

Economie urbane e regionali e innovazione

Parte 3 – I sistemi regionali di innovazione

Economia dell'innovazione

LIUC

Regional Innovation Systems

Regional Innovation System:

“The set of economic, political and institutional relationships occurring in a given geographic area which generates a collective learning process leading to the rapid diffusion of knowledge and best practice” (Nauwelaers and Reid)

Fonte: Policies for Cluster Creation

Esternalità

EXTERNAL ECONOMIES: LOCALISATION/URBANISATION

Economies of scale which are either:

- External to the firm, internal to the industry, termed *Localisation economies* (industrial district)
- External to the industry, related to the number of industries (the size of the local economy), termed *Urbanisation economies*

Localisation Economies

LOCALISATION ECONOMIES:

- Benefits of skilled labour pooling
- Scale economies for intermediate input suppliers
- Non-traded local inputs (infrastructure)
- Specialised ancillary services
- Knowledge spillovers
- Social capital

Urbanization Economies I

URBANISATION ECONOMIES

All localisation economies plus:

- Large and varied labour market
- Scale and Scope economies with intermediate supply
- Scale economies in infrastructure provision
- Variety of business services
- Gateway effects
- Knowledge spillovers between industries

Urbanization Economies II

- Localisation economies - Specialisation achieving efficiency through incremental innovations in industries with synthetic knowledge bases (e.g. industrial districts)
- Urbanisation economies - Diversity promoting creativity resulting in radical innovations in industries based on analytical knowledge bases (e.g. “creative cities”/geography of talent)

Fonte: Asheim, The Urban Turn

Knowledge Spillovers

In clusters:

- circulation of skilled labour
- business meetings
- birth of firms
- informal contacts
- social interaction
- tacit knowledge

In University R&D:

- consultancy
- libraries
- seminars
- joint ventures
- shared research personnel
- conferences
- science parks
- graduate retention

Types of Clusters - Marshall

Alfred Marshall: industrial district 1890

- Specialised labour pool
- Subsidiary trades present
- Knowledge spillovers

Type of Clusters - RIS

Regional Innovation Systems (and Collective learning systems)

Four key concepts:

a) competencies/capabilities: core and dynamics

b) learning:

i) knowledge sharing

ii) combinatorial ability

iii) organisational inertia

c) codified and tacit knowledge

d) social capital institutional thickness

RIS - definition

Regional Innovation System:

“A set of interacting private and public interests, formal institutions and other organizations that function according to organizational and institutional arrangements and relationships conducive to the generation, use and dissemination of knowledge”.

(Fonte: Doloreux 2003)

Cooke: RIS Potential - Higher

Infrastructure level:

- Autonomus taxing and spending
- Regional private finance
- Policy influence on infrastructure
- Regional university-industry strategy

Superstructural level

(institutional dimension):

- Co-operative culture
- Interactive learning
- Associative-consensus

Cooke: RIS Potential - Higher

Organizational dimension (firms):

- Harmonious labour relations
- Workers mentoring
- Externalization
- Interactive innovation

Organizational dimension (policy):

- Inclusive
- Monitoring
- Consultative
- Networking

Cooke: RIS Potential - Lower

Infrastructure level:

- Decentralized spending
- National financial organizations
- Limited influence on infrastructure
- Piecemeal innovation projects

Superstructural level

(institutional dimension):

- Competitive culture
- Individualistic
- Institutional dissension

Cooke: RIS Potential - Lower

Organizational dimension (firms):

- Antagonistic labour relations
- Self-acquired skills
- Internalization
- Stand alone R&D

Organizational dimension (policy):

- Exclusive
- Reacting
- Authoritative
- Hierarchical

Cooke: RIS – 5 key concepts

Research on RIS in Europe (Wales and Baden-Wurttemberg). Five key, linked concepts:

- 1. Region**
- 2. Innovation**
- 3. Network**
- 4. Learning**
- 5. Interaction**

Types of Clusters - Porter

Michael Porter's definition:

“a geographically proximate group of interconnected companies, suppliers, service providers and associated institutions in a particular field, linked by externalities of various types”.

Porter – Types of industries

Distinction in order to assess
“Regional performance”:

- Local industries
- Resource dependent industries
- Traded industries

Local industries

- Local industries provide goods and services primarily to the local market, or the region in which the employment is located
- They show limited competition with other regions (health services, utilities, retailing, construction)

Resource dependent industries

- Employment located where the needed natural resources are found
- They compete nationally or internationally

Traded industries

- Traded industries sell products and services across regions and often to other countries
- They are fundamental to prosperity. “Only” 33% of national employment (USA 1997) but higher wages.

Metro Montréal's Life Sciences Industry

