaceful coexistence" of different standardization organizations (Werle 2001, 400).

The cooptation of producer representatives to participate in regulatory decision making is a familiar measure to cope with the conflict between producers and regulators, but if it does not lead to agency capture, cooptation leads to the internalization of the conflict, which now calls for within-agency negotiation. Such negotiations do not resolve conflicts; they are indicators of their continued presence. Another attempt of moving from a confrontation of interests to the sphere of objective problem-solving is the involvement of scientific experts. But especially in the case of high uncertainty and a strong conflict of interests, the success of this measure is doubtful. According to Abraham and Lewis (2000, 58), the experts involved in the regulation of pharmaceuticals in Britain, having in their majority financial interests in the industry, constitute a "revolving door" between industry and agency.

Conflict between agencies in MLG occurs in several analytically distinct forms. There are, first, conflicts between agencies at the same and at different levels about the distribution of powers. Conflicts between different levels occur mainly between national governments and the EU. EU member countries have delegated substantial powers to EU institutions; non-EU members who are weak states may be dependent on the IMF or the World Bank, but this is not a relationship of manifest conflict. Occasionally is there conflict between regional and international agencies, such as the

EU and the WTO; more frequent are conflicts between WTO and individual countries. Agency conflicts between levels occur both in Tc standardization, and in the market control of medicines (licensing). In Tc, national governments wanted to preserve their domain, while the EU pressed for privatization and centralized standardization. In the field of pharmaceuticals, national regulatory agencies resisted the centralization of licensing in a European regulatory agency. The compromise found – participation of national regulators in the scientific committee CPMP – kept being contested by the Commission, with little success; in the course of the Legislative Review it succeeded to reduce the number of national representatives on the committee from 2 to 1 per country, but due to EU enlargement the size of the committee grew at the same time from 15 to now 27 members.

Conflicts about agency powers often coincide, and are exacerbated by, a difference in the goals pursued by agencies at the same and at different levels, and even within agencies. This sets the WTO, intent on market expansion, against quality controls pursued at the national level. Within the framework of the EU, different agencies or subunits of the Commission pursue conflicting goals; thus there is conflict between the development of the tourist industry and guaranteed service quality for tourists, and even more pointedly between market expansion and the safety of medicines. That it is difficult to strike an appropriate balance between industrial, medical and budgetary needs is openly admitted by the Enterprise-Directorate General of the Commission. Abraham and Lewis (2000) therefore doubt that public health is still sufficiently safeguarded as regulation has shifted to the EU. Conflicts within agencies are rampant not only where different subunits have different priorities, as in the EU Commission, but also where the prominent decision-makers represent different countries or regions. The WTO thus often serves as arena for conflicts between the US, Japan, and the EU.

Domain conflicts are about the allocation of powers to different corporate actors and the delineation of jurisdictions. But there is not only conflict between different actors in MLG; different regimes can also conflict with each other substantively. Joerges (2006, 2007) distinguishes between vertical, horizontal, and diagonal legal conflicts in the EU, i.e. conflicts about the question which legal norms apply to a given case. These three types of legal conflict can be applied to MLG generally. Vertical conflicts are conflicts between legal regimes at different territorial levels; they occur both between national law and EU legislation, and between EU law and WTO rules. In horizontal conflicts, the injunctions of different national laws to a given case diverge. Horizontal legal conflicts occur typically in the context of transactions involving the movement of persons, goods, or finances across national borders. Diagonal legal conflicts finally occur if regimes at two different levels that apply to different aspects of a given case make contradictory demands. Thus Community competition law may accept a given contract between businesses as a pro-competitive arrangement, whereas national competition law may find it to be unfair and hence invalid (Joerges 2006, 794). While in this paper, MLG was not analyzed from a specifically legal viewpoint, the case studies nevertheless pointed to the existence of horizontal conflicts between national regimes in the control of pharmaceuticals, and of horizontal as well as vertical conflicts between different standardization regimes in Tc. Certain conflicts in Tc about the application of different legal regimes to specific cases are a consequence of the convergence of different technologies to an integrated information-and-communication system.

Different and partly cross-cutting conflict lines between agencies, and legal conflicts at the same and at different levels, make coordination in MLG precarious and problematic. The resulting tensions and inefficiencies provoke continuous efforts to cope with them. A new kind of collision law which Joerges (2006, 2007) has analyzed specifically for the EU, but which can also be found at the international level (e.g. in WTO law), is being developed in response to the increasingly frequent vertical, horizontal, and diagonal legal conflicts in MLG. Power conflicts between governance levels are generally approached by the establishment of higher level agencies to which lower level units send delegates. A famous instance is the EU comitology system (Joerges/ Neyer 1998). The comitology procedure grants member country executives influence on the elaboration of regulatory provisions which implement EU legislation. Comitology developed in response to the power conflict between the Commission and national governments, even before it was formally instituted in 1987. In addition to permanent institutions in which lower level representatives negotiate with each other and with higher level representatives, ad hoc committees are also set up to coordinate diverging interests. Thus in Tc, various committees have been set up for the express purpose of coordination; one such committee (ICTSB) coordinates ETSI, CEN, CENELEC, and many private standards organizations. Besides, in 1997 an Independent Regulators Group which is not part of the EU framework has been established; this intergovernmental network deals with problems of regulatory practice. Another example of coordination efforts which reflect the presence of coordination deficits is the Legislative Review Process started in 2001 by the Commission to deal with the obvious problems in the market control of medicines. The reform turned an existing informal group facilitating the Mutual Recognition Procedure into an official Coordination Group, charged to speed up the processing of applications and negotiations about the mutual recognition of national authorizations, and to improve and the effectiveness of pharmacovigilance.

If coordination is understood as the resolution, and hence disappearance of conflicts, coherence in MLG should not be defined in terms of the coordination achieved. EU comitology has sometimes been interpreted euphemistically as leading to genuine supra-nationalism (e.g. Joerges and Neyer 1998). In truth, however, the very need for such a procedure attests to the continuing conflict. Observable efforts at coordination, whether ad hoc or by the institutionalized negotiation among diverging interests in permanent organizations, indicate that MLG is inherently fraught with conflict - conflict between regulators and economic actors, and conflict among governance agents the norms they produce and apply. These conflicts follow from the interest structure underlying the actor constellation in a given economic sector at its governance, as determined by the potential benefits and costs of the product involved and the distribution of governance responsibilities and powers. Both the architecture, and the regimes of MLG are shaped by the attempts to cope with conflict, and manifest the endurance of conflicts that cannot be resolved once and for all. Multi-level governance institutionalizes enduring conflicts in the same way that, according to Theodor Geiger, the legal and organizational framework of industrial relations institutionalizes the class conflict in capitalist societies.[10] This, then, is the answer to the question posed in this paper: To the extent that there is coherence in MLG, it is primarily based on the legal mediation of regime conflicts, and organizational

[10] Reference is here to Geiger's book *Klassengesellschaft im Schmelztiegel* (1949), first published in Danish in 1948; see p. 11-12 in the editor's introduction to Geiger (1969).

responses to power (or domain) conflicts. This view of coherence is closer to the notion familiar from chemistry than from arguments about institutional complementarity. The dimension of conflict, and coping with conflict, is neglected in VoC analysis as pursued by Hall and Soskice (2001). Analysis of the multi-level governance of economic sectors may help to change this perspective.

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