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Outline

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2. Smart specialisation strategy: concept and implementation in current EU policies
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Introduction

- Smart specialisation is set to become an important policy rationale in the upcoming structural fund period 2014-2020.
- Roots in analysis of the EU-US productivity gap; the concept is increasingly applied to regional contexts.
- Regions are often faced with scarce resources and limited budgets which they should allocate adapt to external influences (e.g. global competition) and inherited structures (sectoral foci, linkages between sectors, innovation infrastructure).

- Smart specialisation concept is going to expand its influence to regional innovation policy making.
- Impact regional innovation systems in the long-run.

- The principles of smart specialisation have been applied in certain European regions implicitly for years in form of future-oriented transformation processes.
- Use experience from Austrian and German regions to discuss potential impacts of S³ and learn from those experiences.
Smart specialisation strategy: concept and implementation in current EU policies

- Part of the wider Europe 2020 strategy.
- Important policy rationale and an ex-ante conditionality in the upcoming structural fund period and a pre-condition for the R&I target, the ICT target as well as for obtaining support from the European Agricultural Fund for Rural Development (EAFRD).
- S³ has two dimensions: a policy or governance dimension as well as an economic or market dimension (European Commission 2011; Foray et al. 2012, Barca 2009).

Smart specialisation is about placing greater emphasis on innovation and having an innovation-driven development strategy in place that focuses on each region’s strength and competitive advantage. It is about specialising in a smart way, i.e. based on evidence and strategic intelligence about a region’s assets and the capability to learn what specialisations can be developed in relation to those of other regions.

DG Regional Policy, European Commission (2011)
S³: the governance and implementation perspective

- From a governance perspective the S³ addresses the following key aspects:
  
  - address regions for policy implementation and promote the dialogue between regions and the EU,
  
  - make innovation a priority in all European regions – as answer to global challenges and in order to create more knowledge-based jobs,
  
  - focus investments, to create more value-added and visibility of EU funding and to create synergies between regional, national and EU investments as well as private investments,
  
  - improve innovation processes by use of qualitative and quantitative evidence and strategic intelligence in order to optimize the (innovation) policy mix, and
  
  - involve stakeholders and local actors and thus ensure that S³ becomes inter-active, regionally driven and consensus-based.

Source: European Commission 2011
Practical challenges associated with S$^3$

- How to promote dialogues between regions and EU?
  - Why addressing regions? Interference from the national level will be likely.
- What constitutes a regional (innovation) development strategy?
  - R&D, innovation, institutions, economic development, interaction, i.e. a broader regional process?
- What role should and can regional governments play in building strategies?
  - Which actors to involve and when? How to integrate bottom-up and top-down?
- Focusing investments:
  - How to find/define the optimal focus? How to create synergies of investments?
- How to develop strategies to the context of different types of places?
  - Highly idiosyncratic processes, blue-prints unlikely to work => resource intensive, risk of inefficiency, hard to replicate successes / learning from other regions
- Risk of too much specialisation?
  - Will this result in a division of work between regions and cement existing disparities instead of promoting cohesion? Specialisation vs. diversification…
Regional systems of innovation approach: brief revision

- A regional innovation system is characterized by co-operation in innovation activity between firms and knowledge creating and diffusing organizations, [...], and the innovation supportive culture that enables both firms and systems to evolve over time. (Doloreux/Saeed 2005)
- Innovations are generated in interactive processes between different actors of the system. Institutions and interactions determine the innovative performance of a region.
- RIS may evolve spontaneously or can be built/supported by the government. In real terms: varying degrees of these two ideal types exist. The governance infrastructure and the business superstructure are constitutive (Cooke 1998).
- Concept of RIS has evolved into a widely used analytical framework generating the empirical foundation for innovation policy making, giving rise to the development of systemic, network-oriented instruments.
- Advantages of network-oriented instruments: network-building capacity, enhanced quality control of support projects, increased reach of the instruments, fiscal advantages.
Relating the regional systems of innovation approach and the policy paradigm of $S^3$

**Both:** focus on innovation at the interception between localized capabilities and international competition to leverage regional competitive advantages.

**Regional Innovation System Approach**
- academic concept with high practical relevance and respective policy influence
- conceptual/analytical dimension, governance dimension, business innovation dimension
- focus on internal processes and interactions of actors and less on diagnostic analyses

**Smart Specialisation Strategy**
- practitioner approach, driven by the European Union (modernization, reform agenda)
- governance dimension, business structure and innovation dimension, external influences (global competition, technological trends, etc.)
- focus on locally adapted strategy processes under external influences and more diagnostic analyses (based on evidence)
Research questions and methodological approach

1. Will the smart specialisation strategy promote a more system oriented regional strategy development process (since it forces regions to make their strategy processes more explicit and interactive and increasingly base it on evidence)?

2. Can the smart specialisation strategy help regions to improve their regional development strategies?

- Case study approach: Bavaria, Saxony, Upper Austria.
- Selection of regions: implementation of aspects addressed in S³, success in regional (economic and innovation) development in order to learn from those experiences.
- General approach: analysis of policy trajectories allowing conclusions to be drawn concerning the smart specialisation concept.
- Topics covered in case studies: economic development, sectoral features, systemic characteristics, policy characteristics and policy mix, policy coordination mechanisms and priority setting, actual and potential contributions of S³ concept.
- Analytical dimensions: along the five governance dimensions of S³ (see slide 5).
S³ and regional innovation policies: evidence from the case study regions (1)

- **Priority on innovation:** all case study regions invest in innovation
  - Bavaria: since 1993, €4.2b investments in development and deployment of the new and high-tech technologies; innovation policy is perceived as major element for strengthening regional competitiveness
  - Saxony: since 1992 but innovation becomes a key topic in the ERDF OP in the next funding period
  - Upper Austria: 2004/2005 development programme “RIO” Regional Innovation System Upper Austria (co-funded by ERDF); focus on competitiveness: “Regio 13” (OP)

- **Focus of investments:** all case study regions focus on key sectors or technologies
  - Bavaria: distinct development over time; 80s starting with micro-electronics, 90s high-tech (bio) and industry networks, since 2005: focus on 19 clusters
  - Saxony: 1992 “Guidelines for Technology Policy” (can be considered as S³): the regional government decided to focus support on technology fields that seemed to offer potential for a *nationally leading position*: energy technology, material sciences, physical and chemical engineering, biotechnology, microsystem technology, information technology, production technology, environmental technology, medical technology;
  - Upper Austria: since 2005 focus on mechatronics, ICT, life sciences, innovative materials, logistics; since 2010 on automotive, eco-energy, furniture, timber, food-technology, health, environmental technology, design and media
S³ and regional innovation policies: evidence from the case study regions (2)

- **Evidence-based policy making:** evaluations and external studies are frequently used tools in all case study regions to assess impacts and quality of programmes and projects.
  - Upper Austria: elaborated mix, consisting of the formerly mentioned instruments plus technological foresight, roadmapping or the development of techno-economic scenarios.

- **Involvement of stakeholders and interaction:** increasingly so, but different tools.
  - Bavaria: used increasingly in strategy building; especially since 2010, public discussion to increase transparency of innovation policy processes.
  - Saxony: used increasingly, especially since 2010; regional government started drafting a regional innovation strategy with involvement of different actors from industry, science, culture, government and administration; the government aims to establish a continuous and structured dialogue with the public in so-called innovation fora.
  - Upper Austria: network-oriented focus in its policy approach; participative strategy process as regards the development of innovation policies (“legitimation by negotiation”).

- **Dialogue between the region and EU:** in all case study regions in its infancy; besides regional representations in Brussels and implementation of OPs little activity.
S³ and regional innovation policies: learning from the empirical evidence

- Certain aspects of S³ have already been addressed by regional innovation policy making in the case study regions:
  - the priority on innovation and the focus of investments display a long tradition in the case study regions,
  - investment foci on certain sectors and/or technologies can be observed since the 1990s,
  - regional development processes are often linked to an assessment of technological and industrial strengths and weaknesses (which are at least partly fostered by the formulation of OPs within EU funding structures),
  - the use of strategic intelligence and empirical assessment of success factors and failures are commonly used,
  - BUT: gained only momentum during the last years,
  - the same holds for a more intensive involvement of stakeholders in strategy processes,
  - communication channels between regions and the EU are established in all regions, although intensity of dialogue processes remains somewhat unclear.
Conclusions: Lessons learnt from the case studies

Will the smart specialisation strategy promote a more system oriented regional strategy development processes (since it forces regions to make their strategy processes more explicit and increasingly base it on evidence)?

- Regular assessments, diagnostic analyses and adjustments of regional innovation strategies
- Knowing the actors of the system, their roles and interaction patterns helps to govern the system and to develop locally adapted policy instruments. Their involvement seems to ensure higher acceptance.

Can the smart specialisation strategy help regions to improve their regional development strategies?

- Results: directed investments, enhanced transparency, strengthened support, participation.
- But: capacities (financial and actors) are needed for the process; strategy needs to be designed carefully and revised regularly to meet changing conditions.
Summary

- **S³** enforces regions to assess in which fields they are (internationally) competitive and concentrate efforts on those areas in coordination with regional stakeholders.

- Many of the economically powerful regions are basically applying these ideas for many years and are familiar with the ideas behind S³. However, quite often knowledge is not made explicit and communicated in strategies.

- Is the centrally promoted S³ strategy effective?
  - Some of the stronger regions have already started with pilot actions in reaction to S³: they started to document tacit knowledge and initiated participative approaches.
  - It seems to help to increase transparency and develop strategies to support approaches from a purely sectoral policy toward "regional challenges". Regions might reflect their problems / opportunities in a better way.

- Will S³ impact regional innovation systems?
  - No direct influence on interaction patterns, but it impacts the policy dimension.
  - It has the potential to improve the understanding of the system through more elaborated diagnose tools in order to make the most of given endowments in different types of regions.