Milestones *en route* to smart specialisation strategies: from theory to practice and evaluation

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The result orientation – cohesion policy at work

Sofia, June 16 & 17 2016
« The idea that the government can disengage from specific policies and just focus on general framework conditions in a sector neutral way is an illusion based on the disregard for the specificity and complexity of the requisite publicly provided inputs and capabilities » Hausmann and Rodrik, 2006
3 - Smart Specialisation: The Concept

Dominique Foray12, Paul A. David10, and Bronwyn Hall17

This brief introduces the basic concept of “Smart Specialisation” (SS) which has been a leading idea of the Knowledge for Growth expert group (K4G). The concept is spelled out in more detail in Policy Brief N° 113 in relation to globalisation. Other K4G Policy Briefs that refer to the concept are those on Catching-up Member States (N° 5) and on technology and specialisation (N° 8).

Rationale for invigorating the R&D specialisation policy discussion

Addressing the issue of specialisation in the R&D and innovation is particularly crucial for regions/countries that are not leaders in any of the major science or technology domains. Many would argue that these regions/countries need to increase the intensity of knowledge investments in the form of high education and vocational training, public and private R&D, and other innovation-related activities. The question is whether there is a better alternative to a policy that spreads that investment thinly across several frontier technology research fields, some in biotechnology, some in information technology, some in the several branches of nanotechnology, and, as a consequence, not making much of an impact in any one area. A more promising strategy appears to be to encourage investment in programs that will complement the country’s other productive assets to create future domestic capability and interregional comparative advantage. We have termed this strategy “smart specialisation.”

Smart specialisation is expected to create more diversity among regions than a regime in which each region tries to create more or less the same thing. This would almost certainly result in excess correlation among investment programs, which in turn would diminish within the European knowledge base. It is both an idea and a need to answer this critical question about their respective economies.

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14 Professor at the University of California at Berkeley and at the Graduate School of Business, Innovation at the University of Massachusetts, Amherst.
15 Reports and Policy Briefs of the K4G expert group are to be found at: http://ec.europa.eu/invest-in-research/monitoring/knowledge_en.htm
Why?

● Critical mass!
● Scale and agglomeration: essential determinants of R&D productivity, creativity, innovation
● Most regions cannot reach critical mass in all industries
● Instead of *doing a little bit of everything*, let’s specialise
● Specialisation: many benefits but a dangerous game!
On what?

- RIS3 is not about sectoral prioritisation but...
- .. the specialisation is on modes of transformation of sectors and ways to establish new ones
- Priorities are on transformative activities

<table>
<thead>
<tr>
<th>Agrofood</th>
<th>ICT</th>
<th>Tourism</th>
<th>Forest, pulp &amp; paper industry</th>
<th>Biotech. nanotech.</th>
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<td>ICT appli for agrofood</td>
<td>Digital services for tourism</td>
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<td>Forest based bio-economy</td>
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● These transformative activities are not known *ex ante*; they cannot be planed by the Government in a top down fashion
● They will be discovered through knowledge, interactions and dialogs between companies, research, public agencies and other communities
● The process of entrepreneurial discovery
  ● Building a vision for the future of the region and identifying priority’s areas
  ● Building action plans in each of these areas
RIS3 has an experimental dimension: a few bets are placed on various domains and these are risky bets.

This is different from standard policy where the « bets » are safe and sure.

The good news: it is a living document!
RIS3 has two facets

- Forming capabilities in strategic domains
- Driving structural changes
- It is always possible to import all the factors of structural changes
  - These are structural changes without smart specialisation
- RIS3 addresses not only structural changes but also the formation of local capabilities to drive these changes
- The role of government is to decide where it might be worthwhile to have a smart specialisation (there are potentials and opportunities) while in other domains ‘simple’ sectoral policy might be enough
I see a rich potential in export industries....

...such as cocoa, cashew nut and soccer balls

Oups, she probably confuses me with another client

The process of entrepreneurial discovery - How?
Process of entrepreneurial discovery

Economic and industry’s structures
Process of entrepreneurial discovery

- Economic and industry’s structures
- Sound base of evidence
  BAKBASEL
  Looking outwards
  Looking inwards

Stratégies de Spécialisation Intelligente
Process of entrepreneurial discovery

- Contextual analysis
  - Internal expertise

- Sound base of evidence
  - BAKBASEL

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Process of entrepreneurial discovery

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- Economic and industry's structures

Mega-trends

GPT
Process of entrepreneurial discovery

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  - Internal expertise
- Dialog and interactions
- Sound base of evidence
  - BAKBASEL
- Economic and industry's structures
- Mega-trends
  - GPT

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Internal expertise

Sound base of evidence
BAKBASEL

Dialog and interactions

Priority's areas

Economic and industry's structures

Action plan in each area – platforms, projects, leaders

Mega-trends
GPT

BAKBASEL
Process of entrepreneurial discovery

- Economic and industry’s structures
- Sound base of evidence BAKBASEL
- Action plan in each area – platforms, projects, leaders
- Dialog and interactions
- Contextual analysis Internal expertise
- Mega-trends GPT
- Priority’s areas
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- Economic and industry’s structures

Dialog and interactions

Priority’s areas

Action plan in each area – platforms, projects, leaders

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- Economic and industry's structures
- Priority's areas
- Action plan in each area – platforms, projects, leaders
- Transformative activities Critical mass

Mega-trends GPT
Priority’s areas should not be too broad

- Energy
- Industry 4.0
Monitoring - 1

- Contextual analysis
  - Internal expertise
- Dialog and interactions
- Sound base of evidence
  - BAKBASEL

Economic and industry’s structures

Priority’s areas

- Action plan in each area – platforms, projects, leaders

Transformative activities
- Critical mass

Mega-trends
- GPT

Project level – 2 years
Monitoring - 2

- Contextual analysis
  - Internal expertise
- Dialog and interactions
- Sound base of evidence
  - BAKBASEL
- Economic and industry’s structures
- Mega-trends
  - GPT
- Priority’s areas
- Action plan in each area – platforms, projects, leaders
- Transformative activities
  - Critical mass

Project level – 2 years
Critical mass – 4 years
Stratégies de Spécialisation Intelligente

Monitoring - 3

- Contextual analysis
  - Internal expertise
- Dialog and interactions
- Sound base of evidence
  - BAKBASEL
- Economic and industry’s structures
  - Structural changes – 6 years

- Mega-trends
  - GPT
- Priority’s areas
- Action plan in each area – platforms, projects, leaders
- Transformative activities
  - Critical mass
  - Critical mass – 4 years

Project level – 2 years
RIS3 = putting in place a process to:

- Analyse potentials and opportunities
- Identify priority’s areas
- Stimulate action plans in each area (projects, platforms, leaders)
- Help the new activities to grow
- Monitor and evaluate
- Re-start the process at any time
Is there a RIS3 trap?

● Risk of regions being locked in trajectories of minor innovations?
● Not a risk: it is not true that in the realm of innovation there is only one game in town
● For many regions, the key point is not inventing at the frontier but rather generating innovational complementarities in adopting sectors
● Based on RIS3, a ‘secondary region’ becomes capable of allocating R&D and other innovative inputs in critical domains so as to lever the growth potential of the prevalent KET invented elsewhere
« Countries should put more effort into choosing in details and for the future the direction of R&D – on what products, what processes, into what markets »

John Enos, 1980, The pursuit of science and technology
MOOC - Massive Open Online Course

Smart Specialisation Strategies