Regions and Innovation Policy: Lessons from OECD countries

Claire Nauwelaers
Innovation has received increased priority to address not only productivity gaps, but also societal challenges in the move towards smart, sustainable and inclusive societies.

Regions are called as innovation catalysts in their countries. Two moves: attention to territories in national innovation policies; more stress on innovation in regional development policies.

The adoption of a broader concept of innovation gives a chance to regions that are not at the technology frontier.

How to organise complementarity/synergies between policies at various levels of government?

How effective are innovation policies by, for, in regions?
1. Changing framework for innovation and innovation policy

2. State-of-the-art and challenges for innovation policy by, in, for regions

3. Regions and Innovation Policy: the way forward
The changing framework for innovation

1. Increased **awareness** of the role of innovation as crucial ingredient for economic development

2. **Interactive** view of innovation - innovation differs from R&D

3. **System-based** approach to innovation, emphasis on learning and diffusion / absorption of knowledge

4. Diffusion of **tacit knowledge** embedded in humans becomes a key performance factor

5. **Glocalisation**: localised nature of (tacit) knowledge spillovers - importance of global connections
New innovation policy approach

Traditional policy
- Innovation as R&D
- Focus on research and technology
- High-tech focus
- R&D and transfer institutions
- Knowledge creation and diffusion

New policy
- Innovation as economic exploitation of new combinations
- Includes broad set of activities (design, organisational...)
- Innovation in all sectors
- Companies at the centre
- Knowledge absorption
Innovation is more than R&D

New-to-market product innovators with and without R&D, 2004-06
As a percentage of innovative firms by R&D status


Notes: These estimates are based on national studies. They do not yet reflect standardised methods and definitions.
OPENING THE BLACK BOX OF POLICIES: IDENTIFYING RELEVANT POLICY SPACES

Potential and limits for innovation policy in regions

1. Variety of institutional arrangements
2. Different types of innovation potential
3. Diversity in regional development & innovation strategies

Three dimensions to take into account

Innovating for what?

- Building on current advantages
- Supporting socio-economic transformation
- Catching up: towards creation of knowledge-based capabilities

Importance of setting policy priorities
TYPOLOGY OF OECD REGIONS DISPLAYS VARIETY

**Peripheral Regions**
- Low populated peripheral regions in rich countries
- Structural inertia/de-industrialising regions
- Rural low populated regions

**Knowledge Hubs**
- Small sized knowledge intensive capital districts
- Regional knowledge and technology hubs

**Industrial Production Zones**
- Core manufacturing and service providers
- Skill-intensive production centres
- Service and rural production centres
- Old manufacturing centres

Source: Regions and Innovation Policy OECD 2011
Typology of OECD Regions: Within Country Diversity

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France (metropolitan):

21 regions belong to 6 types

Source: Regions and Innovation Policy OECD 2011
The diversity of European regions

## Innovation policy instruments

<table>
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<tr>
<th>Target of support</th>
<th>Form and focus of innovation support services for SMEs</th>
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<td><strong>Reactive tools providing inputs for innovation</strong></td>
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| **Global connections** | Excellence poles  
Cross-border technology centres  
Funding for international R&D or innovation projects | International technology transfer schemes  
Mobility schemes  
Support for global networking of firms  
Cross-border innovation vouchers  
Lead market initiatives |
| **Regional system** | Collective technology or innovation centres | Cluster policies  
Proactive brokers, match-makers  
Innovation vouchers  
Support for regional networking of firms  
Schemes acting on the culture of innovation |
| **Individual Firms** | Incubators with “hard” support  
Traditional “reactive” technology centres  
Seed and venture capital funds  
R&D subsidies or tax incentives | Management advice  
Incubators with “soft” support  
“Proactive” Technology centres  
Audits, monitoring of needs  
Innovation Coach  
Innovation management training  
Techno-economic intelligence schemes |

Source: Regions and Innovation Policy OECD 2011
Need for bridging initiatives between ALL actors

- Clusters programmes
- Regional growth initiatives
- ...

« Systemic » innovation policies

➢ Challenge for Innovation policy: organise complementarity and synergy between policy areas – design effective policy mixes
Ten Questions Relevant to the Design of Policy Mixes

1) Challenges for NIS
2) Policy Objectives
3) Gaps (between Challenges and Objectives)
4) Instruments (R&D, non R&D, using typology)
5) Gaps (between Objectives and Instruments)
6) History
7) Actors
8) Balances within policy portfolio
9) Interactions
10) Governance

Source: UNU-MERIT 2008  www.policymix.eu
Implications for Science Parks

The BRIDGE

✓ Technology transfer
✓ From source to recipient
✓ A specific place
✓ Focused support
✓ Material support
✓ In-house support
✓ Technology gap

The CLUSTER of COMPETENCE

✓ Dialogue creation
✓ Multilateral exchanges
✓ A node in a system
✓ Multiple support
✓ “Learning support”
✓ Clearing house
✓ ...and managerial gap
Key challenges for European Cohesion Policy

- Need for differentiated policies based on regional **smart specialisation** strategies
- Move towards supporting more **demand** than supply side of innovation (ex ante analysis !)
- Balance technology focus with **other forms of innovation**
- Give preference for **competitiveness** when developing strategies
- Focus on **social capital**, the oil in the regional system
- **Innovative** and more complex projects should be favoured over focus on funds absorption

Innovation Policy:
The way forward (1)

- Effectiveness of innovation systems depends on balanced combination of 3 capacities:
  - creation of knowledge
  - diffusion of knowledge
  - absorption of knowledge

- Growing importance of framework conditions
  - entrepreneurship
  - competition rules
  - labour market conditions
  - financial market
  - social capital, ...
Innovation Policy: The way forward (2)

- Government’s role shifts from investor to facilitator - promotion of public/private partnerships and interface management

- Improving knowledge governance in firms and clusters of firms becomes a key issue

- Policies need to « open borders »:
  - In terms of content
  - In terms of applications space
Innovation Policy:
The way forward (3)

1. The need for borderless content of innovation policies
   - “Hidden” forms of innovation, beyond R&D-driven innovation, should be stimulated through mixes of instruments from various policy areas: education, S&T, environment, infrastructure, etc.

2. The need for borderless territory for innovation policies
   - Innovation does not stop at administrative borders: cross-border collaborations in policies to target functional areas
   - RIS are not “small NIS”: complementarities need to be ensured between policies and instruments at various levels
Innovation Policy:
The way forward (4)

- More efficiency through “Policy packages” rather than isolated instruments – Consider Policy Mix

- Demand oriented innovation policies: a “set of public measures to induce innovations and/or speed up diffusion of innovations through increasing the demand for innovations, defining new functional requirement for products and services or better articulating demand.” (Edler 2007)
  - Public procurement.
  - “Soft steering” concepts geared to the willingness and ability to accept, demand and apply innovations
  - Measures stimulating the articulation of needs, preferences, ideas and fears of potential users
  - Shaping of regulations and norms
Innovation Policy:
The way forward (5)

- Need for more *strategic policy intelligence*
  - monitoring and evaluation of policies
  - sound analyses of innovation systems
  - « intelligent » benchmarking practices
  - long term views
  - inclusive policy design processes
SUMMING UP

FOUR KEY ARGUMENTS FOR MORE EFFECTIVE INNOVATION POLICIES IN AND FOR REGIONS

1. Variety in innovation policy models
2. Openness (content, space) of policies
3. Synergy of instruments (vertical, horizontal)
4. Policy learning and experimentation
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