Smart specialisation and the new industrial policy agenda

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Knowledge for Growth expert group (EC)

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Smart Specialisation: the Concept

Smart specialisation strategy = S3
Biotech & ICT in fisheries and canning industry

Advanced manufacturing technologies in the footwear industry

Animal genetics for breeding

Photonics for renewable energy

Towards advanced ceramics
Advanced manufacturing technologies in the footwear industry

Biotech & ICT in fisheries and canning industry

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New activities emerge from the connections between – and the integration of knowledge of - entrepreneurs, specialised services, local universities and public research organisations, etc.. to explore and open new opportunities

Towards advanced ceramics

What happens?
Advanced manufacturing technologies in the footwear industry

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Why is it important?

*Not about enhancing existing specialisation but help the economy to change: diversification & modernisation

*Supporting the development of rich ecosystems – to avoid the «home alone» syndrom
*Don’t start from scratch; the selected domains will be most likely related to the existing structures*

*The goal of the new domains is to transform these structures*
Smart specialisation has two faces

• Building capabilities (through the exploration of a new domain of opportunities)
• Driving structural change (modernisation, etc.)
• Of course a region can « import » all factors for structural changes and get it without building capabilities. This is OK but this is NOT smart specialisation
• Or you can « import » factors AND build capabilities. This is a smart specialisation
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Knowledge spillovers:
New projects complement existing structures
Activities/sectors are connected

Expected benefits
S3 is a place-based AND open policy process

- Growth strategies should focus on mechanisms which build on local capabilities
- S3 is not place-neutral or spatially-blind approach (McCann)
- **Colocation** of firms, research and labor forces – if adequately stimulated - is a fundamental engine for innovation and structural changes
- This does not mean that it is a closed process for an autarkic region!
  - At any stage of the process – external resources are central
Policy design

- S3 provides a method to help policy makers identify domains and activities where capabilities formation is supported (innovation ecosystem) and structural changes are initiated
- Entrepreneurial discovery
Entrepreneurial discovery

• The government does not have innate wisdom.
• The new industrial policy (such as S3) is not the one where the government knows from the start which activities should be developed and therefore confines itself to setting up the incentives for private industry to carry out the plan!
• The discovery of priorities and collective exploration of the new domains form an integral part of political action
Entrepreneurial discovery

- Information & knowledge about future domains of opportunities come from the grassroot.
- Discoveries and explorations must be carried out within the framework of **strategic interactions between the government and the private sector.**
- Embeddedness as the main characteristic of a « good » government.
• ED does not only amount to innovation – but it increases its probability in the near future: ED reveals a potential while subsequent innovations (and entry) will realize this potential

• The underlying structure of ED is the integration of different sorts of knowledge (science, technology & engineering, vision and insight, marketing)

• The connection between different kind of actors is key

• ED has a strong public dimension
CEI / Zipor Group
Water jet cutting systems

agência de inovação

Chair of Economics and Management of Innovation
Operational content of E.D.

• Two situations
• High/medium intensity of ED thanks to a high level of private capabilities
  – Large firms as well as network of SMEs or industrial consortia involving universities: they generate numerous process of opening and exploring new domains
  – Micro-systems of innovation are doing we
• Low intensity of ED
  – EDs are missing and so the S3 cannot get started
• **Low intensity of ED (in the entire region, in some sectors)**
• Improving *ex ante* the conditions to increase the intensity of ED
• Detection, information / *EMBEDDEDNESS*
• Problems of networks and connections to structure and integrate the entrepreneurial knowledge which is dispersed and fragmented
  – Platform, consortia, public-private partnerships
• Problems of leaders and integrators
  – Role of local universities, regional agencies of PRO, large companies
• Problems of connections with extra-regional sources of competences
  – Pipe line strategy, teaming/twinning instruments, diaspora
Desirable Structural Change

Lack of Entrepreneurial Discovery in the Area of Desirable Structural Change

Solutions

- Entrepreneurial Knowledge
  - Integration
  - Connection
  - Platform

- Extra-regional Resources
  - Teaming
  - Twinning
  - Migration

- Information Externalities
  - Subsidies
  - Prizes

- Big Push
  - New
  - Institutes
  - Programmes
  - Campus

Early Growth Policy

- Opening of New Domain, New Activity
- Public Good Provision, Coordination, Clustering
Desirable Structural Change

Lack of Entrepreneurial Discovery in the Area of Desirable Structural Change

Discovery Policy Binding Constraints

Solutions
- Entrepreneurial Knowledge
  - Integration Connection Platform
- Extra-regional Resources
  - Teaming
  - Twinning
  - Migration
- Information Externalities
  - Subsidies, Prizes
- Big Push
  - New Institutes, Programmes, Campus

Early Growth Policy
- Opening of New Domain, New Activity
- Public Good Provision, Coordination, Clustering

Less advanced, transition regions
Desirable Structural Change

- Lack of Entrepreneurial Discovery in the Area of Desirable Structural Change

**Solutions**

- **Discovery Policy**
  - Binding Constraints

- **Early Growth Policy**
  - Opening of New Domain, New Activity
    - Public Good Provision, Coordination, Clustering

**Less advanced transition regions**

- **Entrepreneurial Knowledge**
  - Integration
  - Connection
  - Platform

- **Extra-regional Resources**
  - Teaming
  - Twinning
  - Migration

- **Information Externalities**
  - Subsidies,
  - Prizes

- **Big Push**
  - New
  - Institutes,
  - Programmes,
  - Campus

**Most advanced regions**

- Macroanalysis,
  - Foresight,
  - etc.
Other design principles

• What is prioritized is not a sector but the new activity
  – 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

• Inclusiveness: S3 is not only a high tech policy but in many cases help to make use of high tech to regenerate traditional sectors
A Narrow View of Smart Specialisation!
Figure 3.2: An Inclusive Smart Specialisation Strategy.
Other design principles

- Evolving prioritisation
  - After n years a new activity is no longer new
  - Success or failure it needs to exit
  - Self-destructing mechanism or sunset clause for withdrawing supports after n years

- *Ex ante* and *ex post* evaluation
  - Experimental nature of the policy
  - Not to reduce the risk of mistakes but the costs of mistakes
  - *Ex ante* assessment
  - Use of clear benchmarks and criteria for success and failures in *ex post* assessment
**Nine criteria to assess ex ante projects or domains and select priorities**

* Proximity to market

* Does the activity open a new domain potentially rich in innovation and spillovers?

* What is the degree of collaboration, the number of partners involved?

* Is public funding needed?

* What is the significance of the activity for the regional economy?

* What is the capacity of the region to keep the successful activity on its territory?

* Can this activity drive the region towards leadership in the selected niche?

* What is the degree of connectedness of the activity *vis-à-vis* the rest of the regional economy

* Private firms are ready to submit themselves to monitoring and performance audits.
CEI / Zipor Group
Water jet cutting systems

*Entrepreneurial discovery
*Priority at activity level
*Inclusive strategy

*Modernisation & diversification through research and innovation

Second largest European exporter
Second higher value shoes in Europe

*Spillovers to other sectors

Metal working, furniture, automotive

*The process has two faces

Transforming a sector
Building capabilities
Building a S3 or joining a GVC?

- « Joining a GVC provides a much more easy and rapid access to capabilities and learning than building local innovation systems » (R. Baldwin)
- A strong challenge to S3!!
- A look at the footwear industry facing the competitive shock of Chinese firms.
  - Two modes of response:
  - **Global value chains**: the Sinos Valley (Brazil)
    - Upgrading is imperative but limited: « the danger of this strategy became evident when Chinese producers undercut Brazilian products in the US market, and Brazilian producers were faced with sharply declining prices »
  - **Smart specialisation** (Portugal)
    - Upgrading is imperative and has been fully accomplished!
S3 vs. GVC?

- Isn’t the fundamental question underlying the discussion *GVC vs S3* one of economic power in the area of innovation and competitiveness? Do we want to shift this power from global multinational buyers to local (but open) networks of actors, and if so how?
### Eligibility map 2014-20

<table>
<thead>
<tr>
<th>Region Type</th>
<th>Billion EUR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less developed regions</td>
<td>164.3</td>
</tr>
<tr>
<td>Transition regions</td>
<td>31.7</td>
</tr>
<tr>
<td>More developed regions</td>
<td>49.5</td>
</tr>
<tr>
<td>Cohesion Fund</td>
<td>66.3</td>
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<tr>
<td>European territorial cooperation</td>
<td>8.9</td>
</tr>
<tr>
<td><strong>Of which</strong></td>
<td></td>
</tr>
<tr>
<td>Cross border cooperation</td>
<td>6.6</td>
</tr>
<tr>
<td>Transnational cooperation</td>
<td>1.8</td>
</tr>
<tr>
<td>Interregional cooperation</td>
<td>0.5</td>
</tr>
<tr>
<td>Outermost regions and northern sparsely populated regions</td>
<td>1.4</td>
</tr>
<tr>
<td><strong>Youth Employment initiative</strong></td>
<td>3.0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>325.1</td>
</tr>
</tbody>
</table>

The « renewal of the regional planning culture » seems to have been a quite important secondary outcome for number of regions in the which the EDP has been a novel approach with a view to their administrative traditions

Fraunhofer ISI, 2014 – 2013 survey

Up to €100 billion for innovation investments bolstering over 100 smart specialisation strategies
Thank you