Smart specialisation

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An Industrial Renaissance in Europe
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Why not doing industrial policy?

- Government failures, risks, inefficiencies
  - Better not to do it!
- The relevance of IndPol in the GVCs age?
  - Joining GVCs as a better strategy
  - “It is not clear whether in today’s world economy increasingly dominated by global production chains, it makes any sense to even try to encourage the establishment of local industries in particular areas” (Maskus & Saggi)
- 1st challenge: IndPol too difficult
- 2nd challenge: there is no point any more to have an IndPol
- Responses
  - The question is not “whether” but “how”, hence design matters
  - Related variety and local spillovers framework
D. Foray and B. van Ark

*Smart Specialisation in a truly integrated research area is the key to attracting more R&D to Europe*, 2008

D. Foray, P.A. David and B. Hall

*Smart Specialisation: the Concept*, 2009

http://ec.europa.eu/research/era/publication_en.cfm
Smart specialisation

- One important driver of industrialisation and diversification is the infallible sequence:
  - Entrepreneurial discovery
  - Entry and agglomeration (clustering)
  - Structural change (related variety)
Entrepreneurial discovery

• The key event: discovery of a new domain potentially rich in innovation and spillovers
  – Entrepreneurial discovery opens/explores a new domain of opportunity.
  – It precedes routinized innovation
  – Essential phase or decisive link that allows a system to reorient and renew itself

• Anatomy
  – knowledge integration – science – technology – insights and vision;
  – and economic experimentation
Anibal Abrantes led the first Portuguese mould making company. The market of glass industry declined. Mass production of plastic products began. Abrantes started to experiment and explore the production of mould for this new material.

E.D.: the decisive link that allows a system to re-orient and renew itself.
• One important driver of industrialisation and diversification is the infallible sequence:
  • Entrepreneurial discovery (opening of a new domain of opportunity)
  • Entry and agglomeration (clustering)
  • Structural change (related variety)
  • Smart specialisation reflects the capacity to develop new specialties and generate structural change via research and innovation
Is a policy needed?

- Some times ED and SS happens spontaneously – thanks to private capabilities of entrepreneurs
- Many times, policy is needed to build and develop projects: policies can help to manage risk, uncertainty, weak appropriability; connect different entities and integrate knowledge; solve coordination failures
- Horizontal policy: not enough!
• Smart specialisation strategy means: putting in place a process whereby such a dynamics of new specialty development can be facilitated thanks to targeted government intervention in order to support in a preferential way the most promising new activities in terms of discovery, spillovers and structural changes.

• Such process involves:
  – to identify focal points where the connection between research and industry (or agriculture or services) is crucial to open a new activity;
  – to support the development of these new activities (priorities), by achieving critical mass (networks, clusters) and helping coordination between complementary investments;
  – to measure progress (innovation, job, structural change)
<table>
<thead>
<tr>
<th>Eligibility map 2014-20</th>
<th>Billion EUR</th>
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<tbody>
<tr>
<td>Less developed regions</td>
<td>164.3</td>
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<tr>
<td>Transition regions</td>
<td>31.7</td>
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<tr>
<td>More developed regions</td>
<td>49.5</td>
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<tr>
<td>Cohesion Fund</td>
<td>66.3</td>
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<tr>
<td>European territorial cooperation</td>
<td>8.9</td>
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<tr>
<td>Of which</td>
<td></td>
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<tr>
<td>Cross border cooperation</td>
<td>6.6</td>
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<tr>
<td>Transnational cooperation</td>
<td>1.8</td>
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<tr>
<td>Interregional cooperation</td>
<td>0.5</td>
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<tr>
<td>Outermost regions and northern sparsely populated regions</td>
<td>1.4</td>
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<tr>
<td>Youth Employment initiative</td>
<td>3.0</td>
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<tr>
<td>TOTAL</td>
<td><strong>325.1</strong></td>
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</tbody>
</table>

Up to €100 billion for innovation investments bolstering over 100 smart specialisation strategies
Knowledge economy

Top countries

Spillovers?

Scientific publications

R&D centres

Doctoral programs
Knowledge economy

- Chairs production and innovative design
- Shoe industry and new manufacturing technologies
- Biotech application in wine production
New activities emerge from the connections between entrepreneurs, lead users, local universities and public research organisations, etc. to explore and open new opportunities.
Knowledge economy

Chairs production and innovative design

Shoe industry and new manufacturing technologies

Biotech application in wine production

Knowledge spillovers:
New projects complement existing structures
Activities/sectors are connected
• Responding to the usual critics: “Although it is certainly true that not everything can be done at once, focus on selected areas for large investments to the neglect of the rest of the economy is a highly questionable strategy. Why it would be preferable to allocate scarce capital so that some activities have excellent infrastructures while others must manage with seriously deficient structure is not clear: without further evidence, it would appear to be a distortion”.

• Policy design matters
  – Mid-grained granularity – no sectoral prioritization
  – Discovering what to do as an integral part of the policy
  – Inclusiveness
  – Ex ante and ex post assessment
  – Evolutionary strategy
1 - Not sectoral prioritisation but new activity

• What is prioritized is not a sector but the new activity to develop advanced manufacturing tech. for the shoes’industry

• Sectoral prioritization creates distortions

• Activity level is the right one to see in detail the pieces of the knowledge economy that a region or country can take as a basis for its S3
2 - No omniscient planner anymore

- The government does not have innate wisdom or the *ex-ante* knowledge about future priorities.
- Against the intellectual logic of the principal-agent model - the principal (the government) knows from the start which specialities should be developed and therefore confines itself to setting up the incentives for private industry to carry out the plan!
  - "What if, as I and many others assume, there are no principals...with the robust and panoramic knowledge needed for this directive role?" (Sabel)
- The discovery process is an issue in its own right.
- In that case, the discovery and collective experimentation process forms an integral part of political action - strategic interactions between the government and the private sector.
- This is the essence of entrepreneurial discovery.
3 - Inclusiveness

Sectoral Level
- Sleeping Giant
  Large Sector
  (not innovative)
- Excited Goblins
  High-Tech Cluster
- Hungry Dwarfs
  Low-Tech SMEs

Activity Level

A Narrow View of Smart Specialisation!
Figure 3.2: An Inclusive Smart Specialisation Strategy.
While dynamism is crucial, we want dynamism with economic justice – with what I call economic inclusion. It means drawing companies and people into the economic sector of a modern economy, where new ideas for new processes and products are conceived and experimented» (E. Phelps, 2012)

Figure 3.2: An Inclusive Smart Specialisation Strategy
4 - Experimental nature and evaluation

• The point is not to reduce the risk of mistakes – which would result in no discovery at all – but to minimise the costs of mistakes

• Evaluation
  – Ex ante to assess potentials and select priorities
  – Ex post to measure progress according to clear benchmark
5 - Evolving prioritisation

- After n years, a new activity is no longer new
- Wheter it is a success or a failure, it should not be prioritised naymore
- Sunset clause for withdrawing support (or self-destructing mechanism)
Recap

- Putting in place a process in order to:
- Identify, evaluate and support a few e.d. projects
- Help e.d. projects to emerge in sectors with poor capabilities (inclusiveness): platforms/programs
- How to assess ex ante and prioritize (next slide)?
- Evaluate progress according to clear benchmark for success and failures (cost, productivity, innovation, job)
- Keep alerted: new opportunities will emerge while some projects will be terminated: *the strategy is a living document*