



DECENTRALIZATION AND LOCAL REGULATION

Marija Kastelan Mrak

International Summer School on Regulation of Local
Public Services – TSLR

September 8, 2017.

Starting note... intuition vs. observability

The decentralization logic that applies to business systems may work for governments, yet

What is in reality open to observation?

At our disposal we have:

1. Discourses and theoretical research concerning institutional development
2. Historical interpretations of decentralization processes
3. Case observations

Sources of contemporary ideas on institutional design

- Political debates on trends
- Evolutionary approach (historical analysis of globalization processes, of market liberalization... and institutional differences)
- Case evidence (case studies in specific activity service area, e.g. electricity, education...)
- Theory (Regulation theory, Economics...)

→ Many disciplines (political theory, sociology, administrative theory, legal theory, economic theory...) observe, interpret institutional design and produce advice concerning the role of government and government practices in the social context that influences government activity.

→ Two parallel tracks: normative and positivist

Disposition of this lecture

Basic concepts

Dimension od decentralization (WB)

A look at locally specific context

some EU regional country statistics

General TRENDS concerning the decentralization discussion

- In theory (Olstrom, Scott)
- Historical accounts of institutional reforms (Brenner, Faguet)

Part 1 – Basic Concepts

- Decentralization
- Reasons for organizational stratification
- Coordination mechanisms
- Regulation

Decentralization as a concept

Decentralization is the process of **redistributing** or **dispersing** functions, powers, people or things away from a central location or authority. (Wikipedia)

The term DECENTRALIZATION in the political and administrative sense refers to the transfer of authority from the central government to subordinate or quasi-independent organizations in the government sector, but also the private sector. (Decentralization Thematic Team, WB)

...a more formal (theoretical) definition of centralization compared to decentralization

Centralization	Decentralization
Local entities are divisions of the central authority's organization	Localities are (regulated) legal entities
Property rights are retained by the center who imposed solutions on the local level	Local agents have property and contracting rights that provide scope for independent action
Quotas (planning) dictates the allocation of resources	Allocation is determined by bargaining. Local agents bargain and trade rights as they try to internalize externalities
The central authority has no obligation to respect demands of Localities	Enforceable agreements and transfers are possible under an enforceable legal framework

Adapted from: P. Klibanoff & M. Poitevin: A Theory of (De)Centralization (2013)

Back to basics: the technical logic of decentralization is simple

Every delegation and/or segmentation of activities is a form of decentralization (= relinquishes control for the purpose of achieving some higher goal). By defining and delegation functions and competencies we establish and **organizational structure**, as a basic „map” describing the extent of **horizontal** and **vertical differentiation** of activities in a system.

Once separated, activities requires coordination generates positive economic outcomes (synergies) through:

- economies of specialization (routines),
- economies of standardization (planning),
- economies of scale and scope (capacity optimization).

Rationale: An optimal administrative structure (a hierarchy) may be established based on the idea of **functional specialization** and **optimal span of control**, under the condition we possess full understanding of the underlying technology.

What if organizations are not simple, technologies not transparent and the environments not stable?

→ coordination (control of behavior) becomes more complex.

A look at decentralization in organizational design during the 80s:

Mintzberg's list of personal and non-personal **coordination mechanism** included:

1. Vertical coordination (direct/personal supervision)
2. Horizontal coordination (mutual adjustment = personal non-hierarchical relations)
3. Standardization of processes, skills and outcomes (technical rules/procedures and output specifications)
4. Professionalization (external *training and indoctrination*, institutionalized learning processes)
5. Self-control (motivation; incentives)

→ All 5 mechanisms refer to mechanisms that control the behavior of individuals! The list is informative; it implies the co-existence multiple actors, acting in relatively independent and their choices/behavior are not fully observable. However, this is still a hierarchical conceptualization of how an organization should be designed and how it functions.

Mintzberg's diversified multi-product type organization is the most similar to the organization of the State,

- Established semi-autonomous subordinate units dedicated to a specific a „business” – decentralizing both **administration** and **production**
- Not all types of decision are equally decentralized - unit level decisions are primarily those related to technology and market positioning
- Inside semi-autonomous units, operational management is further decentralized through the differentiation/specialization of functional departments

but **central coordination is retained** by:

- Planning and controlling behavior of subordinate levels primarily by specifying financial inputs/outputs,
- Appointing managers
- Centralizing most of capital investments decision.

A remark on Mintzberg's 5 basic types of organizations: the organizational configuration (extent and nature of horizontal and vertical differentiation) and its key coordination mechanism are supposed to match organization **specific environment (contingent factors)**, described by a matrix of simple-complex vs. dynamic-static environment.

For the diversified organization, the supposed environment was complex, but stable.

Do intuitive justifications for decentralization of business systems work for governments?

Making the organization more responsive

- Earlier problem detection and shorter response time?
(shorter decision making procedures, technical efficiency)
- Better capacity to identify problems, better insight into local situation, priorities and expected policy effects?
(informed decision making, higher allocative efficiency)

...and enhancing efficiency (saving up resources)

- Efficient, professionally competent deployment of resources?
(optimal functional division of activities among different government branches, efficient scaling, objective/reliable planning)
- lower administrative cost?
(by avoiding longer communication channels and not transmitting and processing „irrelevant” information)

Relevance for designing (?) regulatory structures

Organizational design represents the intentional process of developing structures (= hierarchies that encompass an ideal number of functional units; where the function and capacity of individual units is designed/planned to be complementary and coherent with the capacity of other organizational units) and the coordination mechanisms that control the interactions between functional units.

By designing organizations, resources are grouped according to a flow or (functional pattern) and arranged hierarchically (local, national, supra-national) with the **purpose** of effective and efficient development and deployment of valuable resources.

Each activity/function to be included in the design should be:

- Identified** (recognition of importance leads to institutionalization),
- Positioned** in the established organizational setting (subordination),
- Endowed** with adequate resources: professional staff, budgetary stability, authority...

The quality of organizational design *should* depend on:

Understanding the „technology“, important for optimal configuration of each distinctive function (unit size, scaling effects)

Understanding relevant information flows,

Understanding the environment and the interactions of the organization with its environment

Often, these conditions are cannot be met, rendering the development of „regulatory structures“ rather fragmented and incidental, much less *technologically* rational.

Regulation, governance, management

- All generic terms; mechanisms intended/designed to control behavior; i.e., forms of **active intervention** of an authority in the otherwise spontaneous functioning of individuals and organizations
- The differences in meaning are rather contextual, due to the development/deployment of the term in a specific discipline and time.

If we were to make a distinction through this lecture, we could define:

Management as being the internal authority imposing order and carrying a coordinative role; the concept is often related to a physical person - the manager;

Governance (often seen as „corporate governance”) as being a system of explicit and implicit norms/impositions that direct and control behavior and relationships among involved/interested parties.*

Regulation as being a relation where the public authority designs incentive mechanisms and/or undertakes control over independent agents (its subjects). Often, in its more narrow sense, related to the control of production and markets.

Understanding the role of regulation on markets

The role of **regulation** is shaping behavior (and correcting market inefficiencies)

→ influencing production/supply (availability, quality),

→ influencing price (production costs),

→ influencing demand (direct provision, subsidies)

and so controlling redistribution (of power, income, wealth)

Besides market regulation designed to control private providers; state interventions occur in the form of:

Public financing – capital investments, transfer payments, subsidies

Public provision – production of services by entities established, financed and owned by the state

Public-private production and financing

(Barr, 2012, p. 72)

Production

Private

Public

Finance
Private

Food

**Public transportation
Electricity**

Public

**National Health Service Inputs
(drugs, blankets, etc.)
Education**

**Health Care
Education
National Defence**

Market inefficiencies as regulation issues

Regulation is designed to correct market inefficiencies.

Examples of market inefficiencies involve:

- **Insufficient supply** - insufficient supply of public goods (=non-excludable consumption but high marginal costs of production) can be remedied by public provision and/or public financing;
- **Inadequate supply** - inadequate quality can be remedied by setting performance standards
- **Excessive pricing** (above marginal production costs signaling abuse of market power) can be remedied by facilitating entry and or price-caps.

The same issues exist on the localized markets. Institutional decentralization induces discussions about market size and the ability/capacity of local bodies to engage in regulatory activities.

Essential facilities as regulated facilities

In 1996 the OECD Competition Committee debated on essential facilities, described as: „bottleneck”, that cannot be reproduced or bypassed at acceptable costs, such as electricity transmission networks.

Topics covered included:

- access regime and legitimate reasons to deny access
- interoperability issues (that different systems, products, and services work together transparently),
- standards,
- the importance of market definition of an essential facility,
- ownership status (private: single or joint, yet regulated)
- and possible remedies.

Public provision and regulation

When a public authority is in charge of service provision (= has the responsibility for), it can organize the production „in-house”, or it can choose contracting out to private providers (outsourcing). In that case, regulation becomes the mechanism for public guiding, monitoring and evaluation of service delivery.

Public authorities still have the responsibility of designing the system, planning and setting standards, monitoring/sanctioning, sometimes financing...

Because of historical reasons, and because regulation requires substantial expertise and capacity, local regulation is unevenly distributed across countries, but decentralization is generally progressing worldwide.

Part 2

- Dimensions of decentralization (WB)

Back to the normative „technical” approach

Dimensions of government decentralization

According to the WB, government decentralization occurs in different forms:

- Political decentralization
- Administrative decentralization
- Fiscal decentralization
- Market decentralization

Political Decentralization (WB)

Political decentralization aims at increasing the role of lower government administrations in controlling social resources and making policy decisions.

Policy decisions can relate to:

- Public good - provision of services (roads, water and sewage, waste collection, education and sports, health, welfare...)
- Economic planning and development

Political decentralization is also supposed to contribute to more democratic governance, allowing citizens to electing local officials and backing their political programs.

What have been the arguments for government decentralization during in the 2000s? Political?

J-P. Faguet: Decentralization and governance, 2011.

Central research question: **does decentralization improve governance?**

Research motivation: „Decentralization experiments” have been happening everywhere, around the world, in poor and rich countries, large and small.

Paper scope: a systematization of existing research and comments on the achievement of **decentralization goals**:

- a) to improve accountability and responsiveness and increase citizen voice (debates on optimal government size included here)
- b) to reduce abuses of power – balance of power b/w local and national political elites
- c) To improve political stability giving minorities control over subnational governments
- d) increase political competition to motivate politicians for better service (equivalent with increasing market entry possibilities)

Administrative Decentralization (WB)

Administrative decentralization redistributes authorities, resources and responsibilities for performing public services.

Related terms include:

- **Deconcentration** – shift or redistribution of decision making authority, as well as financial and managerial responsibilities to local level administrations, maintaining the supervisory authority of the central government (ministries)
- **Delegation** – more extensive than de-concentration, involving creation of separate, quasi-autonomous entities, such as public companies, school districts, transportation authorities... with high operational autonomy, including pricing.
- **Devolution** – transfer of responsibilities to local municipalities, that elect their own officials, raise own revenues and have independent authority over investments.

Fiscal decentralization

Fiscal decentralization (WB) implies a decentralization of authority over revenues' formation (collection) and allocation.

Self-financing is an important precondition to having more authority over choice of projects and for establishing administrative capacity to establish/regulate and monitor or self-perform desired services/projects. FD increases the share of self-financing and can include: intergovernmental transfers, own revenues from taxes and direct and indirect charges on services, but also debt based financing.

Local autonomy in policy development depends on available resources, especially those „non-dedicated” to a predefined function.

FD is the most studied and documented form of decentralization; used as indicator of level of decentralization in cross-country comparisons.

Percent of local government revenues in GDP by country (eurostat)

GEO/TIME	2008	2012	2016
European Union	11,1	11,5	11,0
Belgium	7,1	7,1	7,2
Bulgaria	6,7	6,8	7,0
Czech Republic	10,4	11,2	11,2
Denmark	31,9	35,9	35,2
Germany	7,6	7,6	8,1
Estonia	10,1	9,5	9,6
Ireland	6,6	4,2	2,4
Greece	3,6	3,6	3,8
Spain	6,0	6,2	6,4
France	10,7	11,5	11,2
Croatia	11,6	11,9	11,9
Italy	14,9	15,1	14,6
Netherlands	14,1	14,6	13,9
Austria	8,0	8,2	8,5
Poland	13,8	13,0	13,2
Portugal	6,5	6,7	6,1
Romania	8,7	9,1	9,2
Slovenia	8,4	9,6	8,5
Slovakia	6,1	6,5	7,1
Finland	19,6	22,3	22,0
Sweden	23,8	24,9	25,2
United Kingdom	12,2	12,3	10,1

Economic or Market Decentralization

Privatization and deregulation represent the highest level of disposing of CG authority. They allow for functions that have been previously executed by CG to pass on to independent operators controlled by market forces.

Forms of Economic Decentralization include the a) execution of services:

By allowing private companies to autonomously perform services previously provide by governmental institutions, contracting out non-core services, PPP;

and b) forms of financing

By allowing the financing public sector programs on the capital market (debt financing by issuing bonds or acquiring bank-credit obligations).

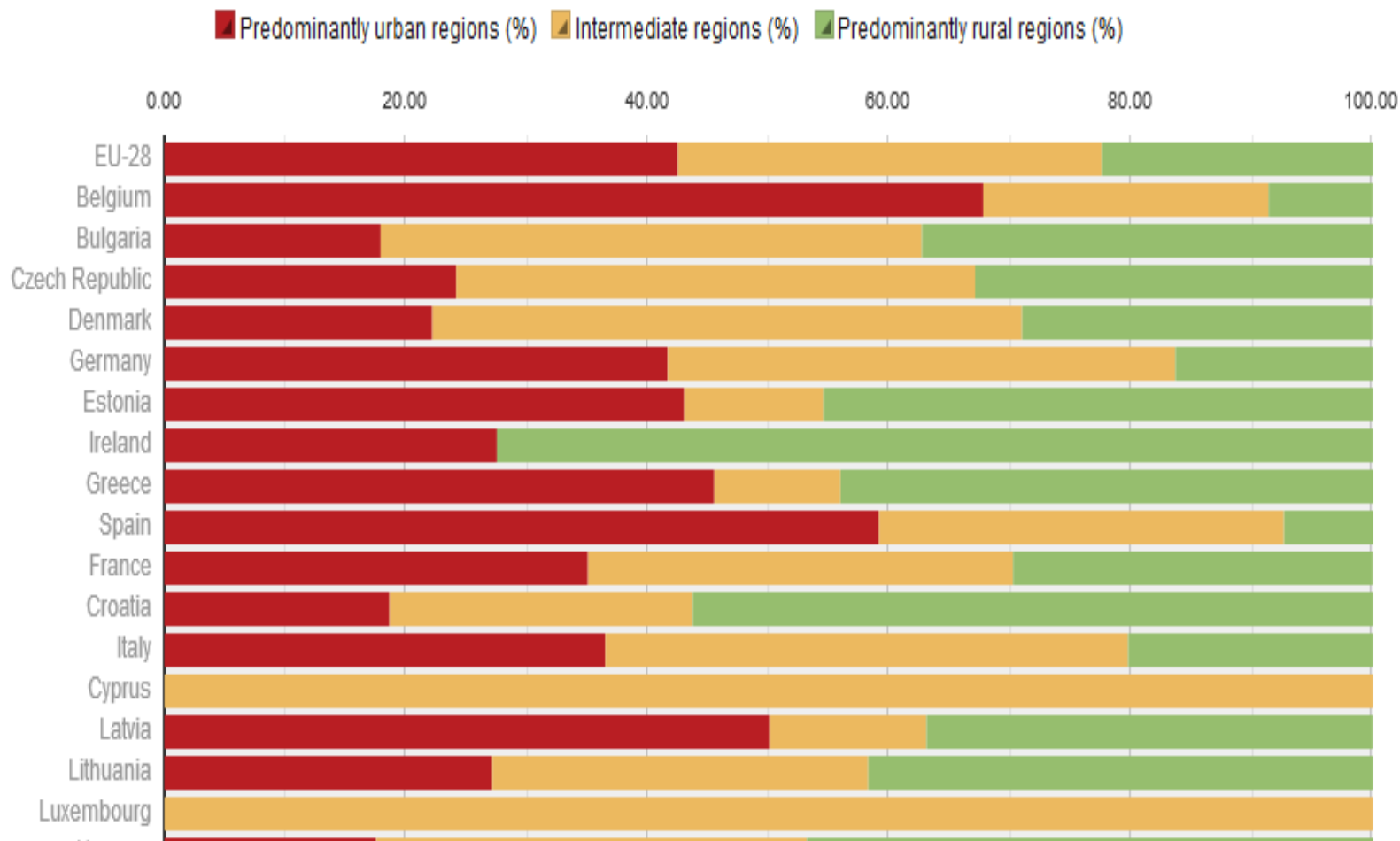
ED became popular in the 80s and 90s as a part of a broader shift on theories on the Role of the State. Provision of services by regulated market actors was seen as a more efficient alternative to state-owned utility companies. ED corresponds with the idea of New Public Management, a popular framework that promoted a less distinct management practices between the **State** and **Market** organizations.

Part 3 - Regional differences

Are regional differences the argument for decentralizing government authority?

Regional differences: Urban/Rural Population structures

http://ec.europa.eu/eurostat/cache/RCI/#?vis=urbanrural.urb_typology&lang=en



Urban/Rural differences in GDP pps/c %EU

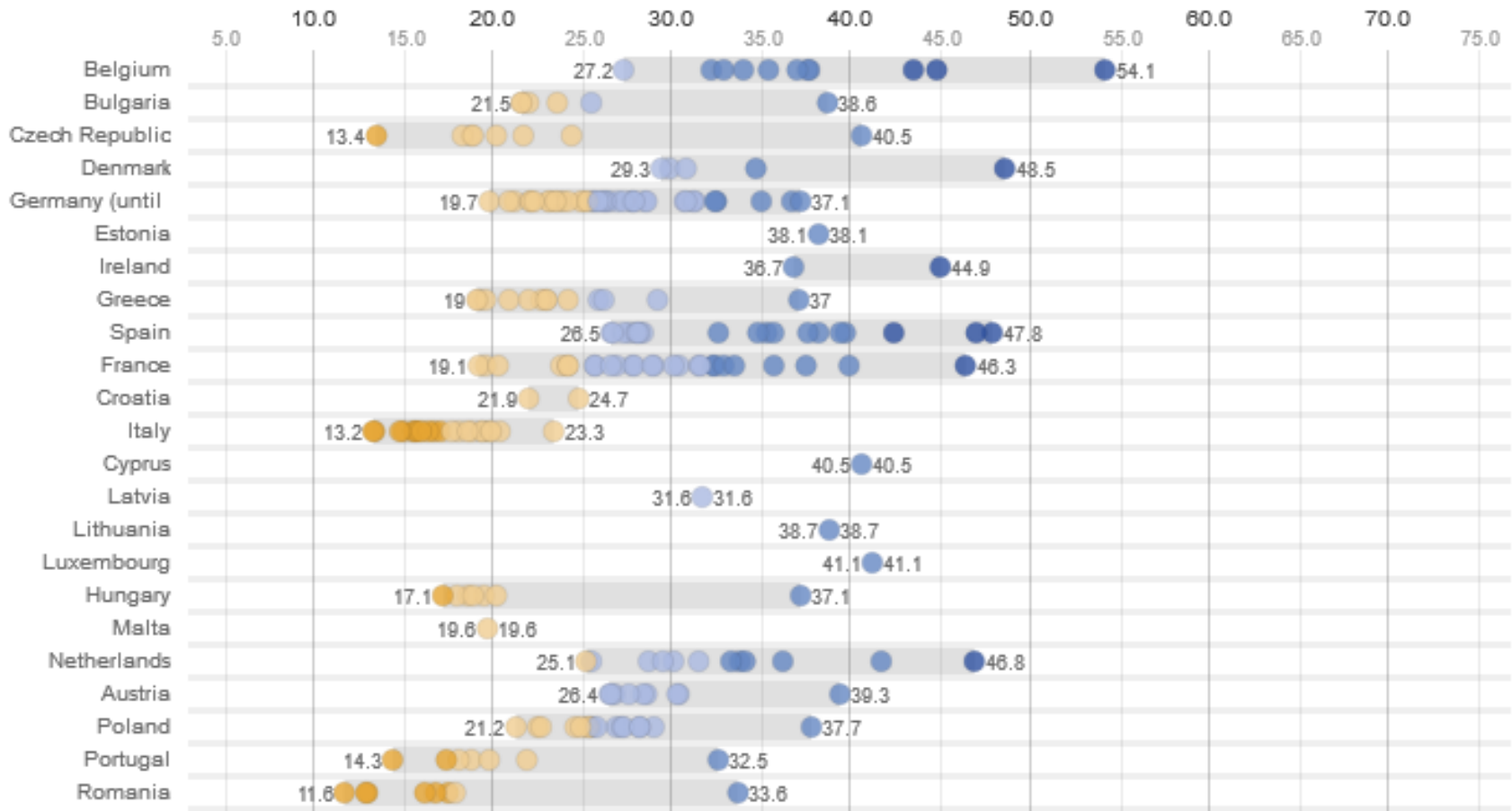
http://ec.europa.eu/eurostat/cache/RCI/#?vis=urbanrural.urb_economy&lang=en

Name	Predominantly urban regions <i>Purchasing power standard (PPS) per inhabitant in percentage of the EU average</i>	Intermediate regions <i>Purchasing power standard (PPS) per inhabitant in percentage of the EU average</i>	Predominantly rural regions <i>Purchasing power standard (PPS) per inhabitant in percentage of the EU average</i>
Belgium	135.0	108.0	77.0
Bulgaria	100.0	34.0	31.0
Denmark	180.0	107.0	104.0
Germany (until 1990 former territory of the FRG)	148.0	109.0	100.0
Estonia	110.0	54.0	50.0
Ireland	206.0	88.0	106.0
Greece	92.0	59.0	59.0
Spain	:	:	:
France	151.0	93.0	83.0
Croatia	105.0	51.0	46.0
Italy	103.0	95.0	90.0

Regional differences: 3-ry education attainment

<http://ec.europa.eu/eurostat/cache/RCI/#?vis=nuts2.educa>

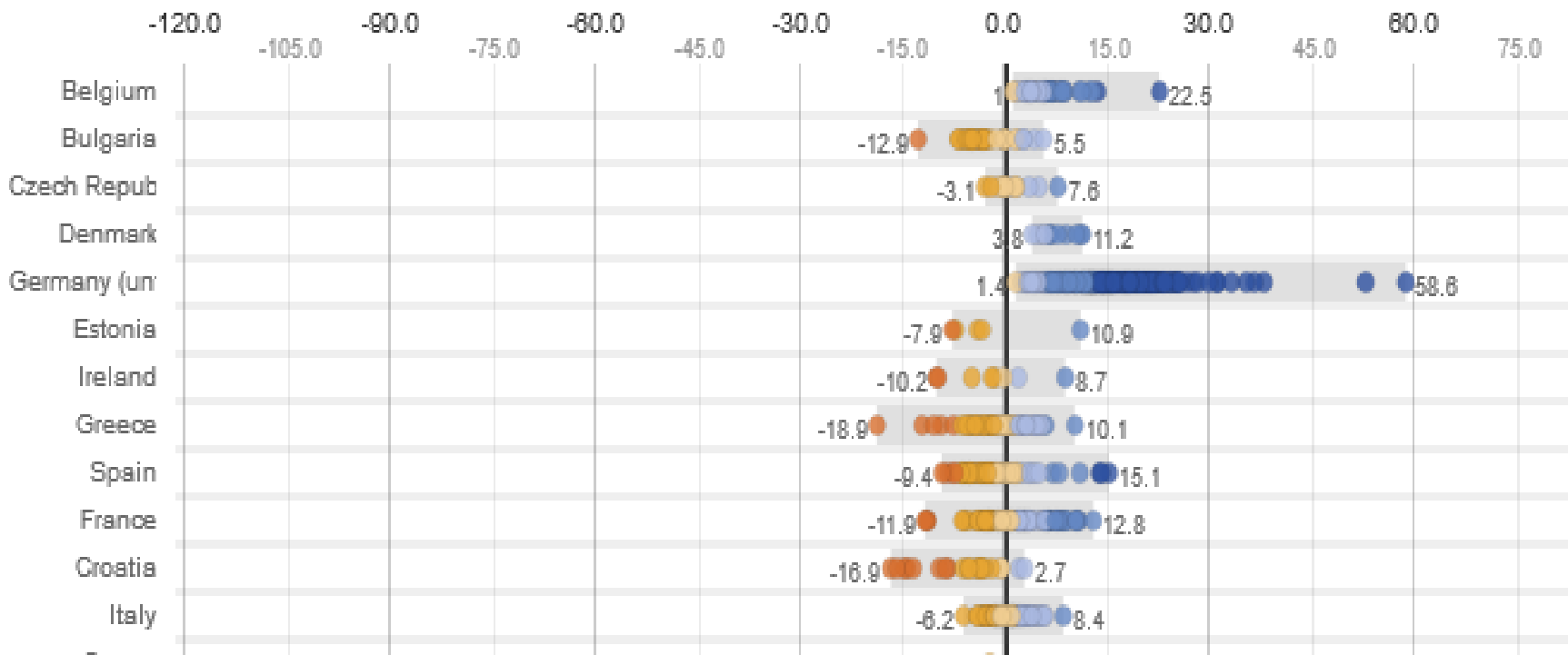
i Population aged 25-64 by educational attainment level, sex and NUTS 2 regions (%), Total, Tertiary education (level... ▼



Regional differences 2 – Net migrations (*feet voting*)

<http://ec.europa.eu/eurostat/cache/RCI/#?vis=nuts3.demography&lang=en>

i Crude rate of net migration plus statistical adjustment



Questions opened by observing regional differences

1- Can diversity at subnational level be the argument for decentralization?

If yes, the intuitive argument supporting decentralization would be sub-national governments have superior (specialized) knowledge/expertise concerning local priorities. Also, by shortening information processes, administrative costs can be saved.

2- What is the relationship between administrative fragmentation and scale effects?

Intuition suggest that the share of total national assets dedicated to governmental activities will be higher in more fragmented governmental structures. Decentralization would therefore be expected to hurt national economic performance (higher share of assets employed for „non-productive” purposes, more redundancies)

Ad 1. In view of regional differences, is (central) government failure the argument for decentralization?

Can we consider the following passage as such a suggestion?

„Policy makers, academics, businesses and international organizations are increasingly recognizing that human capital is an essential societal asset and that we have to spend more – and intelligently – on education and skills development.... The current approach is flawed, shown by the mismatch of jobs and skills and the high level of unemployment in the EU. .. We need highly skilled, flexible and creative people – not only to fill vacancies, but also to tackle global challenges such as unemployment, ageing populations, climate change, diverse societies, migration, the rise of poverty, and marginalization. Cities and regions are at the forefront of dealing with these issues.”

Source: Human capital for territorial growth, (publication, foreword), European Commission Joint Research Centre

<http://publications.jrc.ec.europa.eu/repository/bitstream/JRC105197/lb-07-16-092-en-n.pdf>

Ad 2) Does structural fragmentation imply scale problems? Two quotes

„The traditional argument for a unified metropolitan government assumed that only such a regional government could have the institutional capacity and fiscal resources necessary for capital-intensive public works that promote regional development, such as water supply, waste water treatment, solid waste disposal, airports, highways, and mass transit. But, as public choice scholars point out, the scale economy problem can be solved without centralized regional governments. Instead, local governments can purchase services from each other, enter into joint agreements for planning, financing, and delivery of services, ...” R. Briffault (The Local Government Boundary Problem in Metropolitan Areas, 1996)

„Local authorities generally follow adequate regulatory decision-making processes. This finding is not dependent on the size of the local authority. The review specifically tested the hypothesis that larger local authorities are able to follow better regulatory processes because of their greater financial resources and internal capability. The analysis revealed that while larger local authorities are able to draw upon a larger body of technical information when making regulatory decisions, smaller local authorities appear better able to incorporate specific community concerns, due to their closer relationship with the community.” The New Zealand Productivity Commission: Towards better local regulation, Final Report, 2013, p.156

Part 4

- Some theoretical insights
- Brenner: A Historical explanation of decentralization

On the regulatory space metaphor

C. Scott : Analyzing Regulatory Space: Fragmented Resources and Institutional Design, 2011.

*„The chief idea of the regulatory space **metaphor** is that resources relevant to holding of regulatory power and exercising of capacities are dispersed or fragmented. These resources are not restricted to formal, state authority derived from legislation or contracts, but also include information, wealth and organizational capacities. The possession of these resources is fragmented among state bodies, and between state and non-state bodies. The combination of information and organizational capacities may give to a regulated firm considerable **informal** authority, which is important in the outcome even of formal rule formation or rule enforcement processes.”*

E. L. Windholz: Governing Through Regulation: Public Policy, Regulation and the Law, 2018.

*„...power and influence within the regulatory space is **not solely exercised hierarchically, but also horizontally and vertically by non-state actors...**, creating a reflexive process of influence and change within the regulatory space.”*

E. Ostrom's arguments for decentralization

Beyond Markets and States: Polycentric Governance and Complex Economic Systems, 2010

Starting point:

In the past, scholars criticized the size of the public sector and number of government agencies, rather than trying to understand their role and performance mechanism

FINDINGS: Small and medium sized cities more effective in monitoring cost and performance.

Citizens dissatisfied with service provision vote with their feet.

Local incorporated communities can contract with larger producers and change contracts if not satisfied with the services provided.

CONCLUSIONS: The use and the conditions of resources depend on users having long-term interests, leading them to **invest** in monitoring and trust.

Polycentric systems are capable of coping with complexity.

Historical account for reasons for decentralization

Brenner (2004): **Urban governance and the production of new state spaces in western Europe, 1960–2000**

Aim: interpret regulatory activity beyond the internal, territorial, administrative boundaries and explain how **globalization processes** influenced decentralization of regulatory activities.

Basic premise: Urban governance (UG) represents major politico-institutional mechanisms where **national and subnational** regulation are combined (constitutive); as multiscalar hierarchies, they make political authority contestable and may generate regulatory conflict.

Emphasis: path-dependancy; challenges the idea of state-space as territorially centralized, exclusive area of sovereignty.

Periodization of Urban Governance Evolution (Brenner, 2004)

50s-60s- Policy frameworks target space specific local assets and address spatially specific socio-economic problems: massive public investments in infrastructure favoring major metropolitan areas aiming to enhance *national* competitive advantage, while standardizing /equalizing the provision of centrally financed welfare policies. Central state regional policies seen as compensatory and aim at redistribution of wealth and income towards less privileged.

70s- Fordism in crisis: reorientation of UG from managerial and welfarist to entrepreneurial and competitive. Industrial decline. Fiscal squeeze. Crisis-management. Traditional demand management prevails.

Metropolitan authorities take role in guiding industrial expansion (land-management) and social programs (unemployment relief, employment policies). Place-specific regulatory problems evolve, most pronounced in major cities.

...80s

National governments abandon Keynesianism and concentrate on monetary policy (inflation). Privatization and deregulation, supply-side management.

As rationalization of government spending threatens LG revenues, they try to strengthen their own fiscal base for regulatory activity (local taxes, user fees, national fiscal transfers). New forms of local governance, such as PPP become prominent.

Competition among regions and cities is promoted: „Uneven geographic development established as intentional, rather than incidental.” Partnering with state government to promote local economic growth, labor market-programs, infrastructural investments...as part of globalization (*glocalization*) strategies.

... and 90s

Metropolitan regionalism strategies favor global competitiveness (scale-scope rescaling), but also increase social inequality and uneven special development increasing geographical differentiation of state regulatory activities (decentralized, regional economic policy). Contradictions between global competitiveness and social problems expected to be resolved „through integration of local economies into larger, regionally configured territorial units.

New regulatory landscape: Feeling of regulatory deficit, promotion of equalized growth is now to be promoted at metropolitan and regional scale.

Decentralization (downscaling) of national administrative capacities and regulatory arrangements.

Consolidation of entrepreneurial forms of urban governance.

Concluding remarks

- Decentralization of regulation happens inside the broader context of political, administrative, fiscal and economic decentralization that has been observed for almost half a century. It is an evolutionary process.
- The efficiency of regulation systems, as that of any other system, whether in service or production, public or private provision, can be enhanced by informed design. Designing systems requires listing goals, and require some „technical” structuring or competencies, resources and coordinating instruments/methods.
- Recent theoretical developments support the idea that local regulation can be efficient and that scale consideration can be approached effectively in a well designed system of authority allocation and support.
- Regulatory systems are and should be understood as dynamic; as they need to accomodate changing social, economic and technical circumstances.
- The inclusion of multiple intelectual inputs, coming from both practioners from diverse strands of academic discourse, make conceptualiation fragmented and the forthcoming advice cautious. Developing the „know-how” to macro- and micro-magage of this *sector* will continue to be challenge for researchers and practitioners.

miscellaneous

Comparing definitions: Corporate governance, Public governance, Regulation

“... **Corporate governance** is a field in economics that investigates how to secure/motivate efficient management of corporations by the use of incentive mechanisms, such as contracts, organizational designs and legislation. This is often limited to the question of improving financial performance, for example, how the corporate owners can secure/motivate that the corporate managers will deliver a competitive rate of return.” ([Mathiesen](#), 2002)

Public governance = **governance of society**; that can take the form of hierarchical governance, governance by markets and governance by networks.
(E. Windholz, 2018)

...**Regulation**, according to Windholz (2018), is a heavily contested concept where „definitions vary according to professional discipline, political ideology and even geography.

...**structured process** undertaken by or under the auspices of government designed to modify the behavior of persons or entities according to defined standards.”

....includes a full range of legal and informal instruments: primary legislation, subordinated legislation (delegated law making, including the bylaws and planning instruments for which local government has responsibility), licenses, codes and consents, rules, informal instruments and agreements... The purpose of regulations is to influence and control behavior in order to preserve and advance public interests. (New Zealand, p.16)

Classifications of regulation

Functional: economic regulation vs. social regulation

Economic regulation	Social regulation
Financial	Environmental
Corporate	Health and safety
Utilities and telecommunication	Workplace
...	...

(E. L. Windholz, 2018, to be published)

Classification of regulatory tools

Groups of regulatory tools: Frieberg, according to Eric. L. Windholz
(Introduction)

- Economic tools: taxes, quotas, pricing
- Transactional tools: contracts and grants
- Authorising tools: registration, licensing, accreditation
- Information tools: labeling, disclosure regimes
- Structural tools: product or process design
- Legal tools: laws, rules and regulations

Political Decentralization illustration

Local self-government definition in recent European history

European Charter of Local Liberties (1953)

European Charter of Local-Self Government (1985)

Art. 3. Concept of local self-government

1. Local self-government denotes the right and the ability of local authorities, within the limits of the law, to **regulate** and **manage** a substantial share of public affairs under their own responsibility and in the interests of the local population.

...

Art. 4 – Scope of local self-government

2. Local authorities shall, within the limits of the law, have full discretion to exercise their initiative with regard to any matter which is not excluded from their competence nor assigned to any other authority.

3. Public responsibilities shall generally be exercised, in preference, by those authorities which are closest to the citizen. Allocation of responsibility to another authority should weigh up the extent and nature of the task and requirements of efficiency and economy.

4. Powers given to local authorities shall normally be full and exclusive. They may not be undermined or limited by another, central or regional, authority except as provided for by the law.

..

Total employment (%) in public administration, defense, education, human health and social work activities

GEO/TIME	2007	2011	2015
European Union (28)	22,3	23,3	
Euro area	22,70	23,7	
Belgium	28,64	29,7	30,6
Bulgaria	16,43	15,2	15,8
Czech Republic	17,67	17,6	17,6
Denmark	29,70	31,9	31,3
Germany	23,39	23,8	24,3
Ireland	21,54	25,8	25,0
Greece	20,65	21,6	21,8
Spain	17,52	20,9	21,6
France	29,43	29,8	30,2
Croatia		17,1	20,9
Italy	18,53	18,6	18,9
Hungary	20,58	21,4	22,9
Netherlands	25,79	27,8	27,1
Austria	21,46	22,2	22,3
Poland	19,32	20,0	20,4
Portugal	18,94	20,4	21,0
Romania	11,32	12,3	13,6
Slovenia	16,70	18,5	18,9
Finland	27,20	28,3	28,6
Sweden	32,49	31,9	

Definition urban-rural (eurostat)

'Rural areas' are all areas outside urban clusters. 'Urban clusters' are clusters of contiguous¹ grid cells of 1 km² with a density of at least 300 inhabitants per km² and a minimum population of 5 000.

Classification of the regions

- **In the second step**, NUTS 3 regions are classified as follows, on the basis of the share of their population in rural areas:
- 'Predominantly rural' if the share of the population living in rural areas is higher than 50
- 'Intermediate' if the share of the population living in rural areas is between 20 and 50
- 'Predominantly urban' if the share of the population living in rural areas is below 20

Recommended readings (some links to literature)

N. Barr: Economics of the Welfare State, 5E, Oxford University Press, 2012.

N. Brenner: Urban governance and the production of new state spaces in western Europe, 1960–2000 Review of International Political Economy 11:3 August 2004.

J-P. Faquet: Decentralization and Governance, Economic Organization and Public Policy Discussion Papers, LSE, 2011.

H. Mintzberg: Structures in 5's: A Synthesis of the Research on Organization Design, Management Science, vol. 26/3, 1980.

E. Olstrom: Beyond Markets and States: Polycentric Governance and Complex Economic Systems, American Economic Review, vol. 100/3, 2010.

C. Scott: Analyzing Regulatory Space: Fragmented Resources and Institutional Design, 2001;
<http://researchrepository.ucd.ie/bitstream/handle/10197/6785/AnalysingRegSpace.pdf?sequence=2>

E. L. Windholz: Governing Through Regulation: Public Policy, Regulation and the Law, Routledge, Taylor and Francis, 2018.

The New Zealand Productivity Commission: Towards Better Local Regulation, Final Report, 2013; www.productivity.govt.nz