



CLUSTERS AND NETWORKS OF SMES FOR GLOBAL COMPETITIVENESS

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Clusters have existed for centuries

- Prato, Italy, famous for its textile cluster was a centre of cloth production already in the middle age.
- Sialkot, Pakistan, famous for its surgical tool cluster, was already a producer of knives and swords in the late 19th century.
- Locally concentrated knowledge and skills have been at the origins of some of the most successful and longstanding clusters worldwide.



The advantages of clusters have been formalised in the 20th century

- A. Marshall (1920): three main external economies acting within clusters
 - A specialised labour market where skilled manpower is readily available (e.g. the role of universities in many high-tech clusters in the US or India)
 - Presence of intermediate suppliers of materials and components (e.g. machine tool producers located close to end users like in Italy's footwear and marble clusters)
 - Knowledge spillovers, which favour faster innovation within clusters (e.g. spin-off process is at the core of cluster development)



Other factors stressed in the emergence and development of clusters

- The existence of sophisticated and demanding customers (M. Porter)
- Local competition and (horizontal and vertical) cooperation at the same time (Becattini, Piore and Sabel)
- A favourable investment climate
- A favourable people climate (R. Florida)



Cluster development has therefore become an issue for policy makers

- Key questions have included:
 - Do clustered firms do better than non-clustered ones?
 - How do clusters adapt and evolve over time?
 - How do they react to periods of recession?
 - What are the key success factors for a cluster?
 - What are the main barriers to their further expansion?
 - What policies can favour the development of clusters?



OECD LEED has tried to answer some of these questions (I)

- **Government can play a role**
 - 40% of firms in the Grenoble cluster started after the labelling of “pôle de compétitivité” by the govt.
 - Wisconsin govt. intensively financed biomedical research in the Madison cluster and created the Wisconsin Institute of Discovery through a PPP involving the local university.
- **Clusters can develop rapidly**
 - Oxford bioscience: from 190 firms and 2000 employees in 1989, to 3500 firms and 45000 employees in 2004
 - Madison, WI: 75% employment growth in 10 years (1995-2005) in life sciences and IT.



OECD LEED has tried to answer some of these questions (III)

- **Adaptation to technological and market change requires strong local skills**
 - The example of the Waterloo University Coop program in Canada
- **Avenue for research commercialisation is important in knowledge intensive clusters**
 - The example of the WAWE program in Wisconsin



Key policy messages

- Support spinouts and small firm collaboration both through formal partnership and informal events
- Lead the transition to the entrepreneurial university, making HEIs key actors of cluster development
- Ensure that skills provision at II and III level meet the requirements of cluster firms
- Encourage evolution in cluster activities to react to changes in technology and market conditions



THANK YOU!

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