Smart specialisation strategies and cross-border integration of regional innovation systems:

Policy dynamics and challenges for the Upper Rhine

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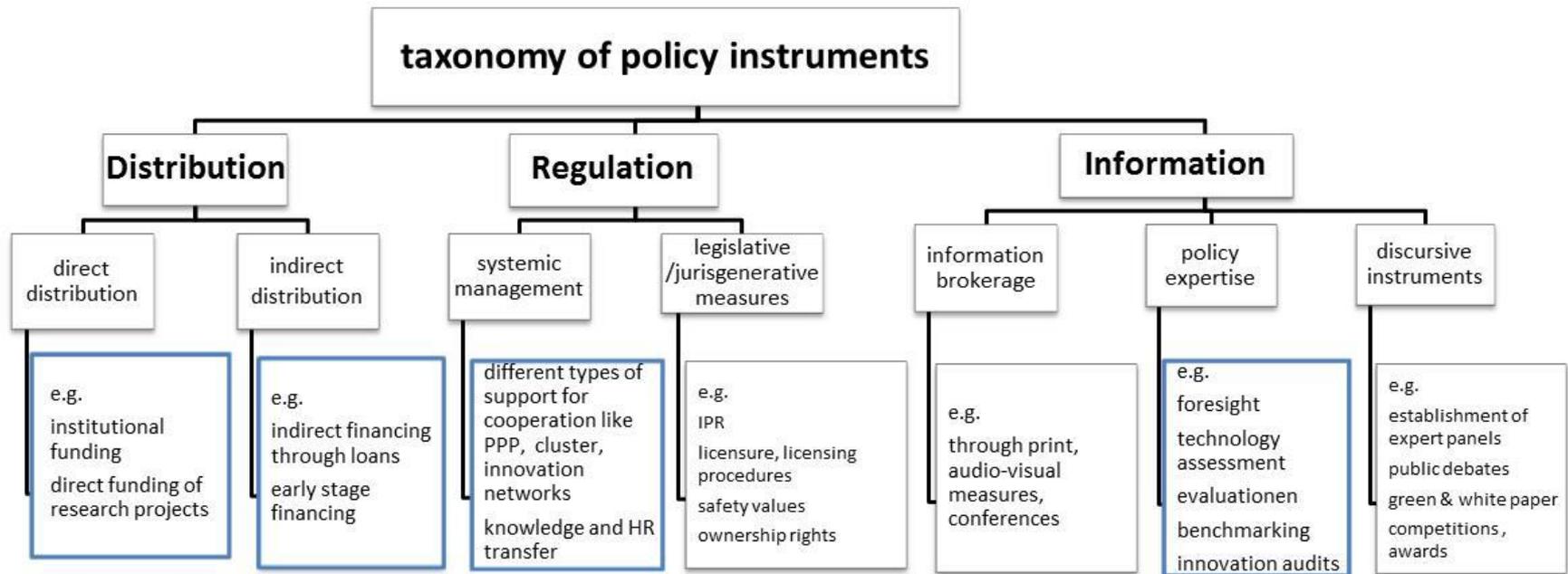UMR 7522

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Agenda

- The concept of smart specialisation and specific challenges for regional policy-making

- Cross-border regional integration in the Upper Rhine region

- Smart specialisation of (and within) the Upper Rhine region

The concept of smart specialisation

➢ High importance for regional innovation policy making

➢ „Integrated, place-based economic transformation agendas" (http://ec.europa.eu/regional_policy/sources/docgener/informat/2014/smart_speci alisation_en.pdf)

➢ National/ Regional Research and Innovation Strategies for Smart Specialisation (RIS3 strategies): ex-ante conditionality of European Cohesion Policy

➢ S3 concept suitable for all types of regions (Foray et al. 2011)

➢ Originally academic concept, now applied to European regional policies

➢ At the core: process of „entrepreneurial discovery", i.e. a learning process to detect future regional competitive fields and specialisations in research and innovation

➢ Policy challenges: complexity of the process, discovering the "right" fields for further specialisation, identifying emerging trends

Most relevant policy tools for implementing the S3 concept
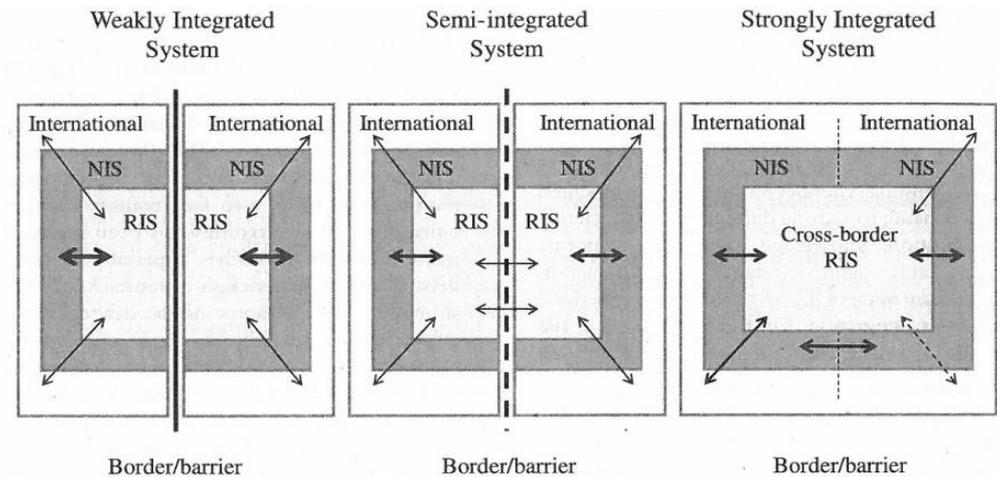

Adapted from Hufnagl (2010, p. 102)

Specific challenges

➢ Systemic character of instruments

➢ Addressing different actors of the regional innovation system

➢ Organising the process of entrepreneurial discovery and involving the „right" actors (businesses, but also higher education and research?)

➢ Bringing together particular needs and interests of a wide range of regional actors

➢ Defining specialisation, i.e. focusing on specific areas and leaving out others, risk-taking

➢ Division of labour, issues of legitimacy

Cross-border regional integration

- Evolution from a stage of two distinct regional innovation systems on both sides of a border to an integrated system that stretches over a territory including a state border

- Relationship and state of integration depending on characteristics of regional innovation systems involved, their relations and the relations of both national systems concerned (Lundquist/ Trippl 2013)

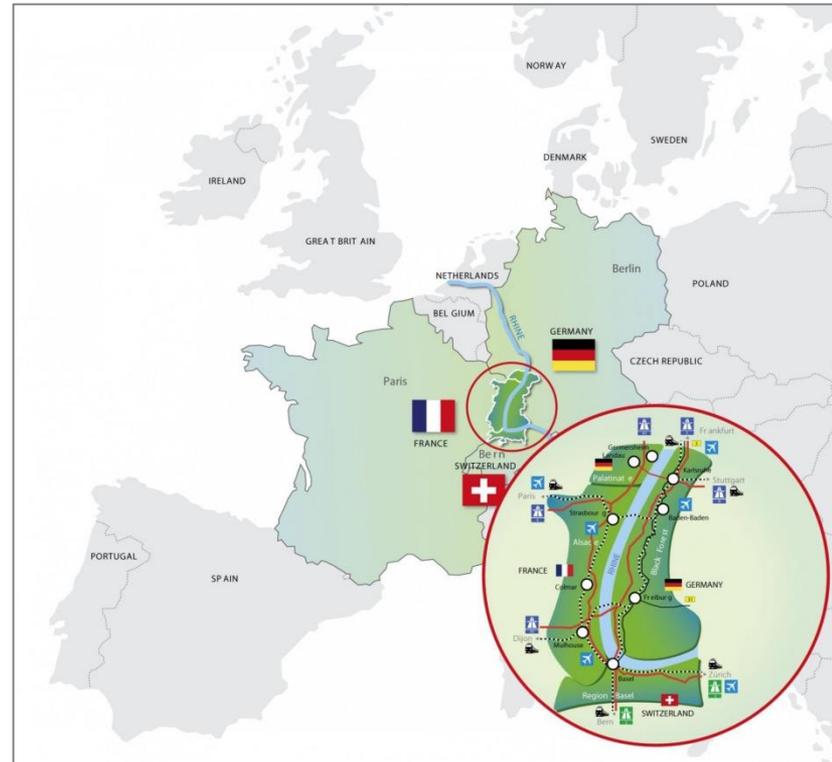### Different stages of cross-border innovation policy integration

NIS: National Innovation System; RIS: Regional Innovation System

Adapted from Lundquist and Trippl (2013, p 455)

The Upper Rhine cross-border region: Possible convergence through cooperation in smart specialisation strategies?

➢ Upper Rhine region: Alsace, Baden, parts of Switzerland and South Palatinate

➢ Tradition of cooperation in various areas (some examples: Upper Rhine Conference 1975, Upper Rhine Council 1997, Eurodistricts, Regio Pamina, Trinational Eurodistrict Basel, European Campus EUCOR, Trinational Upper Rhine Metropolitan Region)

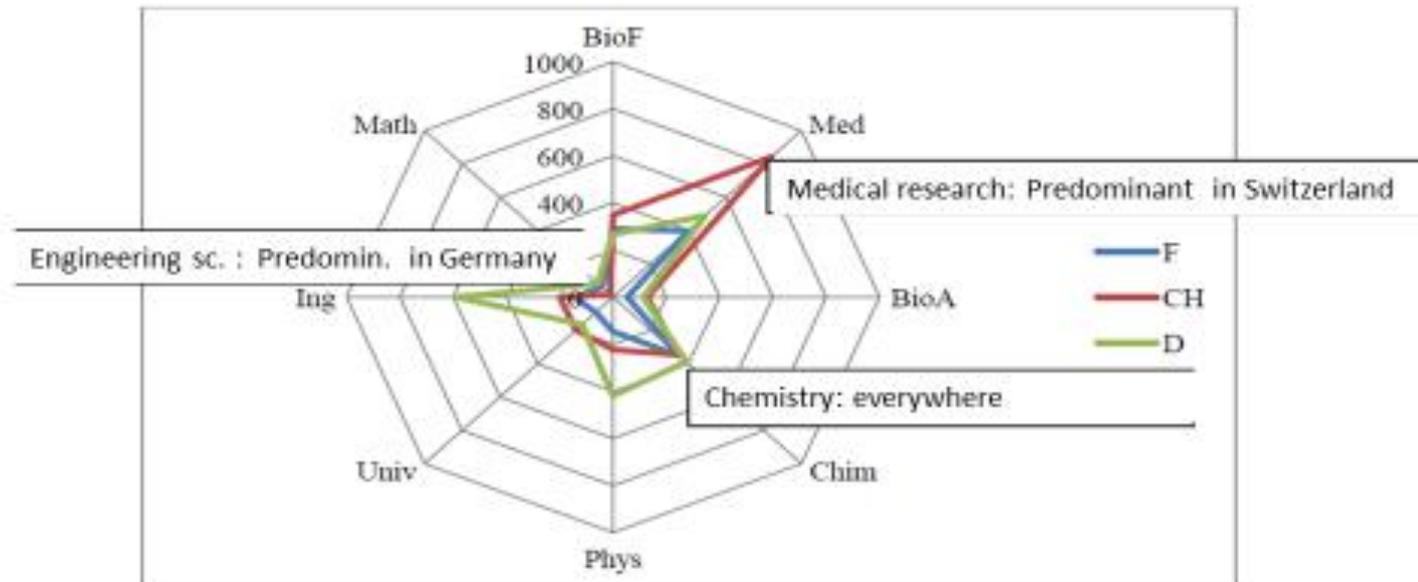➢ Polycentric metropolitan structure, strength in science and innovation

http://www.upperrhinevalley.com/de

Scientific production of Upper Rhine: weight in Europe (EUR27+)

% in 2008

Chemistry	**2,61**
Physics	**2,02**
Engineering sciences	**1,89**
Basic Biology	**1,71**
Sciences of the Universe	**1,59**
Medical research	**1,46**
Applied biology and ecology	**1,19**
Mathematics	**1,11**

Source: Héraud, BETA, OST, 2012

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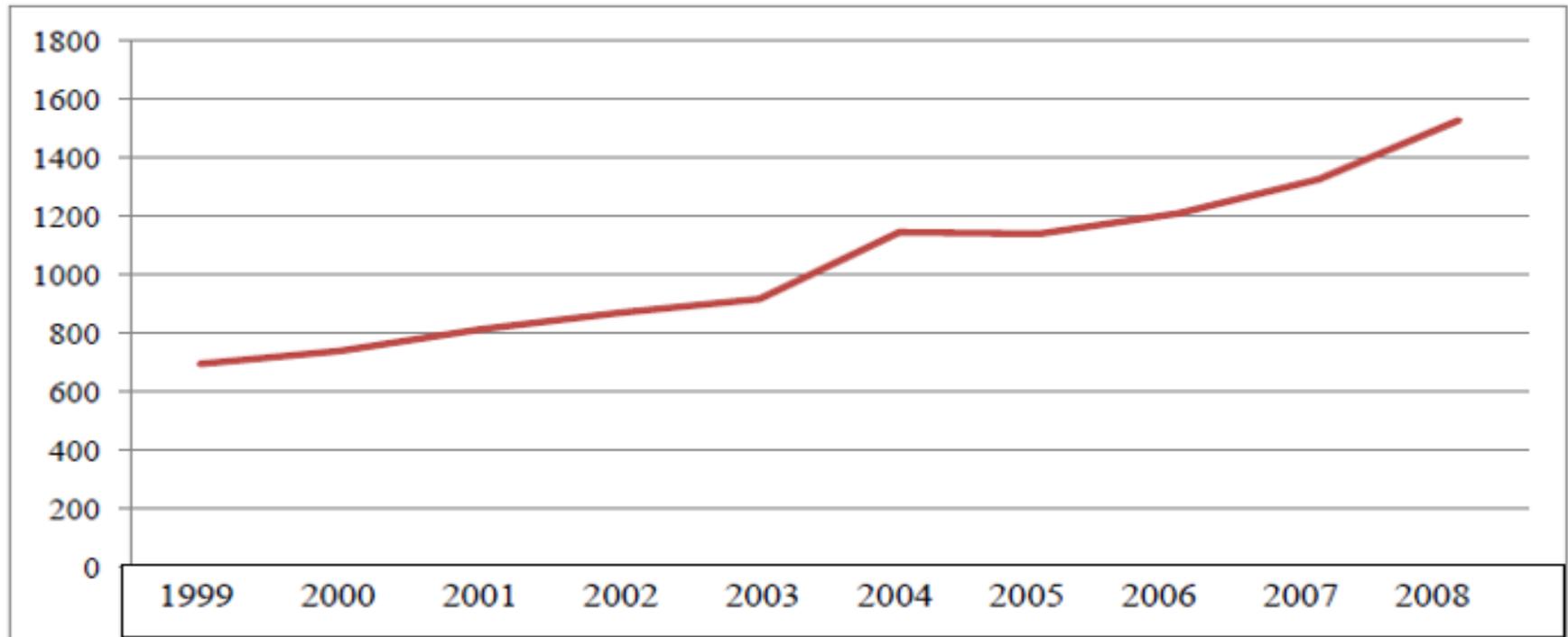ISI

Scientific productions in 2008: convergence but specialisation

Source: Héraud, BETA, OST, 2012

Co-inventions within Upper-Rhine: increasing connectivity

Source: Héraud, BETA, OST, 2012

Innovation policies in the Upper Rhine region

➢ Different traditions and current states of regional governance and policy implementation (Baden-Württemberg: state within a federal system; Alsace: *région* with complex multi-level/ multi-actor configuration)

➢ Both regions: Tradition in regional innovation strategy conception and implementation: Baden-Württemberg: long tradition of innovation policy and strategic approaches; stakeholder participation for years now; Alsace: *Stratégie régionale d'innovation* (as all French regions)

-> S3 requirement not completely new, however in individual regional contexts

Future-oriented fields Baden-Württemberg:
- Sustainable mobility
- Environmental technologies, renewable energies
- Health and care
- ICT, green IT, smart products
- Creative industries
- Aerospace
- Key enabling technologies

Regional targets Alsace:
- Green economy
- Health and wellbeing
- Human sciences and society

Our enquiry

➢ 2 surveys (2013, 2014) realised at Fraunhofer ISI targeting S3, framework conditions, levels of achievement and experiences, complemented by additional telephone interviews

➢ Aim: deeper understanding of strategy building and implementation processes in European regions, as well as regional policy options

➢ Results for France and Germany:

  ▪ Rather similar profiles compared to other European countries

  ▪ Framework conditions rather supportive, comparable degree of achievement (national level)

  ▪ No strong evidence for national intra-homogeneity and international extra-heterogeneity

Evolution

➢ Alsace: Progress through S3 rules of action, leading to a higher involvement of regional companies, consideration of emerging markets and an intensified bottom-up proceeding

➢ Baden-Württemberg: RegioWIN competition: supporting bottom-up strategic approaches towards innovation at local/ regional level

➢ Cross-border perspective: Individual S3 strategies, but base for strengthening cross-border relations prepared

➢ Main instrument so far: information exchanges, inclusions of stakeholders from the other region in regional processes

➢ Examples: Invitation of Swiss and Baden-Württemberg representatives to „Alsace 2030" workshops, possibility of involving French actors in RegioWIN strategies (though beneficiaries are located in Baden-Württemberg), Science Offensive, Dialog Science – in the context of the TMO

Core questions

- Can these processes be the base for further integration steps in the sense of Nauwelaers 2013?

- Can convergence of policies, governance structures and supporting programmes lead to further integration and additional opportunities through cross-border cooperation, e.g. in specialisation areas?

Information	Mutual exchange of policy information
Experimentation	Ad hoc and temporary common initiatives without joint funding
Alignment	Mutual opening of programmes or structures across borders – no joint funding
Joint actions (narrow)	Cross-border measures, structures and actions – joint funding by actors from several regions
Joint actions (broad)	Joint policies or policy instruments co-funded by all constituting regions
Joint strategy	Joint common strategy adopted at the level of the cross-border area, translated into common policy mix co-funded by all constituting regions

Adapted from Nauwelaers (2013, p. 20)

- Is smart specialisation the "right" starting-point or are other options (e.g. cross-border cooperation programmes) more promising?
- Are European Structural Funds Programmes a strong vehicle to foster cross-border cooperation?
- Might there be synergies between different programmes and measures?
- … ?

Summary

➢ S3 rather evolution than revolution (previous activities and traditions on both sides of the Rhine river, however in different manner)

➢ Strong will for cooperation on both sides

➢ S3 could serve as additional opportunity for cooperation and complement other approaches

➢ Interlinkage of partners existing, further potentials seen on both sides

➢ Synergies conceivable through (i) further coordination efforts on policy levels, (ii) of various programmes and measures, (iii) stronger aligning target fields in both regions

➢ In total: „Cross-border S3 Alsace-Baden-Württemberg" may serve as further promoter and catalyst of existing initiatives and activities and the Upper Rhine may work as „cross-border laboratory" leading to new knowledge, experience and coordination, may thus be a valuable „showcase" for other cross-border regions

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Thank you for your attention!

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