Cluster policies (in Europe)

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Cluster and global markets

- Why do firms of some regions succeed and firms of other regions fail in international competition?
- Why a region becomes the home base for successful international competitors in an industry?

Sources of Regional Advantage

- Natural Resources
- Cluster Based
  - Factor Endowments
  - Economies of Scale
  - Technology

Oracle Headquarters, Silicon Valley

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What is a cluster?

Clusters are **networks** within some **regional proximity** of interconnected companies, specialized suppliers, service providers, firms in related industries and associate institutions in particular fields that compete but also cooperate (Porter, 1998).

The cluster is part of main policies to enhance economic growth via industrial development and R&D promotion.

Benefits of a cluster:

- Increases firms‘ efficiency
- Increases innovation
- Increases business formation

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What is the Cluster Approach?

The Cluster approach is a model for explaining how economic development can be influenced by comprehensive identification of economic and geographic interdependencies.

The model can be used both to design cluster-based economic development policies and to evaluate existing clusters.

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Concentration: Typology

Protoindustrial concentration

Industrial district

Cluster

Industrial region

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Main question

How does (European) integration effect the equilibrium location of an industry?

Agglomeration and disperson forces.
(Example)
The model (1/2)

• Risk averse firm; two locations; costs of location are risky;
• uncertain net returns; correlation;
• share of investment to region 1 and 2 \((s; 1-s)\)
The model (2/2)

\[ s \]
\[ R_1 = R_2 = R \]
\[ Sd_1 = Sd_2 = Sd \]
\[ \alpha > 0 \]
\[ \text{corr} \]

Share of Investment
Return
Risk
Risk aversion
correlation
EU integration and correlation

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Policy

with perfect symmetry: $s^* = 1/2$

$E(C_2) > E(C_1)$

Assume - expected costs of location are managed by government policy in one region.
Optimum

\[ s^* = \frac{1}{2} + \frac{E(C_2) - E(C_1)}{aRSd(1 - corr)} > \frac{1}{2} \]

\( s^* \) is increasing in \( corr \) (integration)
Agglomeration

\[ S \]

\[ corr_c \]

\[ corr \]
Location

Agglomeration force (corr)

and

dispersion force \( (a, R, Sd) \)
Summary

Result:

• We demonstrate that greater integration within a union may induce more agglomeration of resources instead of regional diversification.
Annexe 1
Evolution of region-based development concepts

Industrial development
Industrial growth can be steered through the regional pattern of public investments

 Instruments: • subsidies • infrastructure Investments

Creation of growth poles
“Counter-urbanisation” can be triggered by creating industrial complexes in peripheral settings, development will trickle down into region

 Instruments: • planned industrial complexes in focused areas • subsidies • focus on large corporations

Decentralised, endogenous development
Initiatives must be region driven, measures need market orientations and no orthodoxy on tool box

 Instruments: • regional marketing • attraction of investment • infrastructures for SME and start-ups • labour market improvements

Learning regions
Regions need to build a highly networked base of suppliers, labour and knowledge and social linkages vital

 Instruments: • institutions of exchange • knowledge infrastructure • incubation • international networks • business support functions

Spatial strategy convergence
Large firms need cluster and could contribute to their vitality and public and corporate interests in the regions converge

 Instruments: • tech-farming • targeted localisation • private-public partnerships • entrepreneurs forums

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